



---

Brazilian MRS Meeting (15.: 2016 : Campinas – SP)  
XV Brazilian MRS Meeting Program book (SBPMat) / Sociedade Brasileira de Materiais  
– Campinas : SBPMat, 2016.  
380p

1. Materiais. 2. Pesquisa em materiais. I. Sociedade Brasileira de Materiais  
– SBPMat. II. Título

---



# Welcome message

On behalf of the board of the Brazilian Materials Research Society, B-MRS, I warmly welcome all the participants to its 2016 Meeting in Campinas, state of São Paulo. The B-MRS Annual Meeting has consolidated as a major event in Brazil and Latin America, in which high-level research and technology associated with all areas of materials science and engineering are discussed and disseminated. This year meeting will contain 20 symposia, 2 workshops and 2 tutorials on essential subjects to train young scientists. Attention paid to students and young researchers has been a hallmark of B-MRS to take advantage of the contributions of this vibrant community in our country. I should also mention the excellence of the 8 plenary speakers; I look forward to their lectures, which I am sure will be most inspiring. Following a tradition of holding the annual meeting in different regions of Brazil, Campinas was chosen for the 2016 for being one of the most important centers for science and technology in the country. May I end by thanking the organizers and sponsors of the 2016 B-MRS Meeting, wishing you all a very fruitful week in Campinas.

**Oswaldo Novais De Oliveira Jr.** (President of Brazil MRS)



# Welcome to the XV Brazilian MRS Society Meeting

Dear Participants,

We would like to welcome you to the XV Brazil-Materials Research Society (B-MRS) Annual Meeting, to be held in September, 25-29, in Campinas, São Paulo. This year the meeting congregates almost 1500 participants, with 2142 accepted abstracts. Fifteen years after the first annual meeting of SBPMat, as it was called then, our figures are impressive, both for the large number of participants and abstracts as well as for the high quality of the scientific contributions, divided in oral and poster presentations. The current edition of the Annual Meeting covers almost all relevant research areas of Materials Science.

The XV B-MRS Annual Meeting is comprised of 20 Symposia, 2 workshops and 2 Tutorials. The program also includes 7 Plenary Lectures from the most prestigious scientists in cutting edge materials science. The Opening Ceremony, with a tribute to the memory of Prof. José Arana Varela, will be followed by the Memorial Lecture “Joaquim da Costa Ribeiro”; the renowned scientist Aldo Craievich will talk about the relevance and challenges on advanced materials characterization. Furthermore, in this Meeting program, three discussion panels will take place during lunchtime: Research in Germany, Meet the Editors and Materials Research and Innovation. In particular, the latter will discuss research, development and innovation in industry and the role of innovation agencies and startup ventures.

During the Closing Ceremony, the symposium organizers will honor students with the “Bernard Gross Award” for the best poster and best oral presentations of each Symposium. Awards from the European Materials Research Society (E-MRS) and the American Chemical Society (ACS) will be also granted for best posters and oral contributions.

On behalf of Organizing Committee, we would like to thank the Brazil-MRS staff and board, the funding agencies, the symposium organizers and the local committee members, for their commitment and great effort to make this Meeting possible.

We hope we can all enjoy a very hectic Meeting with stimulating exchange of scientific ideas and results, creating new insights and collaborations, to reach even further quality levels in Materials Science research.

**Mônica A. Cotta** and **Ana Flávia Nogueira**  
*Conference Chairs*



# Organizing committee

## Conference Chairs

**Ana Flávia Nogueira**  
*IQ/UNICAMP*

**Mônica Alonso Cotta**  
*IFGW/UNICAMP*

## Local Committee

Antonio José Roque da Silva (*LNLS*)  
Antonio Riul Jr. (*IFGW/UNICAMP*)  
Carlos César Bof Bufon (*LNNano*)  
Celso A. Bertran (*IQ/UNICAMP*)  
Christoph Deneke (*LNNano*)

Francisco das Chagas Marques (*IFGW/UNICAMP*)  
Helio Tolentino (*LNLS*)  
Jillian Nei Freitas (*CTI Renato Archer*)  
Luiz Fernando Zagonel (*IFGW/UNICAMP*)  
Talita Mazon (*CTI Renato Archer*)



# Contents

Venue .....	9
Maps .....	11
General schedule .....	13
Memorial Lecture “Joaquim Costa Ribeiro” .....	19
Plenary talks .....	20
Discussion Panel.....	23
Technical lectures .....	24
Symposia summary .....	27
Symposia .....	31
SYMPOSIUM A - 2D Advanced Materials: Carbon/Graphene and NanoComposites .....	A-1
SYMPOSIUM B - Nanocellulose materials: the keystone for a plethora of multifunctional applications .....	B-1
SYMPOSIUM C - Symposium on complex advanced materials: from novel superconductors to magnetic nanostructures.....	C-1
SYMPOSIUM D - Materials science at high-pressure conditions .....	D-1
SYMPOSIUM E - X Brazilian Electroceramics Symposium .....	E-1
SYMPOSIUM F - Advanced and Analytical Microscopy and Spectroscopy of Nanostructures and Engineering Materials.....	F-1
SYMPOSIUM G - Applications of Neutrons to Materials Research.....	G-1
SYMPOSIUM H - From atomistic to multiscale modeling: new developments and applications in Materials Science .....	H-1
SYMPOSIUM I - Surface Science: fundamentals and models .....	I-1
SYMPOSIUM J - Surface Science: Recent Developments in Technological Applications .....	J-1
SYMPOSIUM K - Structure-properties Relationship of Advanced Metallic Materials .....	K-1
SYMPOSIUM L - Advanced Materials and Devices for Organic Electronics and Bioelectronics .....	L-1
SYMPOSIUM M - Plasmonics and Photonics in Nanostructured Materials .....	M-1
SYMPOSIUM N - Advanced semiconductor and hybrid architectures .....	N-1
SYMPOSIUM O - Materials and Devices for Third Generation Solar Cells.....	O-1
SYMPOSIUM P - Materials for energy conversion and storage .....	P-1
SYMPOSIUM Q - Nanotoxicology and Nanoregulation - the safe use of manufactured nanomaterials and 2nd Nanoreg Brazil Meeting .....	Q-1
SYMPOSIUM R - Surfaces and Interfaces for Medical Applications, Biomaterials and Health .....	R-1
SYMPOSIUM S - Biomaterials and Devices for Neuroscience .....	S-1
SYMPOSIUM T - Self-Assembled Biological Structures for Electronic and Photonic Devices and Applications .....	T-1
SYMPOSIUM U - University Chapter Symposium .....	U-1
SYMPOSIUM V - Sustainable development of materials for advanced energy and electronics, extractive materials and transportation products .....	V-1
AUTHOR INDEX.....	Index-1



# Venue

Founded in 1774, Campinas was an important agricultural center until the early twentieth century, with coffee and sugar cane plantations. In the 1930s, however, Campinas became a regional industrial center. Tenth richest city in Brazil, Campinas was the third city in the world to adopt the phone technology in 1883. Since then, science and technology have gained a major boost with the creation of several research institutions, such as the Agronomic Institute and the State University of Campinas (Unicamp), which in 2016 celebrates its 50th anniversary. The science park was further expanded with the installation of Renato Archer Information Technology Center and the National Center for Research in Energy and Materials, which houses the National Synchrotron Light Laboratory and the National Nanotechnology Laboratory, among others. Along the years, high-tech companies have gathered around these research centers, along with many important industries. As the third largest center of research and development in Brazil, Campinas generates today at least 15% of the whole national scientific production. Acknowledging the importance of Campinas in the country scientific scenario, in 2016 the Brazilian Materials Research Society chose this city to host the 15th edition of its annual meeting, the XV Brazil-Materials Research Meeting.

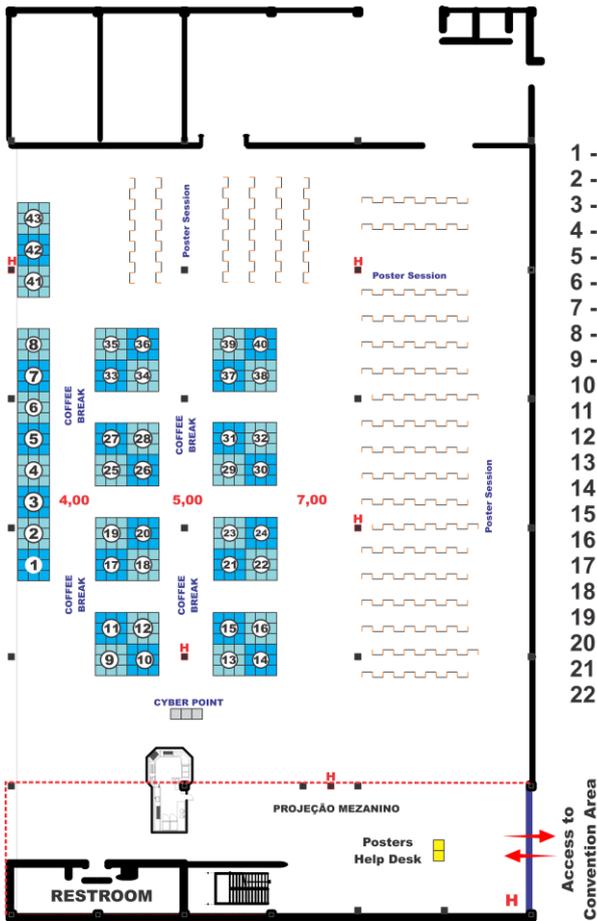


# Maps

## CONVENTION AREA



## Exhibition Area



- |                       |                          |
|-----------------------|--------------------------|
| 1 - ALTMANN           | 23 - ANTON PAAR          |
| 2 - METROHM           | 24 - ANACOM              |
| 3 - IOP               | 25 - TESCO DO BRASIL     |
| 4 - RAIH / HEIDELBERG | 26 - OXFORD INSTRUMENTS  |
| 5 - RAIH / HEIDELBERG | 27 - MM VÁCUO            |
| 6 - AVACO             | 28 - RENISHAW            |
| 7 - AVACO             | 29 - BRUKER              |
| 8 - ANALÍTICA         | 30 - BRUKER              |
| 9 - INSTRUTÉCNICA     | 31 - BRUKER              |
| 10 - INSTRUTÉCNICA    | 32 - BRUKER              |
| 11 - JEOL             | 33 - AROTEC              |
| 12 - EDWARDS          | 34 - MBRAUN              |
| 13 - AGILENT          | 35 - RESEARCH IN GERMANY |
| 14 - AGILENT          | 36 - DPUNION             |
| 15 - KEYSIGHT         | 37 - INTERPRISE          |
| 16 - QUANTUM DESIGN   | 38 - OERLIKON            |
| 17 - REOTERM          | 39 - USBIO / DAFRATEC    |
| 18 - HORIBA           | 40 - SIBRATEC NANO       |
| 19 - OHMINI           | 41 - CSI                 |
| 20 - ANALOG           | 42 - TECH SCIENTIFIC     |
| 21 - RIGAKU / DAIRIX  | 43 - UNICAMP             |

# General schedule

	25/set	26/set	27/set	28/set	29/set	
7:00 – 18:00 8:00 – 18:00 8:00 – 12:00		<i>Registration</i>	<i>Registration</i>	<i>Registration</i>	<i>Registration</i>	
8:30 – 9:30 9:30 – 9:45 9:45 – 10:00 10:00 – 10:15 10:15 – 10:30 10:30 – 10:45 10:45 – 11:00 11:00 – 11:15 11:15 – 11:30 11:30 – 11:45 11:45 – 12:00 12:00 – 14:00		PLENARY	PLENARY	PLENARY		
		<i>Oral sessions (Symposium)</i>	<i>Oral sessions (Symposium)</i>	<i>Oral sessions (Symposium)</i>	<i>Coffee Break</i>	
		<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Coffee Break</i>	PLENARY	
		<i>Oral sessions (Symposium)</i>	<i>Oral sessions (Symposium)</i>	<i>Oral sessions (Symposium)</i>		
		LUNCH / Discussion Panel	LUNCH / Discussion Panel	LUNCH / Discussion Panel	<i>Room Transfer Closing ceremony</i>	
14:00 – 14:15 14:15 – 14:30 14:30 – 14:45 14:45 – 15:00 15:00 – 15:15	<i>School of Scientists &amp; Hands on Tutorials</i>	<i>Oral sessions (Symposium)</i>	<i>Oral sessions (Symposium)</i>	<i>Oral sessions (Symposium)</i>		
15:15 – 15:30 15:30 – 15:45 15:45 – 16:00 16:00 – 16:15 16:15 – 16:45 16:45 – 17:45		<i>Coffee Break</i>				
		PLENARY	PLENARY	PLENARY		
17:45 – 19:30		<i>Registration</i>	POSTER SESSION			
19:00 – 19:30 19:30 – 20:30		<i>Opening Session</i> <i>Memorial Lecture</i>				
20:30 – 22:00	Cocktail					



# Research in Germany

The Research in Germany initiative would like to invite the participants of the 15<sup>th</sup> Annual Meeting of the Brazilian Materials Research Society to the

## Research in Germany – Science Lunch

to be held on Monday, September 26<sup>th</sup>, from 12:00 to 14:00 at Sala Araucária, Expo Dom Pedro.

Representatives of the German Research Foundation (DFG), the German Academic Exchange Service (DAAD) and the Alexander von Humboldt-Foundation (AvH), as well as the scientists Prof. Dr. Charles James Kirkpatrick, Prof. Dr. Norbert Koch and Dr. Hubertus Marbach will provide an insight into the German research landscape, funding schemes and collaboration opportunities. Afterwards, attendees will get the chance to mingle at different tables, chat on a one-to-one basis and seek in-depth advice.

### Programme:

#### 12:00 Introduction

#### 12:05 Testimonial I:

Charles James Kirkpatrick, Emeritus Professor of the University of Mainz

#### 12:12 Testimonial II:

Prof. Dr. Norbert Koch, Director of the Department of Physics at Humboldt University Berlin

#### 12:22 Testimonial III:

Dr. Hubertus Marbach, Chair of Physical Chemistry II at Friedrich-Alexander University of Erlangen

#### 12:32 Exchange and Fellowship Programmes of the German Academic Exchange Service (DAAD)

Anna Barkhausen, Director DAAD Information Centre São Paulo

#### 12:42 Funding Programmes of the German Research Foundation (DFG)

Prof. Dr. Helmut Galle, DFG Liaison Scientist in Brazil

#### 12:52 Opportunities at the Alexander von Humboldt-Foundation (AvH)

Prof. Dr. Alessandra Sussulini, Department of Analytical Chemistry at UNICAMP

#### 13:02 Lunch and networking at the tables

The event will be held in English, is free of charge and includes food and beverages.

Please register using this link: <https://ssl.daad.de/limesurvey/538867/lang-en>

## Sunday, September 25<sup>th</sup>

14:00 - 17:45 School of Scientists & Hands on Tutorials

17:45 - 19:30 Registration

19:00 - 19:30 Opening Session

19:30 - 20:30 Memorial Lecture

20:30 - 22:00 Welcome Cocktail

## Monday, September 26<sup>th</sup>

07:00 Registration

8:30 - 9:30 Plenary talk - Aldo Felix Craievich (Room Auditório)

Symposia	A	B	C	E	
	(Room Jequitibá)	(Room Jacarandá)	(Room Carvalhos I)	(Room Ipê)	
9:45 - 16:15	9:45 - 10:45	Oral Session 1	Oral Session 1	Oral Session 1	Oral Session 1
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 2	Oral Session 2	Oral Session 2	Oral Session 2
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
	14:00 - 16:15	Oral Session 3	Oral Session 3	Oral Session 3	Oral Session 3

Symposia	F	I	N	P	
	(Room Seringueira)	(Room Carvalhos III)	(Room Amoreira III)	(Room Amoreira I)	
9:45 - 16:15	9:45 - 10:45	Oral Session 1	Oral Session 1	Oral Session 1	Oral Session 1
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 2	Oral Session 2	Oral Session 2	Oral Session 2
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
	14:00 - 16:15	Oral Session 3	Oral Session 3	Oral Session 3	Oral Session 3

Symposia	Q	R	U	RIG	
	(Room Amoreira II)	(Room Carvalhos II)	(Room Cerejeira)	(Room Araucária)	
9:45 - 16:15	9:45 - 10:45	Oral Session 1	Oral Session 1	Oral Session 1	Oral Session 1
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 2	Oral Session 2	Oral Session 2	Oral Session 2
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
	14:00 - 16:15	Oral Session 3	Oral Session 3	Oral Session 3	Oral Session 3

16:15 - 16:45 Plenary talk - Lei Jiang (Room Auditório)

16:45 - 17:45 Coffee Break

17:45 - 19:30 Poster Session - Symposia: A, B, C, E, I, N, P, Q, R and U

19:30 - 22:00 Free

# Tuesday, September 27<sup>th</sup>

08:00 Registration

8:30 - 9:30 Plenary talk - Susan B. Sinnott (Room Auditório)

9:45 - 16:15	Symposia	A	C	E	F
		(Room Jequitibá)	(Room Carvalhos I)	(Room Ipê)	(Room Seringueira)
	9:45 - 10:45	Oral Session 4	Oral Session 4	Oral Session 4	Oral Session 4
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 5	Oral Session 5	Oral Session 5	Oral Session 5
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
14:00 - 16:15	Oral Session 6	Oral Session 6	Oral Session 6	Oral Session 6	

9:45 - 16:15	Symposia	J	L	M	N
		(Room Carvalhos III)	(Room Amoreira II)	(Room Cerejeira)	(Room Amoreira III)
	9:45 - 10:45	Oral Session 4	Oral Session 4	Oral Session 4	Oral Session 4
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 5	Oral Session 5	Oral Session 5	Oral Session 5
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
14:00 - 16:15	Oral Session 6	Oral Session 6	Oral Session 6	Oral Session 6	

9:45 - 16:15	Symposia	P	R	S	EXP
		(Room Amoreira I)	(Room Carvalhos II)	(Room Jacarandá)	(Room Araucária)
	9:45 - 10:45	Oral Session 4	Oral Session 4	Oral Session 4	Oral Session 4
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 5	Oral Session 5	Oral Session 5	Oral Session 5
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
14:00 - 16:15	Oral Session 6	Oral Session 6	Oral Session 6	Oral Session 6	

16:15 - 16:45 Plenary talk - Ado Jorio (Room Auditório)

16:45 - 17:45 Coffee Break

17:45 - 19:30 Poster Session - Symposia: A, F, J, K, L, P, R and S

19:30 - 22:00 Free

## Wednesday, September 28<sup>th</sup>

07:00 Registration

8:30 - 9:30 Plenary - Ifor D.W. Samuel (Room Auditório)

Symposia	A	D	G	H	
	(Room Jequitibá)	(Room Ipê)	(Room Jacarandá)	(Room Seringueira)	
9:45 - 16:15	9:45 - 10:45	Oral Session 7	Oral Session 7	Oral Session 7	Oral Session 7
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 8	Oral Session 8	Oral Session 8	Oral Session 8
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
	14:00 - 16:15	Oral Session 9	Oral Session 9	Oral Session 9	Oral Session 9

Symposia	J	K	L	M	
	(Room Carvalhos III)	(Room Amoreira III)	(Room Amoreira II)	(Room Carvalhos I)	
9:45 - 16:15	9:45 - 10:45	Oral Session 7	Oral Session 7	Oral Session 7	Oral Session 7
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 8	Oral Session 8	Oral Session 8	Oral Session 8
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
	14:00 - 16:15	Oral Session 9	Oral Session 9	Oral Session 9	Oral Session 9

Symposia	O	R	EXP	
	(Room Amoreira I)	(Room Carvalhos II)	(Room Araucária)	
9:45 - 16:15	9:45 - 10:45	Oral Session 7	Oral Session 7	Oral Session 7
	10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break
	11:15 - 12:00	Oral Session 8	Oral Session 8	Oral Session 8
	12:00 - 14:00	Lunch/ Discussion Panel	Lunch/ Discussion Panel	Lunch/ Discussion Panel
	14:00 - 16:15	Oral Session 9	Oral Session 9	Oral Session 9

16:15 - 16:45 Plenary talk - Paul S. Weiss (Room Auditório)

16:45 - 17:45 Coffee Break

17:45 - 19:30 Poster Session - Symposia: D, G, H, J, K, L, M, O, R, T and V

19:30 - 22:00 Free

## Thursday, October 29<sup>th</sup>

08:00 Registration

10:15 - 10:45 Coffee Break

10:45 - 11:45 Plenary talk - Anders Hagfeldt (Room Auditório)

11:45 - 12:00 Room transfer

12:00 - 14:00 Closing ceremony



# Memorial Lecture “Joaquim Costa Ribeiro”

Sunday, September 25<sup>th</sup>

19:30 - 20:30



**Aldo Felix Craievich**

*Instituto de Física da Universidade de São Paulo (USP), Brazil*

**Title: Advanced characterization of materials. Relevance and challenges**

The most widely used experimental procedure for studying the structure of materials is X-ray diffraction.

The analysis of single-crystal X-ray diffraction patterns reveals the geometry of unit cells and the coordinates of the atoms inside them. The problem is that atomic structures determined by applying this technique are spatial and time averages of many local and instantaneous structures, respectively. Thus results derived from analyses of single-crystal X-ray diffraction patterns do not describe neither local structures of point, linear, surface and volume defects, nor instantaneous configurations of oscillating or, more generally, moving atoms.

However, the properties of many materials depend more strongly on the local configurations of structural defects than on the features of their spatially averaged structure. Characterizations of static and dynamical defects such as thermal atomic oscillations, quantum dots, stacking faults, strains and others were made possible by using X-ray diffuse scattering techniques, which analyze the weak diffuse intensity between Bragg peaks. The technique of diffuse X-ray scattering at small angles (SAXS) was applied by first time to study substitutional Cu clusters in Cu-doped aluminum (GP zones). In Brazil there are several SAXS setups installed in laboratories located most of them in São Paulo State and two SAXS beam lines in operation at LNLS, connected to its 1.37 GeV UVX synchrotron source. Diffuse X-ray scattering techniques yield useful information related to structural defects but they still only refer to space and time average structures.

The problem related to space and time averaging of structures determined by classical X-ray diffraction is expected to be solved by the use of recently developed new X-ray sources, namely X-ray free-electron lasers (XFEL) and fourth generation synchrotrons, which, under favorable conditions, allow the determination of (i) nearly instantaneous structures without time averaging and (ii) local structures without spatial averaging.

XFELs are now in operation in USA (LCLS) and Japan (SACLA) and under construction in Germany (European XFEL). These X-ray sources generate very short (tenths femtoseconds) and high power photon bunches, which totally destroy the sample but still produce useful diffraction patterns that may lead to the determination of nearly instantaneous structures. A pioneer serial crystallographic study of protein nanocrystals using an XFEL was conducted at LCLS while the first single-shot structural study of metal nanocrystals using only one ten-femtosecond XFEL pulse has been recently performed at SACLA. Another example of application of a modern synchrotron X-ray source to materials science – carried out at ESRF, France - is a time-resolved study of discontinuous crack propagation in silicon single crystals.

The first two fourth generation synchrotrons in the world are under construction, in Sweden (Max IV) and at LNLS, Campinas (Sirius). These sources are expected to produce X-ray beams with high lateral and longitudinal coherence lengths, thus allowing the determination of structures of crystalline and amorphous materials without spatial averaging. Max IV is currently being commissioned and will operate soon while Sirius is now under construction and will be open to users by 2019.

Novel applications of modern coherent X-ray sources require challenging developments of very stable optics systems, in situ preparation of nanoscopic samples, complex control systems, big-data analysis procedures and new advanced instruments such as fast detectors with high spatial resolution and dynamical range. Progresses in all these relevant issues are being achieved.

The expected opening of Sirius to users will certainly bring new, exciting and challenging research opportunities to Brazilian and international materials science communities.

# Plenary talks

Monday, September 26<sup>th</sup>

8:30 - 9:30



**Elvira Maria Correia Fortunato**

*Universidade de Lisboa (UL), Portugal*

**Title: Green electronics: a technology for a sustainable future**

The evolution from rigid silicon-based electronics to flexible electronics requires the use of new materials with novel functionalities that allow non-conventional, low-cost and environmental friendly processing technologies. Among the alternatives, metal oxide semiconductors have brought to attention as backplane materials for the next generation of flat panel displays. After the huge success and revolution of transparent electronics and with the worldwide interest in displays where metal oxide thin films have proved to be truly semiconductors, display backplanes have already gone commercial in a very short period of time, due to the huge investment of several high profile companies: SHARP, SAMSUNG, LG and BOE. These materials have demonstrated exceptional electronic performance as active semiconductor components and can be tuned for applications where high transparency/electrical conductivity is demanded. The new paradigm of transparent electronics has attracted much interest as a novel technical solution in the field of the next generation of consumer electronics. The ultimate goal of this “see-through” device is to realize an integrated system equipped with ubiquitous functions of information storage, image display and networking, which strongly demands an embeddable transparent array of non-volatile memory.

In parallel we have been observing a rapid and growing interest concerning the utilization of biological materials for a wide range of applications. One of the most representative example is cellulose, not only in the form of raw material mainly for pulp and paper production, but also in the development of advanced materials/products with tailor-made properties, especially the ones based on nanostructures. In this presentation we will review the main applications of vegetal and bacterial cellulose in electronics, either as substrate (passive) or as a real electronic material (active), taking into account the expertise as well as the major developments already done at CENIMAT<sup>i3N</sup> in the area of Paper Electronics.

Monday, September 26<sup>th</sup>

16:45 - 17:45



**Lei Jiang**

*Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing, School of Chemistry and Environment, Beihang University, China*

**Title: Smart Interfacial Materials from Super-Wettability to Binary Cooperative Complementary**

Learning from nature and based on lotus leaves and fish scale, we developed super-wettability system: superhydrophobic, superoleophobic, superhydrophilic, superoleophilic surfaces in air and superoleophobic, superareophobic, superoleophilic, superareophilic surfaces under water. Further, we fabricated artificial materials with smart switchable super-wettability, i.e., nature-inspired binary cooperative complementary nanomaterials (BCCNMs) that consisting of two components with entirely opposite physiochemical properties at the nanoscale, are presented as a novel concept for the building of promising materials.

The smart super-wettability system has great applications in various fields, such as self-cleaning glasses, water/oil separation, anti-biofouling interfaces, and water collection system.

The concept of BCCNMs was further extended into 1D system. Energy conversion systems that based on artificial ion channels have been fabricated. Also, we discovered the spider silk's and cactus's amazing water collection and transportation capability, and based on these nature systems, artificial water collection fibers and oil/water separation system have been designed successfully.

Learning from nature, the constructed smart multiscale interfacial materials system not only has new applications, but also presents new knowledge: Super wettability based chemistry including basic chemical reactions, crystallization, nanofabrication arrays such as small molecule, polymer, nanoparticles, and so on.

Tuesday, September 27<sup>th</sup>

8:30 - 9:30



**Susan B. Sinnott**

*Pennsylvania State University, USA*

**Title: Role of Atomic-Scale Modeling in Materials Design and Discovery**

The discovery and design of new materials is the limiting factor to improve many existing technologies or to enable new applications. Material modeling methods across length scales are now widely applied and show promise for fulfilling the ultimate goal contained within the phrase “materials by design”. This presentation will review the evolution of some common material modeling methods and their integration with cutting-edge experimental methods as well as data informatics. Illustrative applications will be discussed within the context of metal/piezoelectric interfacial systems for electronic devices, new metal alloy design, novel two-dimensional and nanostructured systems, and the role of strain and dopants in the design of multifunctional materials. A future outlook of materials modeling within the context of material design and discovery will also be provided.

Tuesday, September 27<sup>th</sup>

16:345 - 17:45



**Ado Jorio**

*Universidade Federal de Minas Gerais (UFMG), Brazil*

**Title: Inelastic light scattering in carbon nanostructures: from the micro to the nanoscale**

Carbon nanotubes, graphene and amorphous carbons are prototypes for the development of nanometrology due to their unique mechanical and electronic structures, and due to their potential applications in different fields, such as biomedicine and soil science. The use of optics to address nanoscience is the use of a big probe to sense a tiny material because, in the visible, light is associated with wavelengths in the range of hundreds of nanometers to microns. Nanotechnology offers some solutions to overcome this measurement limitation, such as exploring resonance phenomena playing against the very low efficiency of a single nanostructure, or using plasmonics to localize light into nanometer sized areas.

In this talk I will discuss these aspects of nanoscale photo physics, addressing the evolution of Raman spectroscopy applied on carbon nanostructures, from the micro to the nanoscale.

Wednesday, September 28<sup>th</sup>

8:30 - 9:30



**Ifor D. W. Samuel**

*University of St Andrews, St Andrews, U.K.*

**Title: Organic Semiconductor Optoelectronics**

Organic semiconductors are a remarkable class of materials because they combine novel semiconducting optoelectronic properties with simple fabrication and the scope for tuning properties by changing their chemical structure. Their properties are very different from, and complementary to, their inorganic counterparts. For example they can be deposited from solution to make working electronic and optoelectronic devices. Advances in materials have enabled a wide range of advances in devices, and in the domain of optoelectronics, organic light-emitting diodes (OLEDs), solar cells and (optically pumped) lasers have been demonstrated. After an introduction to these materials, this talk will show how advances in this field are leading to new applications. In particular it will show how organic light emitting materials can be used for applications ranging from medicine to minefields. It will show how OLEDs can be used to treat many skin cancers, how organic lasers can be used to detect explosive vapour #9for humanitarian demining) and how organic semiconductors can be used for visible light communication.

Wednesday, September 28<sup>th</sup>

16:45 - 17:45



**Paul S. Weiss**

*University of California Los Angeles UCLA, USA*

**Title: Cooperative Function in Atomically Precise Nanoscale Assemblies**

We use molecular design, tailored syntheses, intermolecular interactions, and selective chemistry to direct molecules into desired positions to create nanostructures, to connect functional molecules to the outside world, and to serve as test structures for measuring single or bundled molecules. Interactions within and between molecules can be designed, directed, measured, understood, and exploited at unprecedented scales. Such interactions can be used to form precise molecular assemblies, nanostructures, and patterns, and to control and stabilize function. We selectively test hypothesized mechanisms by varying molecular design, chemical environment, and measurement conditions to enable or to disable function and control using predictive and testable means. Critical to understanding these variations has been developing the means to make tens to hundreds of thousands of independent single-molecule/assembly measurements in order to develop sufficiently significant statistical distributions, while retaining the heterogeneity inherent in the measurements. We measure the electronic coupling of the molecules and substrates by measuring the polarizabilities of the connected functional molecules. The next step in such devices is to learn to assemble and to operate molecules together, both cooperatively and hierarchically, in analogy to biological muscles. We discuss our initial efforts in this area, in which we find both interferences and cooperativity.

Thursday, October 29<sup>th</sup>

10:45 - 11:45



**Anders Hagfeldt**

*Swiss Federal Institute of Technology Lausann (EPFL), Switzerland*

**Title: The Versatility of Mesoscopic Solar Cells**

In our work on solid-state dye-sensitized solar cells (ssDSSC) we have recently shown that copper phenanthroline complexes can act as an efficient hole transporting material. We prepared ssDSCs with the organic dye LEG4 and copper(I/II)-phenanthroline as redox system and achieved power conversion efficiencies of more than 8%. For perovskite solar cells (PSC) our best performance is presently achieved with a mixed composition of iodide/bromide and methyl ammonium/formamidinium. We will report on our work on optimizing the solar cell efficiency that at present shows a certified efficiency of 21.0%. For cells larger than 1 cm<sup>2</sup> we recently certified a world record efficiency of 19.6%. With the use of an ALD deposited SnO<sub>2</sub> compact underlayer we have constructed a planar perovskite solar cell with a hysteresis free efficiency of above 18%. Based on this configuration we have in collaboration with the group of Prof. Bernd Rech, Helmholtz Zentrum Berlin, prepared a monolithic Perovskite/Silicon-Heterojunction tandem solar cell with an efficiency above 18%, pointing out a promising direction for further improvement of tandem cells using PSCs as one of the constituents. Another possibility for a tandem system has been investigated in collaboration with Prof. Segawa and co-workers in which a spectral split-cell, using a combination of a DSSC cell (with a wideband dye DX3) and a perovskite cell, demonstrated an efficiency of 21.5%.

# Discussion Panel

## Monday, September 26<sup>th</sup>

*SESSION RIG (12:00 - 14:00) - Room Araucária*

**12:00 Research in Germany**

Maxi Neidhardt

**RIG.1**

## Tuesday, September 27<sup>th</sup>

*SESSION ME (12:00 - 14:00) - Room Amoreira II*

**12:00 Meet the Editors**

Osvaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos

**ME.2**

## Wednesday, September 28<sup>th</sup>

*SESSION IN (12:00 - 14:00) - Room Amoreira II*

**12:00 Materials Research and Innovation**

Ruy Quadros<sup>1</sup>, André Ferrarese<sup>2</sup>, Vinicius Grassi<sup>3</sup>, Milton Mori<sup>1</sup>; <sup>1</sup>Universidade de Campinas, <sup>2</sup>Mahle Latin América, <sup>3</sup>Braskem

**IN.3**

# Technical lectures

**Tuesday, September 27<sup>th</sup>**

*SESSION EXP1 (09:45 - 10:45) - Room Araucária*

- 09:30 Advance your materials analysis using FTIR Imaging Microscopy** EXP1.1  
Luciana Pataro<sup>1</sup>; <sup>1</sup>Agilent
- 10:15 EnviroESCA - Fully Automated XPS Analysis under Environmental Conditions** EXP1.2  
Thomas Stempel Pereira<sup>1</sup>; <sup>1</sup>SPECS (Avaco)

*SESSION EXP2 (11:15 - 12:00) - Room Araucária*

- 11:15 The benefits of using complementary surface metrology approaches to improve speed and accuracy of surface characterization** EXP2.3  
Albert Sánchez Laforet<sup>1</sup>; <sup>1</sup>Anacom Científica

*SESSION EXP3 (14:00 - 16:45) - Room Araucária*

- 14:00 Bruker Nano Analytics - Benchtop Micro-XRF, TXRF and Electron Microscope Accessories** EXP3.4  
Daniel Andrade<sup>1</sup>; <sup>1</sup>Bruker Divisão BNA
- 14:45 Advanced Materials Characterization Tools by XRF and XRD – Study case of applications and technological advances** EXP3.5  
João Fiori<sup>1</sup>; <sup>1</sup>Bruker ( BAXS)
- 15:30 New performance and automation of complex corrected microscopes** EXP3.6  
Jan Ringnalda<sup>1</sup>; <sup>1</sup>FEI

**Wednesday, September 28<sup>th</sup>**

*SESSION EXP4 (09:45 - 10:45) - Room Araucária*

- 09:30 Combining Rheometry with Spectroscopic methods – Benefits and Applications in Material Science** EXP4.7  
Hans-Michael Petri<sup>1</sup>, Gustavo Riether<sup>2</sup>; <sup>1</sup>Reoterm, <sup>2</sup>Thermo Fisher
- 10:15 Maskless optical direct write lithography: equipment and applications** EXP4.8  
Niels Resandt Wijnandts Van Resandt<sup>1</sup>; <sup>1</sup>Heidelberg Instruments

*SESSION EXP5 (11:15 - 12:00) - Room Araucária*

- 11:15 Instrutécnica** EXP5.9  
I Instrutécnica<sup>1</sup>; <sup>1</sup>Instrutécnica

***SESSION EXP6 (14:00 - 16:45) - Room Araucária***

- |              |   |                |
|--------------|---|----------------|
| <b>14:00</b> | <b>The Solution for Advanced X-ray systems for material analysis</b>                              | <b>EXP6.10</b> |
|              | <u>Danilo Massaki Oshima</u> <sup>1</sup> , Pol De Pape <sup>1</sup> ; <sup>1</sup> Rigaku/Dairix |                |
| <b>14:45</b> | <b>How the R&amp;D OPV can match the market? Possible solutions from lab-to-fab</b>               | <b>EXP6.11</b> |
|              | <u>Diego Bagnis</u> <sup>1</sup> ; <sup>1</sup> CSEM Brasil                                       |                |
| <b>15:30</b> | <b>Electron Beam Lithography for nowadays most pressing research topics</b>                       | <b>EXP6.12</b> |
|              | <u>Andre Linden</u> <sup>1</sup> ; <sup>1</sup> Raith America                                     |                |



# Symposia summary

## (Nano)materials and Synthesis

<b>A:</b> 2D Advanced Materials: Carbon/Graphene and NanoComposites	Paula Vilarinho ( <i>University of Aveiro</i> ) Dr. Pritesh Hiralal ( <i>University of Cambridge</i> ) Dr. Hanbin Ma ( <i>University of Cambridge</i> ) Emerson Camargo ( <i>UFSCar</i> ) Walter Katsumi Sakamoto ( <i>UNESP</i> ) Diogo Paschoalini Volanti ( <i>UNESP</i> ) Maria Aparecida Zaghete ( <i>UNESP</i> )
<b>B:</b> Nanocellulose materials: the keystone for a plethora of multifunctional applications	Dr. Daniela Nunes ( <i>Universidade Nova de Lisboa</i> ) Dr. Ari Alastalo ( <i>VTT Technical Research Centre of Finland LTD</i> ) Dr. David Guerin ( <i>Centre Technique du Papier</i> ) Prof. Dr. Antonio José Felix de Carvalho ( <i>USP</i> )
<b>C:</b> Symposium on complex advanced materials: from novel superconductors to magnetic nanostructures.	Marcelo Knobel ( <i>IFGW - Unicamp</i> ) Surender Kumar Sharma ( <i>UFMA</i> ) Pascoal José Giglio Pagliuso ( <i>IFGW- Unicamp</i> ) Marcos de Abreu Ávila ( <i>GMQ-UFABC</i> )
<b>D:</b> Materials science at high-pressure conditions	Altair Sória Pereira ( <i>UFRGS</i> ) Elisa Maria Baggio-Saitovitch ( <i>CBPF</i> ) Narcizo M. Souza-Neto ( <i>LNLS</i> ) Paulo de Tarso Cavalcante Freire ( <i>UFC</i> )
<b>E:</b> X Brazilian Electroceramics Symposium - In Honor to Prof. Dr. Jose Arana Varela	Marcelo Ornaghi Orlandi ( <i>IQ-UNESP</i> ) Manuel Henrique Lente ( <i>UNIFESP</i> ) Daniel Zanetti de Florio ( <i>UFABC</i> )
<b>Theory, Characterization and Modeling</b>	
<b>F:</b> Advanced and Analytical Microscopy and Spectroscopy of Nanostructures and Engineering Materials	Guillermo Solorzano ( <i>PUC-Rio</i> ) Daniel Lorscheitter Baptista ( <i>UFRGS</i> )
<b>G:</b> Applications of Neutrons to Materials Research	Eduardo Granado ( <i>IFGW-UNICAMP</i> ) Elisa Baggio-Saitovitch ( <i>CBPF</i> ) Cristiano Luis Pinto de Oliveira ( <i>IF-USP</i> ) Paulo F. P. Fichtner ( <i>UFRGS</i> )
<b>H:</b> From atomistic to multiscale modeling: new developments and applications in Materials Science	Alexandre Fontes da Fonseca ( <i>Unicamp</i> ) Marília J. Caldas ( <i>USP</i> ) Pedro Venezuela ( <i>UFF</i> ) Paulo Cesar Piquini ( <i>UFMS</i> )
<b>I:</b> Surface Science: fundamentals and models.	Abner de Siervo ( <i>IFGW - UNICAMP</i> ) Edmar A. Soares ( <i>DF-ICEX UFMG</i> ) Fernando Stavale ( <i>CBPF</i> ) Pedro Augusto de Paula Nascente ( <i>DEMA-UFSCar</i> )

**J:** Surface Science: Recent Developments in Technological Applications

Marcelo Eduardo Huguenin Maia da Costa (*PUC-Rio*)

Carlos Alejandro Figueroa (*UCS and Plasmar Tecnologia*)

Sergio de Souza Camargo Jr (*COPPE and Escola Politécnica UFRJ*)

Maria de Fátima Brito Souza (*Unicamp*)

**K:** Structure-properties Relationship of Advanced Metallic Materials

Leonardo Barbosa Godefroid (*UFOP*)

Waldek Wladimir Bose Filho (*USP*)

Luiz Carlos Rolim Lopes (*UFF*)

---

**Electronics and Photonics**

**L:** Advanced Materials and Devices for Organic Electronics and Bioelectronics

Lucas Fugikawa Santos (*UNESP*)

Ivan H. Bechtold (*UFSC*)

Frank Nelson Crespilho (*USP*)

Gregório Couto Faria (*USP*)

Welber Gianini Quirino (*UFJF*)

**M:** Plasmonics and Photonics in Nanostructured Materials

Lazaro A. Padilha (*UNICAMP*)

Luciana Reyes Pires Kassab (*FATEC-SP*)

Zakya H. Kafafi (*Lehigh University*)

Diogo Burigo Almeida (*University of Michigan*)

Cid Bartolomeu de Araújo (*UFPE*)

**N:** Advanced semiconductor and hybrid architectures

Carlos César Bof Bufon (*LNNano/CNPEM*)

Christoph Deneke (*LNNano/CNPEM*)

Shay Reboh (*LETI*)

---

**Energy and Sustainability**

**O:** Materials and Devices for Third Generation Solar Cells

Prof. Monica Lira-Cantu (*Catalan Institut of Nanoscience and Nanotechnology (ICN2)*)

Prof. Francisco das Chagas Marques (*Unicamp*)

Prof. Lucimara Stolz Roman (*UFPR*)

**P:** Materials for energy conversion and storage

Sydney Ferreira Santos (*UFABC*)

Carlos Moyses Araujo (*Uppsala University*)

Adam Duong (*Université du Québec à Trois-Rivières*)

Fabio Henrique de Barros Lima (*USP*)

**Q:** Nanotoxicology and Nanoregulation - the safe use of manufactured nanomaterials and 2nd Nanoreg Brazil Meeting

Valtencir Zucolotto (*USP*)

Nelson Durán (*Unicamp*)

Wagner José Favaro (*Unicamp*)

Juliana Cancino Bernardi (*USP*)

---

**Biomaterials and Soft Materials**

**R:** Surfaces and Interfaces for Medical Applications, Biomaterials and Health

Diego Mantovani, PhD, FBSE (*Laval University*)

Marisa Beppu, PhD (*Unicamp*)

Victor M. Castaño, PhD (*Universidad Nacional Autonoma de Mexico*)

**S:** Biomaterials and Devices for Neuroscience

Roberto Ricardo Panepucci (*CTI*)

Roberto Maria Covolan (*Unicamp*)

Hercules Neves (*Unitec and Uppsala University*)

**T:** Self-Assembled Biological Structures for Electronic and Photonic Devices and Applications

Wendel Andrade Alves (*UFABC*)

Suchi Guha (*University of Missouri*)

Susana Inés Córdoba de Torresi (*USP*)

Luiz Henrique Dall'Antonia (*UEL*)

---

**Workshops**

---

**U:** University Chapter Symposium  
Tiago Carneiro Gomes (*UNESP*)  
Bruna Carolina Costa (*UNESP*)  
João Paulo Almeida de Mendonça (*UFJF*)  
Marcella Rocha Franco (*UFOP*)  
Jefferson da Silva Martins (*UFJF*)

---

**V:** Sustainable development of materials for advanced energy and electronics, extractive materials and transportation products  
Peter William Bryant (*IBM*)  
Rodrigo Fernando Bianchi (*UFOP*)  
Rodrigo Neumann Barros Ferreira (*IBM*)  
Roberto Mendonça Faria (*USP*)  
Ronaldo Giro (*IBM*)

---

**Tutorials**

---

**X:** Hands-on tutorial on simulations using Reactive ForceFields: overview and applications  
Alexandre Fontes da Fonseca (*Unicamp*)  
Marília J. Caldas (*USP*)  
Pedro Venezuela (*UFF*)  
Paulo Cesar Piquini (*UFMS*)

---

**Z:** School of Scientists: Scientific Writing Tutorial  
Valtencir Zucolotto (*USP*)



# Symposia

## (Nano)materials and Synthesis

### **Symposium A: 2D Advanced Materials: Carbon/Graphene and NanoComposites**

**Scope of the Symposium:** This symposium will focus on progress and frontiers of fundamental and applied Science of Carbon/Graphene nanostructures (CNS) and other two-dimensional (2D) nanomaterials, related materials and composites. The composites prepared with carbon nanostructures and organic or inorganic compounds, as well as by combination of inorganic/organic compounds results in development of new functional materials with specific properties. These composites materials will have important roles in nanotechnology engineering as well as their application in different technological areas. Contributions related to techniques that offer advanced processing, superior properties with particular emphasis in low temperature processing, energy harvesting applications, as well as flexible electronics and surface functionalization are welcomed.

The symposium is also intended to provide a forum for scientists and engineers working in the nanocarbon and related materials, energy and related fields to exchange ideas on novel energy conversion, energy storage, and integration techniques, including viable manufacturing technologies. Papers are invited on both fundamental and applied aspects of advanced electrochemical power sources, namely batteries, super capacitors and fuel cells, in relation to carbon and related materials synthesis and characterization, devices and evaluation, and integration and testing with reference to wearable electronics.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Synthesis and chemical modification methods (example: low temperature processing)
- Novel low dimensional materials,
- Inorganic-organic hybrid composites
- Structural, electrical, mechanical and optical characterization of CNS and 2D materials
- Electronic and optical properties
- Carbon/Graphene, 2D materials and related materials integration and devices (Rigid and flexible substrate technologies)
- Biomedical, thin film power electronic and thin film batteries applications
- 2D nanostructures for energy storage or applications (example: Harvesting energy)
- New physical and chemical properties of 2D materials
- General properties of 2D layered oxides, nitrides and sulfides

### **Symposium B: Nanocellulose materials: the keystone for a plethora of multifunctional applications**

**Scope of the Symposium:** Nanocellulose is categorized as a renewable source of materials that displays remarkable physical properties together with low toxicity and cost production, earth-abundance and biocompatibility, leading to its use in different applications, ranging from electronic to medical and pharmaceutical devices, together with its integration in other systems acting as a composite. The symposium aims at giving an overview on recent advances of nanocellulose materials, as well as other biopolymers and composites, together with the large range of applications where the optimized materials

can be incorporated. Furthermore, all extraction or production routes of nanocellulose/biopolymers (plants, animals, and bacteria) will be considered.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Nanocellulose, biopolymers and composites
- Nanocellulose/biopolymers extraction and production emerging routes together with nanomanufacturing options
- Structural and physical property characterization of nanocellulose, biopolymers and composites
- Biodevices such as biosensors, microfluidics and related applications
- Electronic and energy devices such as flexible electronics, solar cells, batteries, and so on

## **Symposium C: Symposium on complex advanced materials: from novel superconductors to magnetic nanostructures**

**Scope of the Symposium:** The emergence of complex collective phenomena in condensed matter defines one of the most interesting challenges in Physics and one of the areas with highest potential for practical applications. Examples of such phenomena are superconductivity, complex magnetic ordering and Kondo-like behavior, which stem from a coupling between the micro- and macroscopic worlds materialized on the mesoscopic scale. The scientific objective of the symposium is to pursue a series of events worldwide to discuss materials where emergent phenomena can be observed. Among the systems that will be debated are complex oxides, superconductors, superconducting/ferromagnetic hybrids, and heavy-fermion, thermoelectrical and multifunctional materials. Since the phenomena are rooted in the nanoscopic scale, we will give particular attention to small-sized systems. In fact, nanoscale materials (such as heterostructured magnetic nanoparticles with e.g., core-shell, dumbbell, or dimer architectures) have raised considerable interest in basic research as well as potential industrial applications due to their broad range of novel and enhanced properties. Notably, one of the major challenges in the synthesis of complex multiphase nanoscale materials is how to design and prepare the chosen structure with desired multifunctionality.

As such, the design, synthesis and characterization of complex advanced materials in bulk and nanostructured form and the current understanding of the emergent complex collective phenomena that govern their physical properties will be the focus of this symposium.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Kondo physics in bulk materials and nanoscale structures
- Complex Oxides: Ferroics, multiferroics and Rare Earth based magnetic oxide
- Superconductivity and magnetism, including exotic superconductivity
- Topological Insulators and metal-insulators transitions
- Heavy Fermion Physics including Valence and charge fluctuations
- New Materials Design and advanced materials characterization techniques
- Thermoelectrical and multifunctional materials
- Granular magnetic nanoparticles, superparamagnetism & related properties
- Magnetic nanohybrids, related properties & applications
- Dipolar Interactions in magnetic nanosystems, Bimagnetic heterostructured nanoparticles, Spin polarization and charge transfer mechanism, Magnetic nanohybrid catalyst, Biomedical Applications and Exchange coupled magnets

## **Symposium D: Materials science at high-pressure conditions**

**Scope of the Symposium:** The symposium will be an interdisciplinary meeting for discussing recent trends and developments in the science of materials submitted to extreme conditions of pressure. The development and dissemination of new experimental, computational and theoretical tools have enormously increased the

possibility to exploit how this fundamental thermodynamic parameter affects the physics and chemistry of different materials. The proposal is bring together basic and applied researchers working in this field, using high-pressure in a broad spectrum of approaches, including: study of basic materials properties, induction of electronic, magnetic and structural changes, production of novel materials, development of materials processing and analytical techniques, theoretical modeling and use of the state of the art computational tools.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Electronic, magnetic and transport properties
- Superconductivity and correlated phenomena
- Crystallography at extreme conditions
- Nanoscience and nanotechnology
- Spectroscopic and structural studies
- High pressure chemistry
- Pressure-induced phase transformations
- Instrumentation for the study of materials under high pressure
- Materials processing
- Theoretical models and computing tools

## **Symposium E: X Brazilian Electroceramics Symposium - In Honor to Prof. Dr. Jose Arana Varela**

**Scope of the Symposium:** Electroceramics is an important interdisciplinary research area involving mainly physicists, chemists and engineers. Electroceramics is a very attractive area in Materials Science. It is large the number of journals and meetings with publication of many papers with potential technological impact. New materials with outstanding properties and potential technological applications together with old materials presenting enhanced properties offer a broad field of research opportunities. This symposium, organized by the Brazilian-MRS intends to be a forum for all researchers and students (undergraduate, M. Sc., PhD and Pos-Docs) on electroceramics. The state-of-the-art of R&D on electroceramic materials will be focused with reviews of the present knowledge and forecasts for future developments. Emphasis will be put on the opportunities for interactions and experiences exchange among researchers. Several features of R&D on electroceramics, including novel processing, experimental procedures and technological applications will be considered.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Synthesis and Processing (powder synthesis, thin and thick film processing, self-supported structures, multilayer structures, heterostructures, nanostructures, sintering and microstructure development, grain boundary engineering, ceramic matrix composites)
- Characterization (dc and ac standard electrical measurements, electrochemical impedance spectroscopy, transport phenomena and diffusion, defects in electroceramics, X-ray diffraction, neutron diffraction, electron microscopy, focus ion beam, Raman spectro)
- Applications (dielectrics, ferroelectric memories, piezoelectrics, non-lead electroceramics, electrical ceramics, magnetic ceramics, ceramic superconductors, ionic-electronic mixed conductors, spintronics, sensors, actuators, transducers, varistors, soli

# Theory, Characterization and Modeling

## Symposium F: Advanced and Analytical Microscopy and Spectroscopy of Nanostructures and Engineering Materials

**Scope of the Symposium:** The symposium aims at providing a forum for researchers interested in applying advanced methods of electron microscopy and spectroscopy, including aberration-corrected electron microscopy, and in-situ characterization in the various fields of microscopies to materials research. Nowadays, this approach is of fundamental and increasing importance in different technology fields, such as electronics, optics, communications, magnetics, energy and environment and covering the wide spectrum from nanostructures in functional materials, soft matter and bioscience to structural engineered materials for industrial infrastructure. Materials research on thin films, bulk materials, surfaces, materials at the nanoscale and at the interface between physical and life sciences is of prevailing interest because of its fundamental importance in understanding the chemical and physical and life properties of materials and in evaluating their potential for technological applications. Advanced microscopic and related spectroscopic techniques play a crucial role in characterizing the microstructure/nanostructures and the structure-property relationships of materials, as well as in metrology. Current topics will be highlighted in keynote presentations given by leading invited experts. Contributions in the topics indicated below and related are welcome.

### Abstracts will be solicited in (but not limited to) the following areas:

- Applications of analytical electron microscopy in electronics, optics, communications, magnetics, energy and environment
- Phase identification and defect analysis in bulk structural materials
- Nanostructures in functional materials, soft matter and bioscience
- Materials research on thin films, surfaces, materials at the nanoscale
- In situ dynamic studies in the electron microscope, e-TEM
- Electron microscopy characterization on nanoparticles and nano-objects
- Applications in analytical tools, spectroscopy: EDS, EELS, PL/cathode luminescence, Raman
- Advanced imaging/analytical techniques: EBSD, EFTEM, spectrum imaging
- New developments in scanning probe microscopy/spectroscopy: AFM, STM and applications in materials research

## Symposium G: Applications of Neutrons to Materials Research

**Scope of the Symposium:** Neutron-based techniques, including diffraction, small angle scattering, inelastic scattering, radiography, reflectivity, among others, have contributed strongly to some of the most serious challenges society is facing, such as agriculture, earth sciences, energy, environment, heritage, information technology, medicine and nanotechnology. Much of the development of neutron sciences around the globe has been led by materials scientists and condensed matter physicists attracted by the neutron sensitivity to nuclear and magnetic structure, correlation and dynamics, as well as its complementarity with respect to x-rays. In the regional setting, the ongoing RMB (Reator Multipropósito Brasileiro) and RA-10 enterprises to build new research reactors in Brazil and Argentina open a window of opportunities for the development of a robust neutron users community in the region. In this symposium, experts will review the properties of free neutrons that make them suitable for research on materials, and present contemporary examples of applications of neutron-based techniques to materials science problems.

### Abstracts will be solicited in (but not limited to) the following areas:

- Small Angle Scattering (neutrons or x-rays)
- Diffraction (neutrons or x-rays)

- Radiography (neutrons or x-rays)
- Inelastic scattering (neutrons or light)
- Irradiation damage (neutrons or ions)
- Magnetism
- Crystallography
- Neutron sources
- Reflectivity (neutrons or x-rays)
- Stress/strain

## **Symposium H: From atomistic to multiscale modeling: new developments and applications in Materials Science**

**Scope of the Symposium:** Theoreticians in Materials Science are living an exciting time. Advances in laboratory technologies are allowing experimentalists to provide high quality data regarding the structure-property relationships of novel materials. Unexpected achievements as the synthesis of nanostructures whose properties have been predicted several years or decades ago, as in case of the so called graphynes, and the re-discovery of special properties of known materials, as in the case of perovskites, are now becoming reality. Hierarchical carbon nanostructured materials, metal-organic-frameworks (MOFs), organic/inorganic composites, self-assembled structures, two-dimensional materials, surfaces, interfaces, etc., are all examples of actual materials and phenomena of great potential for applications in science and technology. Architected shapes of known materials, like origami and kirigami nanostructures or porous solids made of known coiled materials, are providing new ideas to the development of new applications. The aim of this symposium is to address theoretical and computational efforts to provide advances in the investigation of properties of known promising materials, and to present predictions of new materials. New methods, protocols and theories regarding the discovery of materials and prediction of their properties are welcome. Theoretical works based on or dealing with experimental data are encouraged to be submitted to this symposium. Use of atomistic, quantum or classical molecular modeling and dynamics, coarse-grained, mesoscale, and continuum methods and approaches, as well as multiscale strategies to solve problems and describe materials properties, are all welcome. This symposium is dedicated to bring scientists together to examine the current understanding, state-of-the-art, and future trends of these exciting fields.

### **Abstracts will be solicited in (but not limited to) the following areas:**

- Classical reactive and non-reactive force-fields for Molecular Dynamics
- New developments in Density Functional Theory DFT and Generalized DFT
- New developments for electronic and optical properties, on top of DFT or Hartree-Fock (TD-DFT, GW, Bethe-Salpeter)
- Large scale ab initio simulations
- Multiscale modeling
- Organic or hybrid organic/inorganic nano-materials
- Energy harvesting or conversion
- Nanostructured materials, including self-assembly and design
- Surfaces, interfaces, catalysis, sensors, magnetism, bio-nano-materials, etc.

## **Symposium I: Surface Science: fundamentals and models**

**Scope of the Symposium:** Nowadays surface science is a multidisciplinary area devoted to understand fundamental phenomena in nature which are essential for the development of many advanced materials and technological applications. It has been subject of interest in many fields of science and technology. The recent advances on the understanding of surfaces and interfaces properties such as surface energy, wettability, adhesion, super hydrophobicity and super hydrophilicity, monolayers and the development of

theoretical models, by the use of modern and powerful techniques and methods, have opened new horizons in this fascinating area for scientist from academia and industry. The aim of this symposium is to discuss the recent advances in the fundamentals and theoretical models in surface science and to promote the exchange of ideas and knowledge among scientist working in this area, bringing together physicists, chemists, material scientists and engineers.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Electronic and atomic structure of surfaces and interfaces
- Two dimensional and layered materials
- Deposition and growth
- Self-assembled monolayers
- Surface/Interface engineering and functionalization
- Wettability and Surface energy
- Fundamentals of surface modification and deposition processes
- Adhesion and repellency.
- Macro and nano tribology
- Advanced surface Characterization

## **Symposium J: Surface Science: Recent Developments in Technological Applications**

**Scope of the Symposium:** Surface science has been object of great interest both from a fundamental and technological point of views, targeting specific actions as super hydrophilicity, super hydrophobicity, self-cleaning and self-healing abilities and applications. The results of this intense research are present in our modern society in many technological areas, ranging from industrial processes through construction, architecture and aviation. The aim of this symposium is to gather together researchers working in the development of technological applications involving surface science. Physicists, chemists, material scientists, and mechanical, material, metallurgical and mining engineers with interest in this area are the target audience. The symposium intends to embrace many topics, focused in development and application of: nanostructured coatings, super hydrophobic and super hydrophilic surfaces, surface modification, physical and chemical routes of synthesis, characterization and properties of protective coatings and modified surfaces, SLIPS materials and MEMS/NEMS interfaces.

**Abstracts will be solicited in (but not limited to) the following areas:**

- SLIPS (slippery liquid infused porous surface)
- Chemical and Physical routes to synthesis
- Nano-structured coatings
- Surface modifications induced by energetic techniques (CVD,plasma, laser)
- Characterization and properties of protective coatings
- Smart and self-repairing surfaces
- Surfaces with self-cleaning ability
- Advances in Surface/Interface characterization and analysis.
- Super-hydrophobic and super hydrophilic surfaces
- Coatings for Industrial activity

## **Symposium K: Structure-properties Relationship of Advanced Metallic Materials**

**Scope of the Symposium:** The search for new materials with improved properties now occupies an important position in the engineering world. A number of procedures have been recently proposed to aid

the development of materials science and engineering. For example, the advents of the scanning tunneling microscope and the atomic force microscope, together with developments in electron microscopy, have opened new ways for the study of structure materials at the nano-scale. Advances in the field of fracture mechanics and its application to structural design and material selection have helped to offset some of the potential dangers posed by increasing technological complexity, and have undoubtedly prevented a substantial number of structural failures. The development of thermo-mechanical processing in steel industry changed the traditional concept of deformation processing, when the single operation to reduce thickness and to provide a desirable shape has been improved to produce specific microstructures, with which are associated particular mechanical and physical properties. This Symposium deals with these topics, to show some of the new most important scientific and technological advances in materials science and engineering. The Symposium seeks to bring together experts from academia and industry, through various multi-disciplinary themes. This is an event that has grown in public and in quality since its launch in 2009.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Techniques for microstructure and properties characterization
- Fracture mechanics applied to structural integrity
- Light alloys (Al, Mg, Ti) for automotive and aeronautical applications
- Recent developments in steels for automotive industry and for gas/oil pipelines
- Materials to resist fatigue and creep
- Recent technologies for welding procedures

## **Electronics and Photonics**

### **Symposium L: Advanced Materials and Devices for Organic Electronics and Bioelectronics**

**Scope of the Symposium:** This symposium is dedicated to unite the views in physics, chemistry, biochemistry, materials science and engineering on applications of advanced materials and devices for organic electronics and bioelectronics. The growth of organic electronics in the last decade permitted the development of a great number of possible applications as flexible, stretchable and printed electronic/optoelectronic devices, as well devices which can interface biological systems or perform chemical or biochemical sensing and stimulation. The interest topics include chemical synthesis of advanced functional materials, processing techniques for the achievement of new device structures, organic/hybrid compounds and devices, structure fabrication at micro- or nanoscale, interface properties, molecular spectroscopy, film morphology, chemical or biochemical detection, electronic/photonic properties and theoretical approaches to understand supramolecular structures and devices. The symposium encourages the submission of papers comprising applications of organic/hybrid materials, such as: organic light-emitting diodes, field-effect transistors, electrochemical transistors, organic photovoltaics, integrated circuits, non-volatile memories, sensors, actuators and detectors.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Synthesis of conjugated molecules and polymers, hybrid materials and compounds
- Theoretical modeling of conjugated molecules, polymers and organic devices
- Photonics, photophysics, and photochemistry of conjugated molecules and polymers
- Liquid crystal materials for organic electronics
- Flexible, stretchable, wearable and printed devices
- Natural/biocompatible electronic materials
- Strategies to interface biological molecules to organic devices
- Organic optoelectronics for optical and/or electrical sensing and stimulation

- Biosensors, microfluidics and biomimetic systems
- Biofuel Cells and Electrochemical Biosensors

## **Symposium M: Plasmonics and Photonics in Nanostructured Materials**

**Scope of the Symposium:** For the last few decades, colloidal and plasmonic nanomaterials have gone from simple quantum dots and metallic nanoparticles to more complex nanostructures such as core/shell, plasmonic-semiconductor hybrids, etc. Those novel nanomaterials emerged not only as interesting new scientific curiosities but also as promising new platforms for the development of new technologies, expanding from clean and renewable energy, biosensors to medicine. The scope of the symposium is based on recent results of nanoparticles preparation for photonic and biophotonic applications, linear and nonlinear optics in nanocomposite materials, new concepts and fabrication methods of colloidal nanomaterials and plasmonic waveguides, new techniques for plasmon characterization, magnetic, structural and electronic properties using novel probing tools and engineering of new nanostructures.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Novel routes for dielectric and metallic nanoparticle preparation; engineering of new metallic nanoparticles for photonic devices
- Synthesis of quantum dots and other colloidal nanomaterials
- Plasmonics, hybrid metal-semiconductor nanostructures, and other heterostructures
- Optical characterization, spectroscopy, and non-linear optical properties
- Plasmonic waveguides
- Modeling and theoretical studies of electronic structures, transport, many-body effects
- Nanomaterials applied to biology, biophotonics, bioelectronics, and medicine
- Nanomaterial based devices: novel architectures, performance optimization

## **Symposium N: Advanced semiconductor and hybrid architectures**

**Scope of the Symposium:** The symposium aims to gather researcher working on semiconductor as well as inorganic-organic hybrid architectures. Whereas classical semiconductor growth, fabrication and device processing builds the fundament of an advanced nanotechnology with broad applications, extensions to the classical planar semiconductor concepts have been proposed and established in the last years. These include the growth of non-planar structures, advanced 2D materials like semiconductor nanomembranes, the use of self-formed 3D nanostructures (nanowires) as well as advanced hybrid systems combining classical inorganic materials with organic semiconductors for a new device generation.

The symposium offers a forum, where these communities can meet and discuss these novel approaches from material growth and characterization, over nanostructure fabrication to complete device architectures.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Advanced materials for Silicon technology: Semiconductor-On-Insulator, high mobility materials, strained Si, SiGe and SiC alloys, high-k and low-k dielectrics, gate stack, doping, metallization, epitaxy, materials integration.
- Thin-films technology and characterization: MBE, PECVD, LPCVD, ALD, Magnetron sputtering
- Surfaces and interfaces
- III-V semiconductors, Group III Nitrides and Dilute Nitride Semiconductors, Silicon Carbide, Oxide Semiconductors and other compound semiconductors
- Devices: CMOS scaling and alternative architectures, flexible electronics, sensors, micro and nanoelectromechanical systems (MEMS/NEMS)

- Low dimensional semiconductor and interconnect structures: two, one and zero dimensional systems, quantum wells
- New materials for electronics and photonics
- Organic electronics: electronic polymers, molecular devices, OLEDs.
- Nanomembranes architectures and devices

## **Energy and Sustainability**

### **Symposium O: Materials and Devices for Third Generation Solar Cells**

**Scope of the Symposium:** This symposium is dedicated to contributions in the development of new materials and devices applied to conversion of solar energy into electrical and chemical energy. All areas of photovoltaic research are welcome, including the development of novel materials, device fabrication, modules and solar panels, grid integrated solar energy, device stability and standardization. Special emphasis is dedicated to hybrid materials and nanomaterials used in third generation solar cells, artificial photosynthesis. This symposium opens the opportunity to meet experts in the field of energy conversion to discuss new concepts, trends, novel materials and their properties and developments in science and technology.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Perovskite based solar cells
- Dye Sensitized solar cells, Organic (Polymer and small molecule) Solar Cells and Quantum dots Solar Cells, Thin film solar cells, Silicon, CdTe, CIGS and related materials.
- New perovskite materials,
- New hole and electron transport materials (metal oxides, graphene and 2D semiconductors) for next generation photovoltaics
- Carbon nanotubes, fullerenes, graphene and related materials applied to solar cells
- Materials for down conversion/up conversion processes.
- Advances in materials design and control, bandgap engineering, quantum confinement, and plasmonic effects to enhance the solar energy device conversion (Photoelectrochemical devices).
- Device fabrication and processing.
- Device stability and standardization
- Theoretical approaches to designing and discovering novel concepts for solar energy conversion.

### **Symposium P: Materials for energy conversion and storage**

**Scope of the Symposium:** This symposium is dedicated to contributions regarding the development of materials applied to different forms of energy conversion and energy storage. Research areas related to hydrogen storage, secondary batteries, solar cells, photo-electrochemistry, fuel cells, catalysis and electrocatalysis, investigated by means of theoretical or experimental approaches, are welcome. Special emphasis is devoted to advanced materials and nanostructures for energy-related applications. This symposium brings together Brazilian and others experts in the world in several aspects of energy materials opening possibilities of valuable discussions of new concepts, trends and technologies of energy conversion and storage and is also a valuable opportunity to strength on-going collaborations, prospect new collaborations and build-up research networks.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Nanostructured carbon materials applied to energy storage and conversion
- Materials for hydrogen storage (metal hydrides, MOFs, zeolites, conducting polymers, etc.) and storage of other gas fuels

- Quantum dots, nanowire, nanoparticles and other nanostructures for energy conversion and storage
- Characterization techniques for energy materials
- First principle approaches in materials for energy storage and conversion
- Thermodynamic properties of materials for energy storage and conversion
- Reaction kinetics in energy materials
- Energy storage and conversion devices and smart grids

## **Symposium Q: Nanotoxicology and Nanoregulation - the safe use of manufactured nanomaterials and 2nd Nanoreg Brazil Meeting**

**Scope of the Symposium:** Nanotechnology is a strategic industrial and economic sector showing enormous potential benefits for many society and environmental domains. The lack of scientific knowledge and the absence of evidence demonstrating the safety of some nanomaterials make regulation a challenge. Various agencies around the world are providing specific regulatory guidelines for such materials before their commercialization. In this context, toxicology studies are providing information to guide regulatory decisions toward developing a safety regulatory network to enable the marketing of products. In this context, we would like to propose the symposium "Nanotoxicology and Nanoregulation - the safe use of manufactured nanomaterials". This symposium will be the second nanotoxicology meeting in SBPMat-Brazil that will discuss the toxicology aspects of nanomaterials, which is increasing over the world by international conferences that has included Nanosafe and Nanotoxicology. Moreover, it will be the opportunity to the NanoReg Brazil meeting. The symposium welcomes all researchers in the field of Nanoscience and Nanotechnology that is interesting in the toxicology field. Brazilian and Europeans researchers, in particular, are invited to participate in the symposium as a way of identifying partners and potential collaborative projects between Brazil and EU, following the collaborative research program launched in 2014 by Ministry of Science, Technology and Innovation of Brazil (MCTI) and Inmetro. The symposium will create opportunities for participants to present and share experiences, explore new directions and debate topics with experts from across the globe in the field of nanotoxicology.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Exposure assessment
- Detection and identification
- In vitro and In vivo Nanotoxicology assays
- Eco/Environmental Nanotoxicology
- Nanomaterials release
- Protection technology
- Industrial production
- Life Cycle Analysis
- Risk management

## **Biomaterials and Soft Materials**

### **Symposium R: Surfaces and Interfaces for Medical Applications, Biomaterials and Health**

**Scope of the Symposium:** Surfaces and interfaces are widely recognized as key elements in biomaterials processes of primary importance toward the biological performances and clinical success of implants used for the replacement and the regeneration of diseased tissue and organs. This symposium wishes to address the role of surfaces and interfaces in several of these applications, bringing together scientists from different

backgrounds so as to foster a multidisciplinary picture. This symposium will address the most advanced science and engineering challenges in the multidisciplinary aspects at the frontier between materials, processes, and applications. Transversal works and researches crossing the borders between these fields are particularly encouraged.

Dr Diego Mantovani is the director of Lab. for Biomaterials and Bioengineering at Laval University, Canada, and adjunct director Regenerative Medicine, Quebec University Hospital Research Center. Bioengineer by education, he is passionate by the frontiers between engineering, surgery, science and living sciences. He is the co-chair of the next 10th World Biomaterials Congress 2016.

Dr. Marisa Beppu is currently the dean of school of chemical engineering at UNICAMP. She coordinates the Engineering Laboratory and Chemistry of Products (LEQUIP) since 2002. She holds currently the scholarship productivity 1D of CNPq, received the Zeferino Vaz awards of academic performance (2012), Inova Unicamp Award for Innovation and Scientific Merit (2012, 2014).

Dr Victor Castano holds a PhD in Physics. He has authored and coauthored over 600 publications and is one of the most cited latino-american scientists. His areas of research include bioengineering, nanotechnology, materials science and translational medicine. Member of over 30 editorial boards, he was appointed Editor-in-Chief of Current Nanomedicine. He has served in academic and industrial committees in Latin America, the US, Canada and Europe.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Surfaces and interfaces for biomaterials, drug/gene delivery, implants, scaffolds and tissue engineering applications;
- Surface processes for surface modification, patterning and processing, including plasma and laser-based technologies;
- Dry coatings, including biomimetic and others, susceptible to generate appropriate responses to surface chemical composition, texture, and morphology gradients;
- Advanced techniques (electronic and ionic spectroscopy, high resolution scanning microscopy, atomic force microscopy) for surface and interface characterization and modelling;
- Surfaces and interfaces and their role toward the biological performances of biomaterials, including bio, hemo-compatibility;
- Surfaces with unconventional features with extremely high commercial added-value, such as antibacterial, low-fouling, Antifog, easy-cleaning, blood-repellant;
- Smart materials and devices based on surface effects;
- Surfaces and interfaces for tribology, and protective applications;
- Micro-fluidic and micro-reactors and their applications in biomaterials, including alternative-to-in-vivo testing, diagnostics, drug assessment and development;
- Cyto and genotoxicity issues and their relation to interfacial phenomena.

## **Symposium S: Biomaterials and Devices for Neuroscience**

**Scope of the Symposium:** Materials, thin films, nanomaterials and surface modifications applied to biomedical investigation or devices for neuroscience and neuroengineering. Electrochemical engineering for stimulation and recording of neuron activity, sensing of neurotransmitters and biomarkers. Materials for implantable materials for brain interfaces, both optical and electrical.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Long-term chronic interfacing with the brain for optical and electrical devices
- Inflammatory responses to the presence of brain probes
- Multichannel recording and stimulation
- Advanced brain probe techniques
- Medical probes for human use

- Chemical sensing in the brain
- Optogenetics, optical stimulation and recording
- Materials issues in brain probe technology
- Nano- and Micro-texture for biocompatibility
- Flexible biocompatible materials

## **Symposium T: Self-Assembled Biological Structures for Electronic and Photonic Devices and Applications**

**Scope of the Symposium:** Immobilization of biomolecules is an area of intense research activity because it improves the stability and functionality of biomolecules enabling their reuse in an environmentally-friendly manner. The proposed symposium addresses some of the major challenges in the development of biocompatible and biomimetic materials which to date have limited responsiveness. Most of the research in this area has been related to improved materials for healthcare with a remarkably wide range of applications with immense societal benefits. The symposium will also target interfacial properties of biocompatible materials in devices.

A focused session in self-assembled biological structures with direct applications in sensors, and electronic and photonic devices will be a great forum for researchers both in industry and academia.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Structural/optical probes: (a) spectroscopic methods - near-field optics, light scattering, polarized spectroscopy; (b) structural probes - grazing incidence x-ray diffraction, neutron scattering, near edge x-ray absorption fine structure spectroscopy.
- Polymers and self-assembling: from biology to nanomaterials.
- Peptide and protein based materials & Technologies.
- Bioelectrochemistry and bioanalytics.
- Theoretical methodologies for understanding biological interfaces.
- Biomaterials nanostructures for opto / electronic applications.
- Peptide and protein interactions with materials & nanomaterials.

## **Workshops**

### **Symposium U: University Chapter Symposium**

**Scope of the Symposium:** The symposium intends to promote closeness between students and researchers, as well as to show the importance of the education's knowledge on materials science field to toward both the teacher and researchers training. In this way, themes such as scientific good practice, written scientific, program exchange, education and science lectures, session poster, round table, aimed at encouraging the students to develop a community of materials educators both at high school and university. The symposium is being organized by students from University Chapters Program - Brazilian MRS, and is open to all community as such undergraduate and graduate students, further professors, researchers and who would like to share yourself knowledge and scientific experience.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Brazilian MRS University Chapters Program
- Start-up
- Paper publishing
- Materials educators
- Exchange programs

- Scientific network
- Ethical issues

## **Symposium V: Sustainable development of materials for advanced energy and electronics, extractive materials and transportation products**

**Scope of the Symposium:** Throughout human history materials have been defining the progress of mankind. Today nanomaterials technology is affecting energy, environment, health, transportation industry and security issues around the world. With the exponential growth of population, it has become a global challenge to minimize the consumption of raw materials and at the same time optimize their utilization combined with energy reduction in manufacturing and minimizing environmental pollution during product usage and recycling. These challenges fall on the shoulders of academic and industrial materials researchers, as well as government policy makers. This symposium/workshop is the first of a series of events that will address the issues on regional sustainable development based on the collective priorities of South American countries. The four day symposium will address topics of materials for energy and advanced materials in future transportation products, as well as advances in industrial processing and techniques related to extractive materials. The symposium will take the form of oral presentations and discussions which will address selected topics on energy generation and storage, development of lightweight and resistant materials for transport vehicles, and modernization of the extractive industry of materials, including material phenomena at the micro- and nanoscales. Reports from the discussion groups will address: critical needs, proposed research and development challenges, research results, and establishing collaborative working groups to carry out strategic proposals that will be funded by government agencies and industries with potential partnerships to accelerate the end product manufacturing and marketing.

**Abstracts will be solicited in (but not limited to) the following areas:**

- Micro/Nano materials and technology
- New processing techniques in the electronics industry
- Raw materials for biofuels
- Generation and storage of electricity from power harvesting devices
- Design and models of technology transfer
- Composite materials for aircraft structures and other components
- Materials for automobile industries
- Extractive industries and society
- Materials-environment interactions
- Academic and industry innovation case studies

## **Tutorials**

### **Symposium X: Hands-on tutorial on simulations using Reactive ForceFields: overview and applications**

**Scope of the Symposium:** This one day tutorial will deal with the basics of computational simulations of atomistic systems. Participants will gain experience in the use of reactive potentials to describe the interactions between atoms during molecular dynamics simulations. The description of mechanical properties as well as simple chemical reactions will be addressed during the sessions. The main computational workhorse for the hands-on session will be the LAMMPS code, in which are already implemented all the reactive potentials to be discussed. The discussions and computational tests will

include important reactive methodologies such as the Tersoff, COMB and ReaxFF potentials. The tutorial will be divided in two sessions as follows:

1- Session 1 (2 hours): Introduction to reactive methods and the necessary tools, including some installation tips for common computational systems;

2- Session 2 (3 hours): Hands-on session on molecular dynamics simulations using reactive potentials. Skilled tutors will guide participants in the implementation, running and analysis of small simulations which include representative systems and chemical reactions that can be well described by the methodologies adopted during the tutorial.

## **Symposium Z: School of Scientists: Scientific Writing Tutorial**

**Scope of the Symposium:** The "School of Scientists" aims to develop / improve / strengthen the skills necessary for researchers to do High Impact science, upon knowing the state-of-the-art in specific areas. The School will be offered to under and Graduate students and post-docs. Specific scientific writing courses have already been taught in other events by Prof. Zucolotto. In this case, however, we believe researchers can optimize their potential in doing research, with regard to:

- 1) Development of national and international research projects with bold objectives, and implementation of high-level scientific research. Such an approach is essential to promote significant advances at the frontier of knowledge in each area.
- 2) Production of international scientific articles, through appropriate and efficient writing.
- 3) Learn about the knowledge protection mechanisms and writing of patents

# SYMPOSIUM A - 2D Advanced Materials: Carbon/Graphene and NanoComposites

## Symposium organizers:

Paula Vilarinho (*University of Aveiro*)  
Dr. Pritesh Hiralal (*University of Cambridge*)  
Dr. Hanbin Ma (*University of Cambridge*)  
Emerson Camargo (*UFSCar*)  
Walter Katsumi Sakamoto (*UNESP*)  
Diogo Paschoalini Volanti (*UNESP*)  
Maria Aparecida Zaghete (*UNESP*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION A.OR1 (09:45 - 10:45) - Room Auditório*

- 09:45 Oxides for large area electronics** **A.OR1.1\***  
Arokia Nathan<sup>1</sup>; <sup>1</sup>University of Cambridge
- 10:15 Single-step growth of graphene on copper oxide**  
Juan Carlos Moreno Lopez<sup>1</sup>, Stefano Gottardi<sup>1</sup>, Kathrin Muller<sup>1</sup>, Luca Bignardi<sup>1</sup>, Tuan Anh Pham<sup>1</sup>, Oleksii Ivashchenko<sup>1</sup>, Mikhail Yablonskikh<sup>2</sup>, Alexey Barinov<sup>3</sup>, Jonas Björk<sup>4</sup>, Petra Rudolf<sup>1</sup>, Meike Stöhr<sup>1</sup>; <sup>1</sup>University of Groningen / Rijksuniversiteit Groningen, <sup>2</sup>Helmholtz-Zentrum Berlin für Materialien und Energie, <sup>3</sup>Elettra Synchrotron, <sup>4</sup>Linköping University

### *SESSION A.OR2 (11:15 - 12:00) - Room Auditório*

- 11:15 Study of triboelectric devices based on ZnO nanorods and PDMS:GO composites for energy harvesting application** **A.OR2.4**  
Agnes Nascimento Simões<sup>1</sup>, Nilsa Toyoko Azana<sup>1</sup>, Pei Jen Shieh<sup>1</sup>, Talita Mazon<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer
- 11:30 Graphene enhanced flexible energy storage devices** **A.OR2.5\***  
Gehan Amaratunga<sup>1</sup>; <sup>1</sup>Electrical Engineering Division, Engineering Department, University of Cambridge \*Zinergy UK Ltd

### *SESSION A.OR3 (14:00 - 16:15) - Room Auditório*

- 14:00 Large band gap quantum spin hall insulators: 2D fluorinated group-IV binary compounds** **A.OR3.6**  
José Eduardo Padilha de Sousa<sup>1</sup>, Renato B. Pontes<sup>2</sup>, Tomé Mauro Schmidt<sup>3</sup>, Roberto Hiroki Miwa<sup>3</sup>, Adalberto Fazzio<sup>4</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>Universidade Federal de Uberlândia, <sup>4</sup>Universidade Federal do ABC
- 14:15 Multicolor mid-infrared photodetector based on asymmetric multiple quantum wells** **A.OR3.7**  
Pedro Henrique Pereira<sup>1</sup>, Germano Penello<sup>2</sup>, Deborah Sivco<sup>3</sup>, Claire Gmachl<sup>3</sup>, Patricia L Souza<sup>4</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Universidade do Estado do Rio de Janeiro, <sup>3</sup>Princeton University, <sup>4</sup>Laboratório de Semicondutores - CETUC/PUC-Rio
- 14:30 Multiscale Modeling of Advanced Nanomaterials** **A.OR3.8\***  
Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 15:00 Fracture Patterns and Linear Atomic Chain Formation From Graphene Mechanical Stretching** **A.OR3.9**  
Vinicius de Oliveira Splugues<sup>1</sup>, Pedro Alves da Silva Autreto<sup>2</sup>, Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do ABC

- 15:15 carbon nanotube unzipping through mechano-chemical reactions** **A.OR3.10**  
Pedro Alves da Silva Autreto<sup>1</sup>, Mohammad Kabbani<sup>2</sup>, Chandra S Tiwary,  
 Anirban Som<sup>3</sup>, K R Krishnadas<sup>3</sup>, Sehmus Ozden<sup>2</sup>, Robert Vajtai<sup>2</sup>, Ahmad T.  
 Kabbani<sup>2,4</sup>, Thalappil Pradeep<sup>3</sup>, Pulickel Ajayan, Douglas Soares Galvão<sup>5</sup>;  
<sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Rice University, <sup>3</sup>DST Unit of Nanoscience  
 and Thematic Unit of Excellence, Department of Chemistry, Indian Institute of  
 Technology Madras, Chennai 600 036, India, <sup>4</sup>Department of Natural Science,  
 Lebanese American University, P.O. Box 13-5053 Chouran, Beirut 1102 2801,,  
<sup>5</sup>Instituto de Fisica Gleb Wataghin, Universidade Estadual de Campinas
- 15:30 Mono-vacancy in graphene nano-flakes: Ab-initio study.** **A.OR3.11**  
Ana Maria Valencia<sup>1</sup>, Marília J. Caldas<sup>1</sup>; <sup>1</sup>Instituto de Física-USP
- 15:45 Electronic, transport and oxidation properties of free-standing and supported borophene** **A.OR3.12\***  
Adalberto Fazzio

## Poster presentations

### SESSION A.P1 (17:45 - 19:30)

- 17:45 Comparative study of first- and second-order Raman spectra of Reticulated Vitreous Carbon treated at different temperatures** **A.P1.1**  
 Aline Fontana Batista<sup>1</sup>, Aline Castilho Rodrigues<sup>2</sup>, Adriano Luis De Paula<sup>3,1</sup>,  
 Maurício Ribeiro Baldan<sup>3</sup>, Emerson Sarmiento Gonçalves<sup>2,1</sup>; <sup>1</sup>Instituto de  
 Aeronáutica e Espaço, <sup>2</sup>Instituto Tecnológico de Aeronáutica, <sup>3</sup>Instituto  
 Nacional de Pesquisas Espaciais
- 17:45 The power Raman laser induce defects in AgO nanoparticles/graphene bilayers systems** **A.P1.2**  
Ana Champi<sup>1</sup>, Maria Angélica Briones<sup>2</sup>, Maria Quintana<sup>2</sup>; <sup>1</sup>Fundação  
 Universidade Federal do Abc, <sup>2</sup>Universidad Nacional de Ingenieria
- 17:45 Spectroscopic study of the molecular interactions of tannins and graphene** **A.P1.3**  
Thais Braga Vieira<sup>1</sup>, Nelida Simona Marín Huachaca<sup>1</sup>, Francisco Heriberto  
 Martinez Luzardo<sup>1</sup>, Erica Cristina Almeida<sup>1</sup>, Luiz Carlos Salay<sup>1</sup>; <sup>1</sup>Universidade  
 Estadual de Santa Cruz
- 17:45 metallic nanolines ruled by grain boundaries in graphene: an *ab initio* study** **A.P1.4**  
Felipe David Crasto de Lima<sup>1</sup>, Roberto Hiroki Miwa<sup>1</sup>; <sup>1</sup>Universidade Federal de  
 Uberlândia
- 17:45 Raman studies of carbon felt treated at different temperatures** **A.P1.5**  
 Anne Karoline dos Santos Poli<sup>1</sup>, Gustavo Machado Domingues Caetano<sup>2,3</sup>,  
Adriana Medeiros Gama<sup>3</sup>, Mauricio Ribeiro Baldan<sup>4</sup>, Emerson Sarmiento  
 Gonçalves<sup>5,3</sup>, Miguel Angelo do Amaral Junior<sup>4</sup>, Jossano Saldanha Marcuzzo<sup>4</sup>;  
<sup>1</sup>Instituto Tecnológico da Aeronáutica, <sup>2</sup>Faculdade de Tecnologia de São José  
 dos Campos, <sup>3</sup>Instituto de Aeronáutica e Espaço, <sup>4</sup>Instituto Nacional de  
 Pesquisas Espaciais, <sup>5</sup>Instituto Tecnológico de Aeronáutica
- 17:45 Assessment of solubility and spectroscopy analysis of carboxymethylcellulose active films prepared with turmeric** **A.P1.6**  
Vanessa Souza Santos<sup>1,2</sup>, Juliana Juliana Heloisa Pinê Américo Pinheiro<sup>2</sup>,  
 Marcia Regina de Moura<sup>2</sup>, Fauze Ahmad Aouada<sup>2</sup>; <sup>1</sup>UNESP, <sup>2</sup>Grupo de  
 Compósitos e Nanocompósitos Híbridos-GCNH

- 17:45 Raman Spectroscopy and AFM measurements of multi-layers phosphorene obtained by mechanical exfoliation in inert atmosphere** **A.P1.7**  
Henrique Ferreira<sup>1</sup>, Ana Champi<sup>1</sup>, Danilo Mustafa<sup>2</sup>, Gennady Gusev<sup>2</sup>, Dario Bahamon<sup>3</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Instituto de Física da Universidade de São Paulo, <sup>3</sup>Universidade Presbiteriana Mackenzie
- 17:45 Study of the graphene oxide (GO) photoreduction in the RGO-CdS composite by Raman spectroscopy** **A.P1.8**  
Cristiane Gomes Almeida<sup>1</sup>, Marcus Vinicius Silva<sup>1</sup>, Luciana Almeida Silva<sup>1</sup>; <sup>1</sup>Universidade Federal da Bahia
- 17:45 Nonlinear Optical Properties of Carbon Nanodots Investigated by Femtosecond Spectroscopy** **A.P1.9**  
Marcelo Gonçalves Vivas<sup>1</sup>, George Brian<sup>1</sup>, Roberto Vaz<sup>2</sup>, Leonardo De Boni<sup>3</sup>, Marco Antonio Schiavon<sup>2</sup>, Cleber R. Mendonça<sup>3</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Federal de São João del-Rei, <sup>3</sup>Instituto de Física de São Carlos - USP
- 17:45 Radiation effect of low energy X-rays on PVA / FLG** **A.P1.10**  
Regina Duque Estrada Carvalho<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>, Max Passos Ferreira<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Asymmetry in Raman Excitation Profiles of Carbon Nanotubes: The Role of Excitons** **A.P1.11**  
Bruno Gondim de Melo Vieira<sup>1</sup>, Eduardo Bedê Barros<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 17:45 Fitting transport measurements of 2DEG InAs/GaAs multi-quantum-well samples** **A.P1.12**  
Adhimar Flávio Oliveira<sup>1</sup>, Rero Marques Rubinger<sup>1</sup>, Sávio José Zaccaro<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Computational study of hybrid fullerenes captors of glycerol** **A.P1.13**  
Brenda de Souza Ferrari<sup>1</sup>, Arlan da Silva Gonçalves<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo
- 17:45 Infrared Spectroscopic Characteristics of Interaction between Ox-MWNT Protonated Chitosan** **A.P1.14**  
Mariana Botelho Barbosa<sup>1</sup>, Thayana Furtado Teixeira<sup>1</sup>, Matheus Deister Veiga<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>, Estér Figueiredo Oliveira<sup>1</sup>, Estefânia Mara do Nascimento Martins<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Effects of Oxygen Contamination on Monolayer GeSe: A computational study** **A.P1.15**  
Raphael Longuinhos Monteiro Lobato<sup>1</sup>, Igor Saulo Santos de Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras
- 17:45 Raman and Infrared Activity of Low-Frequency Interlayer Modes in 2D GaSe** **A.P1.16**  
Raphael Longuinhos Monteiro Lobato<sup>1</sup>, Jenaina Ribeiro Soares<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras
- 17:45 Influence of the Incorporation of Titanium Dioxide (TiO<sub>2</sub>) on the morphological, structural and electrical properties of Graphene oxide (GO) thin films.** **A.P1.17**  
Emilson Ribeiro Viana Junior<sup>1</sup>, Gustavo Wegher<sup>1</sup>, Jeferson Ferreira de Deus<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná

- 17:45 Microstructural evaluation of silicon oxycarbide (SiOC) ceramics derived from graphene-containing poly(organosiloxanes)** A.P1.18  
Gabriel Rabelo Coelho<sup>1</sup>, Mariana Marina Brito De Carvalho<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Development of nanostructured self -assembled films based on Polypyrrole and Carbon Nanotubes composites** A.P1.19  
Gabriela Martins de Araújo<sup>1</sup>, Luís Antonio Polaci<sup>1</sup>, Fábio Ruiz Simões<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 An evaluation of electrical conductivity towards processing steps of Carbon Fiber/Phenolic Resin Composites modified by silicon up to 1600 °C** A.P1.20  
Suelen Christiane Nunes Alves
- 17:45 Thermal degradation and kinetic study of PMMA/MWCNT nanocomposites by TGA analysis and Broido method** A.P1.21  
Marina Fernandes Cosate de Andrade<sup>1</sup>, Jéssica Marcon Bressanin<sup>1</sup>, Cristina Ikehara<sup>1</sup>, Melina Mituo<sup>1</sup>, Cesar Ishiuchi<sup>1</sup>, Julio Roberto Bartoli<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química - UNICAMP
- 17:45 Mechanical reinforcement of PVC with carbon nanotubes grown on two different micrometric substrates** A.P1.22  
Nadia Guerra Macedo
- 17:45 Improvement of electrochemical detection of H<sub>2</sub>O<sub>2</sub> using a Prussian blue/reduced graphene oxide nanocomposite obtained by photochemical method** A.P1.23  
Pâmyla Layene dos Santos<sup>1</sup>, Juliano Alves Bonacin<sup>1</sup>; <sup>1</sup>Institute of Chemistry- UNICAMP
- 17:45 Temperature analysis due to the hydration heat in cement pastes with carbon nanotubes** A.P1.24  
Alice Zanforlin Benedetti<sup>1</sup>, Tarcizo Cruz Souza<sup>1</sup>, Jose Marcio F Calixto<sup>1</sup>, Luiz Orlando Ladeira<sup>1</sup>, Guaracy Silva Junior<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Preparation and dynamic-mechanical properties of poly(lactic acid)/graphene based nanocomposites** A.P1.25  
Diego de Holanda Saboya Souza<sup>1</sup>, Marcos Lopes Dias<sup>1</sup>; <sup>1</sup>Instituto de Macromoleculas Professora Eloisa Mano
- 17:45 Thermal, mechanical and electromagnetic characterization of HDPE/carbon fibers composites using residues of aircraft components** A.P1.26  
Laís Cristina Gomes Nagaki<sup>1</sup>, Simone Souza Pinto<sup>1</sup>, Mirabel Cerqueira Rezende<sup>1</sup>, Caroline Martins dos Santos<sup>1</sup>, Fabio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Thermal stability of electrical conductivity of Polyaniline/graphite nanosheet composites** A.P1.27  
Eliza Sbrogio Martin<sup>1</sup>, Thuany Garcia Maraschin<sup>2</sup>, Nara Regina de Souza Basso<sup>2</sup>, Alex Otávio Sanches<sup>1</sup>, José Antonio Malmonge<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista, UNESP/FE - Campus de Ilha Solteira, <sup>2</sup>Pontifícia Universidade Católica do Rio Grande do Sul
- 17:45 Characterization of filler-matrix interactions in polymeric composites based on epoxy resin and modified carbon nanotubes** A.P1.28  
Juliana Cardoso Neves<sup>1</sup>, Vinícius Gomide Castro<sup>1</sup>, Ana Luiza Silvestre Assis<sup>1</sup>, Maria Luiza Miranda Rocco<sup>2</sup>, Glauro Goulart Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Instituto de Química / UFRJ

- 17:45 Conventional two-step sintering of zirconia/alumina-niobium carbide nanocomposites** **A.P1.29**  
 Raphael Euclides Prestes Salem<sup>1,2</sup>, Fábulo Ribeiro Monteiro<sup>3</sup>, Adriana Scoton Chinelatto<sup>3</sup>, Adilson Luiz Chinelatto<sup>3</sup>, Elíria Maria de Jesus Agnolon Pallone<sup>1</sup>;  
<sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Estadual de Ponta Grossa
- 17:45 Friction properties of carbon fiber reinforced carbon composites modified with SiC** **A.P1.30**  
Jéssica Fernandes Silva<sup>1</sup>, Luiz Claudio Pardini<sup>2</sup>, Maria Aparecida Miranda de Souza<sup>2</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP, <sup>2</sup>Divisão de Materiais
- 17:45 Influence of epoxy functionalized CNTs on mechanical properties of nanocomposites** **A.P1.31**  
Wesley Franceschi<sup>1</sup>, Filipe Vargas Ferreira<sup>1</sup>, Beatriz Rossi Canuto de Menezes<sup>1</sup>, Felipe Sales Brito<sup>1</sup>, Cintia Rosa<sup>1</sup>, Beatriz Carvalho Silva<sup>1</sup>, Karla Faquine Rodrigues<sup>1</sup>, Luciana de Simone Cividanes<sup>1</sup>, Gilmar Patrocínio Thim<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica
- 17:45 Influence of carbon nanotube and surface modification on PBAT properties** **A.P1.32**  
 Cintia Rosa<sup>1</sup>, Wesley Franceschi<sup>1</sup>, Filipe Vargas Ferreira<sup>1</sup>, Beatriz Rossi Canuto de Menezes<sup>1</sup>, Felipe Sales Brito<sup>1</sup>, Karla Faquine Rodrigues<sup>1</sup>, Beatriz Carvalho Silva<sup>1</sup>, Luciana de Simone Cividanes<sup>1</sup>, Gilmar Patrocínio Thim<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica
- 17:45 Cement-based piezoelectric composite for structural health monitoring** **A.P1.33**  
 Alex Otávio Sanches<sup>1</sup>, Raíssa Pravatta Pivetta<sup>1</sup>, José Antonio Malmonge<sup>1</sup>, Maria Ap. Zaghete<sup>2</sup>, Elson Longo<sup>2</sup>, Walter Katsumi Sakamoto<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Oil stain removal in aqueous means using sorbents and ferrite composite in paraffin** **A.P1.34**  
Renata Santos Seixas<sup>1,2</sup>, André Ben-Hur da Silva Figueiredo<sup>1</sup>, Ronaldo Sérgio de Biasi<sup>1</sup>; <sup>1</sup>Instituto Militar de Engenharia, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 17:45 Rheological properties of low density polyethylene nanocomposites containing organophilic green colored Ni<sup>2+</sup>/Al<sup>3+</sup> Layered Double Hydroxides** **A.P1.35**  
Silvia Jaeger<sup>1</sup>, Fernando Wypych<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Influence of pectin concentration in mechanical properties of edible nanocomposite films** **A.P1.36**  
Pamela Thais Sousa Melo<sup>1</sup>, Fauze Ahmad Aouada<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>;  
<sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Thermal properties of edible nanocomposite films based in cupuassu puree** **A.P1.37**  
Pamela Thais Sousa Melo<sup>1</sup>, Juliana Reghine Souza<sup>2,3</sup>, Marcos Vinicius Lorevice<sup>2,3</sup>, Fauze Ahmad Aouada<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Thermal study of incorporation of copaiba oil nanoemulsions in sodium alginate for applications as wound dressing** **A.P1.38**  
 Viviane G.A. Pires<sup>1</sup>, Fauze Ahmad Aouada<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>;  
<sup>1</sup>Faculdade de Engenharia/UNESP-IS

- 17:45 Physical properties of a sodium alginate nanocomposite of clove essential oil nanoemulsion** **A.P1.39**  
Ronaldo Shigueru Sasaki<sup>1</sup>, Fauze Ahmad Aouada<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>;  
<sup>1</sup>Faculdade de Engenharia/UNESP-IS
- 17:45 Morphological characterization and chemical compositional analysis of the nanostructured hydrogel consisting by poly (methacrylic acid) and nanoclay cloisite-Na<sup>+</sup>** **A.P1.40**  
Carlos Roberto Ferreira Junior<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>, Fauze Ahmad Aouada<sup>1</sup>; <sup>1</sup>Grupo de Compósitos e Nanocompósitos Híbridos-GCNH
- 17:45 nanocomposite thin films formed by biopolymers and clay** **A.P1.41**  
 gabriella dayane ulrich<sup>1</sup>, joão otávio ferreira<sup>1</sup>, maria paula peixoto<sup>2</sup>, osvaldo freitas<sup>2</sup>, kelly roberta francisco<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade de São Paulo
- 17:45 Physical gelation of Laponite/Alginate solutions** **A.P1.42**  
José Luis Dávila<sup>1</sup>, Marcos Akira d'Ávila<sup>1</sup>; <sup>1</sup>University of Campinas
- 17:45 Influence of Buriti oil on the composite PVDF/Eu properties** **A.P1.43**  
Celso Xavier Cardoso<sup>1</sup>, Wagner Dias Macedo Junior<sup>1</sup>, rafael Jesus gonçalves Rubira<sup>1</sup>, Aldo Eloizo Job<sup>1</sup>, Silvio Rainho Teixeira<sup>1</sup>, Agda Eunice de Souza<sup>1</sup>;  
<sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 Effect of the insertion of silver nanoparticles in a commercial acrylic matrix of dental use** **A.P1.44**  
Francisco Nunes de Souza Neto<sup>1</sup>, Renan Aparecido Fernandes<sup>2</sup>, Douglas Roberto Monteiro<sup>2</sup>, Elson Longo<sup>3</sup>, Emerson Rodrigues Camargo<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>UNESP, <sup>3</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Nanocomposites with thermoresponsive behavior as potential biomaterials** **A.P1.45**  
 Renata Lang Sala<sup>1,2</sup>, Jason A. Burdick<sup>1</sup>, Emerson Rodrigues Camargo<sup>2</sup>;  
<sup>1</sup>University of Pennsylvania, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 TPU/calcium carbonate nanocomposites as new additives to prevent drilling fluids lost circulation** **A.P1.46**  
PAULA SALINO RIBEIRO<sup>1</sup>, REGINA SANDRA VEIGA NASCIEMNTO<sup>1</sup>, REGINA CÉLIA REIS NUNES<sup>2</sup>; <sup>1</sup>Instituto de Química / UFRJ, <sup>2</sup>Instituto de Macromoléculas
- 17:45 Clay-based bionanocomposite foams: morphology and porosity characterization by X-ray microtomography technique** **A.P1.47**  
Rubia Figueredo Gouveia<sup>1</sup>, Margarita Darder<sup>2</sup>, Erika Padilla Ortega<sup>2</sup>, Charlene Regina Matos<sup>2</sup>, Pilar Aranda<sup>2</sup>, Eduardo Ruiz Hitzky<sup>2</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>Materials Science Institute of Madrid
- 17:45 ZnO:SBA-15 nanocomposites: synthesis, properties and potential applications in cosmetics products** **A.P1.48**  
Camila Okinokabu Vieira<sup>1</sup>, Isha N. Haridass<sup>2</sup>, Jeffrey E. Grice<sup>3</sup>, Michael S. Roberts<sup>3</sup>, Patricia Santos Lopes<sup>1</sup>, Vania Rodrigues Leite-Silva<sup>1</sup>, Tereza da Silva Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema, <sup>2</sup>Curtin University of Technology, <sup>3</sup>University of Queensland
- 17:45 Electrical transport in buckypapers based on quasi-2D system** **A.P1.49**  
Luiza de Marilac Pantoja Ferreira<sup>1</sup>, Marcos Allan Leite dos Reis<sup>1</sup>;  
<sup>1</sup>Universidade Federal do Pará
- 17:45 Humidity sensing properties of carbon xerogel based-sensor** **A.P1.50**  
 Honória de Fátima Gorgulho<sup>1</sup>, Fabíola de Almeida Ferreira<sup>1</sup>, Wagner Souza Machado<sup>1</sup>; <sup>1</sup>Universidade Federal de São João Del Rei

- 17:45 Effect of reduced graphene oxide on gas sensing performance of SnO<sub>2</sub> under wet atmosphere** **A.P1.51**  
Cecilia de Almeida Zito<sup>1</sup>, Tarcísio Micheli Perfecto<sup>1</sup>, Diogo Paschoalini Volanti<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Electrophoretic deposition of graphene oxide over silicon substrate** **A.P1.52**  
 Cristina Battesini Adamo<sup>1</sup>, Alexander Flacker<sup>1,2</sup>, Paula Nascimento<sup>2</sup>, Ronaldo Timm<sup>3</sup>, Fernando Ely<sup>1</sup>, Lauro Tatsuo Kubota<sup>3</sup>, Stanislav Moshkalev<sup>2</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>Centro de Componentes Semicondutores-UNICAMP, <sup>3</sup>Universidade Estadual de Campinas
- 17:45 Room-temperature acetone sensing with heterostructures based on reduced graphene oxide and tungsten trioxide** **A.P1.53**  
Tarcísio Micheli Perfecto<sup>1</sup>, Cecilia de Almeida Zito<sup>1</sup>, Diogo Paschoalini Volanti<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 The role of the argon concentration on the evolution of morphology and structural properties of boron doped diamond** **A.P1.54**  
 Bárbara da Silva Pinheiro<sup>1</sup>, Luiz Carlos Rosa<sup>2</sup>, Denis Angelo da Silva<sup>3</sup>, Jossano Saldanha Marcuzzo<sup>1,4</sup>, Emerson Sarmiento Gonçalves<sup>5</sup>, Mauricio Ribeiro Baldan<sup>2</sup>; <sup>1</sup>Instituto Nacional de pesquisas espaciais, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Universidade Federal de São Paulo, <sup>4</sup>Faculdade de Tecnologia de São Jose dos Campos, <sup>5</sup>Instituto de Aeronáutica e Espaço
- 17:45 Synthesis of graphene oxide thin films annealed with nitrogen and analysis of its electrical and optical properties** **A.P1.55**  
Rodrigo Hiroaki Ideyama<sup>1</sup>, Marina Sparvoli de Medeiros<sup>1</sup>, Mauro Pinheiro Silva<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Faculdades Oswaldo Cruz
- 17:45 Preparation of reduced graphene oxide and incorporation into the liquid electrolyte of dye-sensitized solar cells** **A.P1.56**  
Diogo M. Guilhermitti Neto<sup>1</sup>, Jilian Nei de Freitas<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer
- 17:45 Improvement of CNT dispersion in HDPE by acid and octadecylamine functionalizations** **A.P1.57**  
Beatriz Rossi Canuto de Menezes<sup>1</sup>, Filipe Vargas Ferreira<sup>1</sup>, Wesley Franceschi<sup>1</sup>, Felipe Sales Brito<sup>1</sup>, Evelyn Alves Nunes<sup>1</sup>, Karla Faquine Rodrigues<sup>1,2</sup>, Cintia Rosa<sup>2</sup>, Luciana de Simone Cividanes<sup>1</sup>, Gilmar Patrocínio Thim<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade do Vale do Paraíba
- 17:45 Preparation And Characterization Of Carbon Nanotube Buckypaper With Low Reflectance And Superhydrophobicity** **A.P1.58**  
Rodrigo Bezerra Vasconcelos Campos<sup>1</sup>, Sérgio de Souza Camargo Jr.<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 17:45 Influence of anodic etching on carbon fiber substrate for TiO<sub>2</sub> deposition from TiCl<sub>3</sub> anodic hydrolysis** **A.P1.59**  
Lania Auxiliadora Pereira<sup>1</sup>, Andrea Boldarini Couto<sup>1</sup>, Neidenei Gomes Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Reduction of Graphene Oxide by Hydrothermal Synthesis** **A.P1.60**  
Rafael Lavagnolli Germscheidt<sup>1</sup>, Talita Mazon<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer
- 17:45 Multiwall Carbon Nanotubes filled with Al<sub>4</sub>C<sub>3</sub>: Electron-phonon Coupling and doping process** **A.P1.61**  
Newton Martins Barbosa Neto<sup>1</sup>, Mario Edson Santos Sousa<sup>1</sup>, Sônia Simões<sup>2</sup>, Manuel Vieira<sup>2</sup>, Paulo Trindade Araujo<sup>3</sup>, Marcos Allan Leite dos Reis<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Universidade do Porto, <sup>3</sup>The University of Alabama

- 17:45 Synthesis and Characterization of Amine-funtionalized graphene oxide via Microwave-assisted reactions** **A.P1.62**  
Cristiano Carrareto Caliman<sup>1</sup>, Anderson Fuzer Mesquita<sup>1</sup>, Arilza de Oliveira Porto<sup>2</sup>; <sup>1</sup>Universidade Federal do Espírito Santo, <sup>2</sup>Universidade Federal de Minas Gerais
- 17:45 Synthesis of graphene at low temperature by PECVD** **A.P1.63**  
Deissy Johanna Feria Garnica<sup>1</sup>, Diego Edison Lopez Silva<sup>1</sup>, Inès Pereyra<sup>1</sup>;  
<sup>1</sup>Escola Politecnica da USP
- 17:45 Removal of uranyl sulfate complexes from aqueous solution using graphene oxide** **A.P1.64**  
Isabela Costa Mendes Peres<sup>1</sup>, Jefferson Patrício Nascimento<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>, Ana Cláudia Queiroz Ladeira<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Synthesis, characterization and catalytic activity of MoO<sub>4</sub><sup>2-</sup> intercalated Zn/Ni layered double hydroxide salt.** **A.P1.65**  
Kamila Colombo<sup>1</sup>, Swami A Maruyama<sup>1</sup>, Henrique Bortolaz de Oliveira<sup>1</sup>, Fernando Wypych<sup>1</sup>, Carlos Itsuo Yamamoto<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Rare-earth doped boron nitride nanotubes: synthesis and characterization** **A.P1.66**  
Wellington Marcos Silva<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Incorporated titanium nanoparticles to improve the physical properties of sodium alginate films** **A.P1.67**  
Tiago Antônio Lima<sup>1,2</sup>, Fauze Ahmad Aouada<sup>1,2</sup>, Marcia Regina de Moura<sup>1,2</sup>;  
<sup>1</sup>UNESP, <sup>2</sup>Grupo de Compósitos e Nanocompósitos Híbridos-GCNH
- 17:45 Effect of the zeolite concentration on the swelling and kinect properties of the hybrid nanostructured hydrogels** **A.P1.68**  
Diego Henrique Oliveira Barbosa<sup>1,2</sup>, Marcia Regina de Moura<sup>1,2</sup>, Fauze Ahmad Aouada<sup>1,2</sup>; <sup>1</sup>Grupo de Compósitos e Nanocompósitos Híbridos-GCNH, <sup>2</sup>Faculdade de Engenharia de Ilha Solteira
- 17:45 Swelling behavior evaluation and spectroscopic properties of nanostructured hydrogels based on alginate, nanoclay and zeolite** **A.P1.69**  
Renan da Silva Fernandes<sup>1,2</sup>, Marcia Regina de Moura<sup>1,2</sup>, Fauze Ahmad Aouada<sup>1,2</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS, <sup>2</sup>Grupo de Compósitos e Nanocompósitos Híbridos-GCNH
- 17:45 Ceramics of lithium titanate obtained by the OPM route** **A.P1.70**  
Lucas da Silva Ribeiro<sup>1</sup>, Emerson Rodrigues Camargo<sup>1</sup>, Andre Esteves Nogueira<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Treads: adding ammonium salt-free organophilic clay** **A.P1.71**  
Mikaela Darós<sup>1</sup>, Mauro Cesar de avila<sup>2</sup>, Reinaldo Yoshio Morita<sup>1</sup>, Juliana Regina Kloss<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Empresa Tecnol-Tecnologia em Polímeros
- 17:45 Programmed synthesis of xerogels/aerogels based on resorcinol/formaldehyde** **A.P1.72**  
Daniela Romão Manfio Gozzi<sup>1</sup>, Liana Alvares Rodrigues<sup>1</sup>, Luiz Claudio Pardini<sup>2</sup>; <sup>1</sup>Universidade de São Paulo - Escola Engenharia Lorena, <sup>2</sup>Instituto Tecnológico de Aeronáutica

- 17:45 Synthesis and photoluminescent properties of TiO<sub>2</sub> and TiO<sub>2</sub>:Ag nanoparticles** **A.P1.73**  
Ana Paula de Moura<sup>1</sup>, Francine Aline Tavares<sup>2</sup>, Euripedes Silva Junior<sup>3</sup>, Máximo Siu Li<sup>4</sup>, Ieda Lúcia Viana Rosa<sup>2</sup>, Elson Longo<sup>1</sup>, José A. Varela<sup>1</sup>;  
<sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>3</sup>Instituto de Química - IQ - Unesp - Araraquara, <sup>4</sup>Instituto de Física de São Carlos - USP
- 17:45 Synthesis and properties of In<sub>2</sub>O<sub>3</sub> nanoparticles processed in microwave system** **A.P1.74**  
Ana Paula de Moura<sup>1</sup>, Danielle Berger<sup>2</sup>, Ieda Lúcia Viana Rosa<sup>3</sup>, Máximo Siu Li<sup>4</sup>, Elson Longo<sup>1</sup>, José A. Varela<sup>2</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Instituto de Química - IQ - Unesp - Araraquara, <sup>3</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>4</sup>Instituto de Física de São Carlos - USP
- 17:45 Photocatalytic Properties of ZnWO<sub>4</sub> Nanostructures** **A.P1.75**  
Rosana de Fátima Gonçalves<sup>1</sup>, Maya Dayana Penha da Silva<sup>1</sup>, Regiane Cristina Oliveira<sup>1</sup>, Ana Paula de Azevedo Marques<sup>2</sup>, Francisco Sávio Mendes Sinfrônio<sup>3</sup>, Elson Longo<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Universidade Federal do Maranhão, <sup>4</sup>Instituto de Química - IQ - Unesp - Araraquara
- 17:45 Effect of rare earth (Eu<sup>3+</sup> and Gd<sup>3+</sup>) on the structural ordering and photoluminescent behavior of the ZrO<sub>2</sub>** **A.P1.76**  
Euripedes Silva Junior<sup>1</sup>, Elson Longo<sup>1</sup>, Máximo Siu Li<sup>2</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Instituto de Física de São Carlos - USP
- 17:45 Plasma formation inside of a long metallic tube used as a chamber to growth DLC film by using Pulsed-DC PECVD process** **A.P1.77**  
Elver Juan de Dios Mitma Pillaca<sup>1</sup>, Marco Antonio Ramírez<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Ag doped sodium titanate: bactericidal and photocatalytic activity** **A.P1.78**  
Felipe Moessa Bezerra<sup>1</sup>, Fabricia Emanuelli Moreira Dias<sup>1</sup>, Wilson S. dos Reis Filho<sup>1</sup>, Alberto Adriano Cavalheiro<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Maria Ap. Zaghete<sup>2</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Copper doped sodium titanate as a faster photocatalyst** **A.P1.79**  
Fabricia Emanuelli Moreira Dias<sup>1</sup>, Wilson S. dos Reis Filho<sup>1</sup>, Felipe Moessa Bezerra<sup>1</sup>, Alberto Adriano Cavalheiro<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Maria Ap. Zaghete<sup>2</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Photocatalysis performance of Lapachol doped titanate** **A.P1.80**  
Wilson S. dos Reis Filho<sup>1</sup>, Felipe Moessa Bezerra<sup>1</sup>, Fabricia Emanuelli Moreira Dias<sup>1</sup>, Alberto Adriano Cavalheiro<sup>1</sup>, Ademir dos Anjos<sup>1</sup>, Maria Ap. Zaghete<sup>2</sup>, Daniela Cristina Manfroi Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Mato Grosso do Sul, <sup>2</sup>Instituto de Química - UNESP

**Tuesday, September 27<sup>th</sup>**

## Oral presentations

\* Invited Lecture

### *SESSION A.OR4 (09:45 - 10:45) - Room Auditório*

- 09:45 Flexible carbon composite material with functional properties, from single process** \*
- Neftali Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 10:15 Making Graphene Visible on Transparent Dielectric Substrates: Brewster Angle Imaging** A.OR4.14
- Priscila Romagnoli<sup>1</sup>, Henrique Guimarães Rosa<sup>1</sup>, Daniel López-Cortés<sup>1</sup>, E.A. Thoroh de Souza<sup>1</sup>, José Carlos Gomes<sup>2</sup>, Walter Margulis<sup>3</sup>, Christiano J.S. de Matos<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>National University of Singapore, <sup>3</sup>Acreo Swedish ICT AB
- 10:30 Polycrystalline Carbon Nanoflakes for field emission applications** A.OR4.15
- Fernando Guzmán<sup>1</sup>, Rodrigo A. Espinoza-González<sup>1</sup>, Victor M Fuenzalida<sup>1</sup>, Gerardo Morell<sup>2</sup>; <sup>1</sup>Universidad de Chile, <sup>2</sup>Universidad de Puerto Rico

### *SESSION A.OR5 (11:15 - 12:00) - Room Auditório*

- 11:15 Celulose / graphite composite dispersions and materials** A.OR5.16
- Bruno Batista<sup>1</sup>, Ramon dos Santos<sup>1</sup>, Douglas da Silva<sup>1</sup>, Gabriel Costa<sup>1</sup>, Fernando Galembeck<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP

### *SESSION A.OR6 (14:00 - 16:15) - Room Auditório*

- 14:00 Carbon dots: synthesis from renewable sources via hydrothermal carbonization, characterization and evaluation of their interaction with biological systems** A.OR6.18
- Liz Specian de Moraes<sup>1</sup>, Oswaldo Luiz Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 14:15 Magnetic zinc-nickel layered double hydroxide salts: synthesis, characterization and chromate removal capacity.** A.OR6.19
- Henrique Bortolaz de Oliveira<sup>1</sup>, Fernando Wypych<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 14:30 Resonance Raman scattering in two-dimensional transition metals dichalcogenides** A.OR6.20\*
- Cristiano Fantini Leite<sup>1</sup>, Bruno Ricardo Carvalho<sup>2</sup>, Juliana Alves Martins<sup>2</sup>, Rafael Nunes Gontijo<sup>2</sup>, Elena del Corro<sup>2</sup>, Leandro M Malard<sup>2</sup>, Ariete Righi<sup>2</sup>, Marcos Assunção Pimenta<sup>2</sup>; <sup>1</sup>Universidade Federal De Minas Gerais, <sup>2</sup>Universidade Federal de Minas Gerais
- 15:00 Thermally-driven hydrogen interaction with single-layer graphene on SiO<sub>2</sub>/Si substrates** A.OR6.21
- Taís Orestes Feijó<sup>1</sup>, Guilherme Koszeniewski Rolim<sup>1</sup>, Cláudio Radtke<sup>1</sup>, Gabriel Vieira Soares<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 15:15 study of properties of graphene oxide produced by dip-coating method and reduced in HI atmosphere** A.OR6.22
- Gabriel Soares de Camargo Munaro<sup>1</sup>, Marina Sparvoli<sup>2</sup>; <sup>1</sup>Fundação Universidade Federal do Abc, <sup>2</sup>Universidade Federal do ABC

- 15:30 Tribological Evaluation of Carbon Nanomaterials Lubricants** **A.OR6.23**  
Flávia Gonçalves Pacheco<sup>1</sup>, Henara Lillian Costa<sup>2</sup>, José Daniel Biasoli de Mello<sup>2</sup>, Marcia Marie Maru<sup>3</sup>, Carlos Alberto Achete<sup>3</sup>, Adelina Pinheiro Santos<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Uberlândia, <sup>3</sup>Instituto Nacional de Metrologia, Qualidade e Tecnologia
- 15:45 Probing Water Adsorption on Graphene incorporated in thermal treatments** **A.OR6.24**  
Guilherme Rolim<sup>1</sup>, Taís Orestes Feijó<sup>2</sup>, Gabriel Vieira Soares<sup>2</sup>, Cláudio Radtke<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, Pós Graduação em Microeletrônica, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 16:00 Influence of temperature on domains structure in graphene nanoislands on Ni(111)** **A.OR6.25**  
Sofia Oliveira Parreiras<sup>1</sup>, Michele Gastaldo<sup>2</sup>, Cesar Moreno<sup>2</sup>, Maximiliano Delany Martins<sup>3</sup>, Gustavo Ceballos<sup>2</sup>, Roberto Magalhães Paniago<sup>1</sup>, Aitor Mugarza<sup>2</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Catalan Institute of Nanoscience and Nanotechnology, <sup>3</sup>Centro de Desenvolvimento da Tecnologia Nuclear

## Poster presentations

### SESSION A.P2 (17:45 - 19:30)

- 17:45 Photocatalytic applications of nanocomposites TiO<sub>2</sub>/SrTiO<sub>3</sub> obtained by Sol-Gel method** **A.P2.81**  
Rafael Aparecido Ciola Amoresi<sup>1</sup>, Vinícius Teodoro<sup>1</sup>, Alexandre Z. Simões<sup>2</sup>, Alberto Adriano Cavalheiro<sup>3</sup>, Leinig Antonio Perazolli<sup>1</sup>, Maria Ap. Zaghete<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>UNESP Guaratinguetá, <sup>3</sup>Universidade Estadual de Mato Grosso do Sul
- 17:45 Piezoresponse Force Microscopy in characterization of NaNbO<sub>3</sub> based flexible composites** **A.P2.82**  
Guilhermina Ferreira Teixeira<sup>1</sup>, Wagner Benício Bastos<sup>1</sup>, Pedro Tendrih Sodré<sup>1</sup>, Elson Longo<sup>1</sup>, Maria Ap. Zaghete<sup>1</sup>; <sup>1</sup>Instituto de Química - IQ - Unesp - Araraquara
- 17:45 (NiZn)Fe<sub>2</sub>O<sub>4</sub>-BaTiO<sub>3</sub> composites: a photoluminescence study** **A.P2.83**  
Guilhermina Ferreira Teixeira<sup>1</sup>, Adis S Dzunuzovic<sup>2</sup>, Biljana D Stojanovic<sup>2</sup>, Elson Longo<sup>1</sup>, Maria Ap. Zaghete<sup>1</sup>; <sup>1</sup>Instituto de Química - IQ - Unesp - Araraquara, <sup>2</sup>Institute of Multidisciplinary Research University of Belgrade
- 17:45 Heterostructures SrTiO<sub>3</sub>/LaAlO<sub>3</sub> with 2DEG behavior** **A.P2.84**  
Rafael Aparecido Ciola Amoresi<sup>1</sup>, Leonélio Cichetto Junior<sup>2,1</sup>, Alexandre Z. Simões<sup>3</sup>, Elson Longo<sup>1</sup>, Maria Ap. Zaghete<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>UNESP Guaratinguetá
- 17:45 Thin films of LaNi<sub>(1+x)</sub>O<sub>3</sub> and LaNi<sub>(1+x)</sub>O<sub>3</sub>/ BaTiO<sub>3</sub> (x = -0,02 and 0,2) obtained by PLD technique for study of the structural and physical properties for application in ferroelectric memories** **A.P2.85**  
Leonélio Cichetto Junior<sup>1,2</sup>, Fernando M. Araujo Moreira<sup>1</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Instituto de Química de Araraquara/UNESP

- 17:45 Influence of Cu-doped TiO<sub>2</sub> on photocatalytic activity** **A.P2.86**  
Vinicius Teodoro<sup>1</sup>, Euripedes Silva Junior<sup>1</sup>, Máximo Siu Li<sup>2</sup>, Maria Ap. Zaghete<sup>1</sup>, Leinig Antonio Perazolli<sup>1</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Instituto de Química - UNESP, <sup>2</sup>Instituto de Física - USP
- 17:45 Influence of Silver on Photocatalytic Activity of TiO<sub>2</sub>.** **A.P2.87**  
Carla Yuri Kisen<sup>1</sup>, Vinicius Teodoro<sup>1</sup>, Elson Longo<sup>2,3</sup>, Maria Ap. Zaghete<sup>1</sup>, Leinig Antonio Perazolli<sup>1</sup>; <sup>1</sup>Instituto de Química, UNESP - Universidade Estadual Paulista, Araraquara-SP, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Instituto de Química de Araraquara/UNESP
- 17:45 MODIFICAÇÃO ESTRUTURAL E CARACTERIZAÇÃO DA ARGILA A5 EM ORGANOFILICA PARA REMEDIAÇÃO DE AMBIENTES AQUATICOS CONTAMINADOS COM POLUENTES ORGANICOS** **A.P2.89**  
Sara Guilhon Barboza<sup>1</sup>, Arão Pereira da Costa Filho<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 17:45 Influence of the injection rate in the diameters of YBCO ceramics Nanofibers obtained by the new technique of Solution Blow Spinning (SBS)** **A.P2.91**  
Maycon Rotta<sup>1</sup>, Lincon Zadorosny<sup>1</sup>, Cláudio Luiz Carvalho<sup>1</sup>, José Antonio Malmonge<sup>1</sup>, Luiz Francisco Malmonge<sup>1</sup>, Rafael Zadorosny<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS
- 17:45 Sctructural properties of the nanostructured hydrogels containing nanoclay for application in agriculture** **A.P2.92**  
UILIAN GABALDI YONEZAWA<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>, Fauze Ahmad Aouada<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>2</sup>Campus Ilha Solteira
- 17:45 Preparation of magnetic MWCNTs thin films by spray method** **A.P2.93**  
Marisa Raquel Rodrigues<sup>1</sup>, Gustavo da Rosa Cunha<sup>1</sup>, Alice Gonçalves Osorio<sup>2</sup>, Carlos Pérez Bergmann<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal de Pelotas
- 17:45 Effect of heat treatment temperature on the electrochemical properties of reticulated vitreous carbon with two different porous sizes.** **A.P2.94**  
Aline Fontana Batista<sup>1</sup>, Adriano Luis De Paula<sup>2,1</sup>, Maurício Ribeiro Baldan<sup>2</sup>, Emerson Sarmiento Gonçalves<sup>3,1</sup>; <sup>1</sup>Instituto de Aeronáutica e Espaço, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Instituto Tecnológico de Aeronáutica
- 17:45 SYNTHESIS OF CARBON XEROGEL BY A BIOSOURCED PRECURSOR** **A.P2.95**  
Kéthy Germano Torres<sup>1</sup>, Honória de Fátima Gorgulho<sup>1</sup>, Patrícia Benedini Martelli<sup>1</sup>, Luiz Gustavo Guimarães<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Thermal analysis and calorimetry applied to the studies of graphene and other 2D carbon based nanomaterials and nanocomposites** **A.P2.96**  
Kristina Lilova<sup>1</sup>; <sup>1</sup>Setaram Inc.
- 17:45 Carbon nanotube coating with TiO<sub>2</sub>** **A.P2.97**  
Karla Faquine Rodrigues<sup>1,2</sup>, Felipe Sales Brito<sup>1</sup>, Beatriz Rossi Canuto de Menezes<sup>1</sup>, Wesley Franceschi<sup>1</sup>, Filipe Vargas Ferreira<sup>1</sup>, Cintia Rosa<sup>1,2</sup>, Beatriz Carvalho Silva<sup>1,2</sup>, Gilmar Patrocínio Thim<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade do Vale do Paraíba

- 17:45 Systematization of the routes towards synthesis of the graphene oxide controlling the chemical reduction via thermal treatment and sonification process** **A.P2.98**  
Mariany Ludgero Maia Gomes<sup>1,2</sup>, Jorge Tadao Matsushima<sup>1,3</sup>, Jossano Saldanha Marcuzzo<sup>1</sup>, Emerson Sarmento Gonçalves<sup>4</sup>, Mauricio Ribeiro Baldan<sup>1</sup>;  
<sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Federal de São Paulo/São José dos Campos, <sup>3</sup>ETEP Faculdades, <sup>4</sup>Instituto Tecnológico Aeroespacial
- 17:45 Evolution of Structure of Graphene Oxide with Heat Treatment Temperature** **A.P2.99**  
Ludmila Vargas<sup>1</sup>, Camila Brito Souza<sup>2,3</sup>, Mariany Ludgero Maia Gomes<sup>4,3</sup>, Jorge Tadao Matsushima<sup>4,5</sup>, Mauricio Ribeiro Baldan<sup>4</sup>, Adriana Medeiros Gama<sup>2</sup>, Emerson Sarmento Gonçalves<sup>2,1</sup>; <sup>1</sup>Instituto Tecnológico Aeroespacial, <sup>2</sup>Instituto de Aeronáutica e Espaço, Laboratório de Caracterização Físico-Química, Divisão de Materiais, <sup>3</sup>Universidade Federal de São Paulo/São José dos Campos, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais, <sup>5</sup>ETEP Faculdades
- 17:45 Preparation and photocatalytic activity of Carbon xerogel/TiO<sub>2</sub> composites** **A.P2.100**  
Adalgisa Reis Mesquita<sup>1,2</sup>, Honória de Fátima Gorgulho<sup>2</sup>, Patrícia Benedini Martelli<sup>2</sup>, Clascídia A. Furtado<sup>3</sup>, Jefferson Patrício Nascimento<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Sudeste de Minas Gerais, <sup>2</sup>Universidade Federal de São João del-Rei, <sup>3</sup>Universidade Federal de Minas Gerais
- 17:45 Structural and Optical Characterization in Amorphous Carbon/Graphite Hybrid Composites: Effect of Graphite in the Induction of Lamellar Behavior in Amorphous Carbon** **A.P2.101**  
Silvania Lanfredi<sup>1</sup>, Gabriela Delli Colli Zocolaro<sup>1</sup>, Jessica Taeko Sanches Kohara<sup>1</sup>, Marcos Augusto Lima Nobre<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 CoTRP/G raphene oxide composite as efficient electrode material for dissolved oxygen sensors** **A.P2.102**  
Juan Sebastian Aguirre<sup>1</sup>, Sukeri Anandhakumar<sup>1</sup>, Josué Martins Gonçalves<sup>1</sup>, Lucas Patricio Hernandez<sup>1</sup>, Bruno Bitaraes<sup>1</sup>, Koiti Araki<sup>1</sup>, Henrique Eisi Toma<sup>1</sup>, Mauro Bertotti<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Electrochemical study of the interaction of Garcinia mangostana extract with carbon nanotubes** **A.P2.103**  
Thaise Almeida Silva<sup>1</sup>, Antônio Santana Santos<sup>1</sup>, Erica Cristina Almeida<sup>1</sup>, Ronaldo Carvalho da Silva<sup>1</sup>, Cristina Pungartnik<sup>1</sup>, Luiz Carlos Salay<sup>1</sup>;  
<sup>1</sup>Universidade Estadual de Santa Cruz
- 17:45 Electrochemical aspects of the interaction of the enzyme lipase from Candida rugosa with carbon nanotubes** **A.P2.104**  
Flávia dos Santos Gomes<sup>1</sup>, Thaise Almeida Silva<sup>1</sup>, Marcelo Franco<sup>1</sup>, Erica Cristina Almeida<sup>1</sup>, Antônio Santana Santos<sup>1</sup>, Luiz Carlos Salay<sup>1</sup>; <sup>1</sup>Universidade Estadual de Santa Cruz
- 17:45 Reduced graphene oxide/ $\delta$ -WO<sub>3</sub> composites for volatile organic compounds sensing** **A.P2.105**  
Tarcísio Micheli Perfecto<sup>1</sup>, Cecilia de Almeida Zito<sup>1</sup>, Diogo Paschoalini Volanti<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"

- 17:45 Effects of Funcionalization in Fluoropolymers/Multiwalled Carbon Nanotubes Nanocomposites** **A.P2.106**  
Cristina Angioletto Pozenato<sup>1</sup>, Pedro Arthur Castro<sup>1</sup>, Rene Ramos de Oliveira<sup>1</sup>, Sandra Regina Scagliusi<sup>1</sup>, Ademar Benévolo Lugão<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Intercalation and exfoliation mechanism of kaolinite during the emulsion polymerization** **A.P2.107**  
 José Costa de Macêdo Neto<sup>1</sup>, Nayra Reis Nascimento<sup>2</sup>, Arlindo Pires Lopes<sup>1</sup>, Adriana Alencar Santos<sup>3</sup>, Ivanei Ferreira Pinheiro<sup>2</sup>; <sup>1</sup>Universidade do Estado do Amazonas, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal do Amazonas
- 17:45 Piezoresistance in multicomponent polyurethane composite and carbon black under charge/discharge mechanical** **A.P2.108**  
Eliraldrin Amorin de Sousa<sup>1</sup>, Elen Poliani da Silva Arlindo<sup>2</sup>, Walter Katsumi Sakamoto<sup>1</sup>, José Antonio Malmonge<sup>1</sup>, Gilberto Campos Fuzari Junior<sup>2</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS, <sup>2</sup>Universidade Federal de Mato Grosso
- 17:45 Synthesis and application of nanocomposite based on multi-walled carbon nanotubes grafted by polyvinylpyridine for the preconcentration of Cd(II)** **A.P2.109**  
Jhessica de Cássia Mendonça<sup>1</sup>, Kristiany Moreira Diniz<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>, Fabio Antonio Cajamarca Suquila<sup>1</sup>, César Ricardo Teixeira Tarley<sup>1,2</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Instituto Nacional de Ciência e Tecnologia (INCT) de Bioanalítica
- 17:45 Photocatalytic activity of reduced graphene oxide/NiO composites obtained by microwave-assisted hydrothermal** **A.P2.110**  
Cristiane da Silva Fonseca<sup>1</sup>, Gabriela Byzynski Soares<sup>2</sup>, Diogo Paschoalini Volanti<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Hybrid platform based on graphene/conducting polymer for applications in a chemical sensor** **A.P2.111**  
Murilo Henrique Moreira Facure<sup>1,2</sup>, Luiza Amim Mercante<sup>2</sup>, Rafaela Cristina Sanfelice<sup>2</sup>, Fernanda Lanzoni Migliorini<sup>2</sup>, Daniel Souza Corrêa<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária - Embrapa Instrumentação São Carlos
- 17:45 Preparation of graphene oxide and reduced graphene oxide: evaluation of experimental parameters** **A.P2.112**  
Thuany Maraschin<sup>1</sup>, Leíse Serena Pasa<sup>1</sup>, José Antonio Malmonge<sup>2</sup>, Nara Regina de Souza Basso<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul, <sup>2</sup>Campus de Ilha Solteira
- 17:45 Methods of preparing carbon nanotubes** **A.P2.113**  
EDINILSON JOSÉ SLABEI<sup>1</sup>, Alfredo Bruger Junior<sup>1</sup>, Elias da Costa<sup>1,2</sup>, Gino Capobianco<sup>1</sup>; <sup>1</sup>Faculdades Integradas do Vale do Iguaçu, <sup>2</sup>Universidade Estadual do Paraná
- 17:45 Electronic structure and optical properties of the ZnS/PMMA nanocomposites** **A.P2.114**  
Isabela Rosado Belê<sup>1</sup>, Murilo Pires de Lima<sup>1</sup>, Mateus Vinicius de Paiva<sup>1</sup>, Rodrigo Furquim Ghiraldi<sup>1</sup>, Walmir Eno Pöttker<sup>1</sup>, Elson Longo<sup>2</sup>, Felipe Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Química de Araraquara/UNESP

- 17:45 One-pot microwave-assisted hydrothermal synthesis of CuO-reduced graphene oxide nanocomposites for gas sensing** **A.P2.115**  
Marco Antonio Modenes Junior<sup>1</sup>, Tarcísio Micheli Perfecto<sup>2</sup>, Diogo Paschoalini Volanti<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Universidade Estadual Paulista
- 17:45 Sonication effect at Graphene Oxide in Acetone** **A.P2.116**  
Felipe Sales Brito<sup>1</sup>, Karla Faquine Rodrigues<sup>1,2</sup>, Beatriz Rossi Canuto de Menezes<sup>1</sup>, Wesley Franceschi<sup>1</sup>, Filipe Vargas Ferreira<sup>1</sup>, Cintia Rosa<sup>2,3</sup>, Beatriz Carvalho Silva<sup>1,2</sup>, Gilmar Patrocínio Thim<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade do Vale do Paraíba, <sup>3</sup>Instituto Tecnológico da Aeronáutica,
- 17:45 Conductive paper produced with a cellulose-CNT composite** **A.P2.117**  
Gabriel Kavilhuka Metzger<sup>1</sup>, Rosieli Lemes de Farias<sup>2</sup>, Irineu Hattenhauer<sup>3</sup>, Celso de Araujo Duarte<sup>1</sup>, Evaldo Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Klabin Ortigueira, <sup>3</sup>Fundação Universidade do Estado de Santa Catarina
- 17:45 CHARACTERIZATION OF SLAG PORTLAND CEMENT MANUFACTURED WITH CARBON NANOTUBES** **A.P2.118**  
Ana Elisa da Silva Dias<sup>1</sup>, Jose Marcio F Calixto<sup>1</sup>, Luiz Orlando Ladeira<sup>1</sup>, Tarcizo Cruz Souza<sup>2</sup>, Lucas Ladeira<sup>1</sup>, Paulo Henrique Vaz Silva<sup>1</sup>, Rodrigo da Costa Macedo<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Centro de Tecnologia em Nanotubos de Carbono
- 17:45 Thermal and mechanical characterization of UHMW-PE/LLDPE blend-based carbon nanotubes nanocomposite** **A.P2.119**  
Bruna Cristina da Silva<sup>1</sup>, Fabio Roberto Passador<sup>1</sup>, Caroline Martins dos Santos<sup>2,1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Universidade Federal de São Paulo
- 17:45 Biosensor based on graphene oxide with gold nanoparticles.** **A.P2.120**  
Glenda Biasotto<sup>1</sup>, João Paulo de Campos da Costa<sup>1</sup>, Paulo Inácio da Costa<sup>2</sup>, Maria Ap. Zaghete<sup>1</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Faculdade de Ciências Farmacêuticas de Araraquara/UNESP
- 17:45 Fullerene nanocomposites based on poly(lactic acid)** **A.P2.121**  
Maria Clara Guimarães Pedrosa<sup>1</sup>, Lívia de Rodrigues Menezes<sup>1</sup>, Jose Carlos Dutra Filho<sup>1</sup>, Emerson Oliveira da Silva<sup>1</sup>; <sup>1</sup>Instituto de Macromoleculas Professora Eloisa Mano
- 17:45 Graphene-based systems for biological delivery** **A.P2.122**  
Julio Cesar Silva<sup>1</sup>, Raigna Augusta da Silva Zadra Armond<sup>1</sup>, Tome Mauro Schmidt<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia
- 17:45 Study of natural graphite exfoliation to obtain graphene nanobelts using sonication process** **A.P2.123**  
Mara Canesqui<sup>1</sup>, Marina Fernandes Cosate de Andrade<sup>2</sup>, Julio Roberto Bartoli<sup>2</sup>, Geraldo Magela Trindade<sup>3</sup>, Ueverson Barros Lima<sup>3</sup>, Antônio Sérgio Souza<sup>3</sup>, Stanislav Moshkalev<sup>1</sup>; <sup>1</sup>Centro de Componentes Semicondutores-UNICAMP, <sup>2</sup>Faculdade de Engenharia Química - UNICAMP, <sup>3</sup>Nacional de Grafite
- 17:45 Carbon Thin Films from Solvent Exfoliated Graphite** **A.P2.124**  
Eric Tsuneki Yoshiura Ono<sup>1</sup>, Gustavo de Mello Correa Marinho Rodrigues<sup>1</sup>, Jessica de Carvalho Arjona<sup>1</sup>, Jessica Silva Santos<sup>1</sup>, Mônica Akemi Bando<sup>1</sup>, Satoru Yoshida<sup>1</sup>, Yuri Sato Sophia<sup>1</sup>, Shu Hui Wang<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo

- 17:45 Graphene oxide polymer nanocomposite** **A.P2.125**  
ANDRESSA DE AGUIAR OLIVEIRA<sup>1</sup>, MAURO CESAR TERENCE<sup>1</sup>, Juan Alfredo Guevara Carrió<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie
- 17:45 Composite membranes based on polymeric nanofibers/graphene oxide with dye sorption capability** **A.P2.126**  
Luiza Amim Mercante<sup>1</sup>, Murilo Henrique Moreira Facure<sup>2,3</sup>, Danilo Locilento<sup>2,1</sup>, Fernanda Lanzoni Migliorini<sup>3</sup>, Rafaela Cristina Sanfelice<sup>3</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>, Daniel Souza Corrêa<sup>2,1</sup>; <sup>1</sup>Empresa Brasileira de Pesquisa Agropecuária - Embrapa Instrumentação São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>3</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 The stability and properties of polystyrene/kaolinite nanocomposites by emulsion polymerization** **A.P2.127**  
José Costa de Macêdo Neto<sup>1</sup>, Telma Regina Nogueira<sup>2</sup>, Liliane Maria Ferrareso Lona<sup>2</sup>, Ivanei Ferreira Pinheiro<sup>3</sup>; <sup>1</sup>Universidade do Estado do Amazonas, <sup>2</sup>Faculdade de Engenharia Química, <sup>3</sup>Universidade Estadual de Campinas
- 17:45 Dispersion of Graphene Oxide in Liquid Sodium Silicate with High SiO<sub>2</sub>:Na<sub>2</sub>O Ratio** **A.P2.128**  
Tiago Serodre<sup>1</sup>, Jefferson Patrício Nascimento<sup>1</sup>, Valdirene Gonzaga de Resende<sup>2</sup>, Flávio de Castro Dutra<sup>2</sup>, Adelina Pinheiro Santos<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Vale S. A.
- 17:45 Influence of the applied bias voltage in a-C:H film deposited on Ti6Al4V by using a modified pulsed DC-PECVD system** **A.P2.129**  
Dubrazkha Carolina Lugo<sup>1</sup>, Marco Antonio Ramírez<sup>2</sup>, Patrícia Cristiane Santana da Silva<sup>1</sup>, Evaldo José Corat<sup>1</sup>, Vladimir Jesús Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Federal de São Paulo
- 17:45 Performance analysis of the reduced graphene oxide/carbon fiber binary composite as electrode for supercapacitor application** **A.P2.130**  
Dalva Alves de Lima Almeida<sup>1</sup>, Andrea Boldarini Couto<sup>1</sup>, Murilo Henrique Moreira Facure<sup>2,3</sup>, Daniel Souza Corrêa<sup>3</sup>, Neidenei Gomes Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>3</sup>Embrapa Instrumentação
- 17:45 Investigation by Mechanical Spectroscopy of the nucleation processes in amorphous Cu-Zr-Al alloys** **A.P2.131**  
Paulo Wilmar Barbosa Marques<sup>1</sup>, Odila Florencio<sup>1</sup>, Paulo Sérgio da Silva Junior<sup>1</sup>, Felipe Henrique Santa Maria<sup>2</sup>, Javier Andrés Munoz Chaves<sup>2</sup>, Ariel Moreno-Gobbi<sup>3</sup>, Luís César Aliaga<sup>1</sup>, Walter José Botta<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Escola de Engenharia de São Carlos/USP, <sup>3</sup>Universidad de la República
- 17:45 Interactions of 2D-2D structures: graphene oxide and hydrotalcite** **A.P2.132**  
Marcelo de Sousa<sup>1</sup>, Ana Carolina Mazarin de Moraes<sup>1</sup>, Leandro Carneiro Fonseca<sup>1</sup>, Luis Visani Luna<sup>1</sup>, Diego Stéfani Tedoro Martinez<sup>2</sup>, Oswaldo Luiz Alves<sup>3</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP, <sup>2</sup>Brazilian Center for Research in Energy and Materials, <sup>3</sup>Instituto de Química - UNICAMP
- 17:45 Thermal stability of poly(ethylene-co-vinyl acetate)/bentonite composites: effect of the ionic and non ionic modifier** **A.P2.133**  
Reinaldo Yoshio Morita<sup>1</sup>, Evelyn Nery de Santana Marculino<sup>1</sup>, Juliana Regina Kloss<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná

- 17:45 Tailoring multifunctional graphene-based materials: from SERS substrates to nanocatalysts** **A.P2.134**  
Jéssica Eliza Silva Fonsaca<sup>1</sup>, Ana Laura Elías<sup>2</sup>, Thomas Golin Almeida<sup>1</sup>, Sergio H. Domingues<sup>3</sup>, Marcela Mohallem Oliveira<sup>4</sup>, Mauricio Terrones<sup>2</sup>, Elisa S Orth<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Pennsylvania State University, <sup>3</sup>Universidade Presbiteriana Mackenzie, <sup>4</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Synthesis of carbon nanotubes by PECVD adjusted by total flux of process gases** **A.P2.135**  
Diego Edison Lopez Silva<sup>1</sup>, Deissy Johanna Feria Garnica<sup>1</sup>, Inès Pereyra<sup>1</sup>; <sup>1</sup>Escola Politecnica da USP
- 17:45 Influence of MWCNT:PANI ratio in sensors applied to ammonia (NH<sub>3</sub>) detection** **A.P2.136**  
Marcelo Eising<sup>1</sup>, Carlos Eduardo Cava<sup>2</sup>, Rodrigo Villegas Salvatierra<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Ultrasound-assisted dispersion of graphene oxide: highly efficient in anionic and non-ionic surfactants removal from water** **A.P2.137**  
Patricia Prediger<sup>1</sup>, Tauany de Figueiredo Neves<sup>1</sup>, Carlos Henrique Guimarães<sup>1</sup>, Bruno Pionte<sup>1</sup>, Thais Cheminski<sup>1</sup>, William Bardelin Nunes<sup>1</sup>, Carlos Roque D. Correia<sup>2</sup>; <sup>1</sup>School of Technology, UNICAMP, Limeira-SP, Brazil, <sup>2</sup>Instituto de Química - UNICAMP
- 17:45 Plasmonic properties of hyperbranched silver-fibroin composite synthesized via a green pathway** **A.P2.138**  
Josias Rogério Lopes<sup>1</sup>, Diego Stefani Teodoro Martinez<sup>2</sup>, Marisa Masumi Beppu<sup>3</sup>, Marcos Akira d'Ávila<sup>1</sup>, Elias de Barros Santos<sup>4</sup>; <sup>1</sup>Faculdade de Engenharia Mecânica-UNICAMP, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Faculdade de Engenharia Química - UNICAMP, <sup>4</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Enhanced biosensing performance of a tyrosinase biosensor architected on functionalized carbon black** **A.P2.139**  
Glenda Gisela Ibanez<sup>1</sup>, Tiago Almeida<sup>2</sup>, Fernando Campanhã<sup>2</sup>, Orlando Fatibello Filho<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Production and characterization of hybrid reduced graphene oxide dispersions using different polymers** **A.P2.140**  
Wagner Anacleto Pinheiro<sup>1</sup>, Maria Iliut<sup>2</sup>, Monica Alberto<sup>2</sup>, Jacek Wychowanec<sup>2</sup>, Aravind Vijayaraghavan<sup>2</sup>; <sup>1</sup>Instituto Militar de Engenharia, <sup>2</sup>University of Manchester
- 17:45 Fabrication of devices based in graphene materials: nanotechnology applications** **A.P2.141**  
Henrique Ferreira<sup>1</sup>, Lucila Menacho<sup>2</sup>, Ana Champi<sup>3</sup>, Maria Quintana<sup>3</sup>, Ana Champi<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidad Nacional Mayor de San Marcos, <sup>3</sup>Universidad Nacional de Ingeniería
- 17:45 Compact glassy carbon obtained from the powder phase.** **A.P2.142**  
Marina Judice Silva<sup>1</sup>, Fábio Dondeo Origo<sup>2</sup>; <sup>1</sup>Federal University of São Paulo, <sup>2</sup>Instituto de Estudos Avançados

- 17:45 Organic bentonites-HIPS nanocomposites. Influence of EB radiation on the mechanical properties** **A.P2.143**  
Francisco J. Mondelo Garcia<sup>1</sup>, Amanda Robau Porrua<sup>1</sup>, Giselle Fe Colls<sup>1</sup>, Esperidiana A. B. Moura<sup>2</sup>, Maria das Graças da Silva Valenzuela<sup>3</sup>, Tania Rodriguez Moliner<sup>1</sup>, Jose Luis Valin Rivera<sup>1,3</sup>, Francisco Rolando Valenzuela Diaz<sup>3</sup>; <sup>1</sup>Instituto Superior Politécnico José Antonio Echeverría, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>3</sup>Escola Politecnica da USP
- 17:45 Voids characterization by optical microscopy on glass fiber composites** **A.P2.144**  
Cláudia Luisa Mendes<sup>1</sup>, Carlos Alberto Soufen<sup>1</sup>, Guilherme Lima Lopes<sup>1</sup>, Tais Lopes Brandino<sup>2</sup>, Marcelo Capella Campos<sup>3</sup>; <sup>1</sup>Faculdade de Engenharia - Campus de Bauru, <sup>2</sup>Faculdade de Ciências/Bauru, <sup>3</sup>UNIVERSIDADE ESTADUAL PAULISTA "JÚLIO DE MESQUITA FILHO" - BAURU - SP
- 17:45 EXPERIMENTAL INVESTIGATION OF THE MECHANICAL BEHAVIOR OF SPOT WELDING-ADHESIVES JOINTS** **A.P2.145**  
Juliana Primo Basílio de Souza<sup>1</sup>, Ricardo Alexandre Amar de Aguiar<sup>2</sup>, Hector Reynaldo Menezes Costa<sup>1</sup>, João Marciano Laredo dos Reis<sup>3</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>CENTRO FEDERAL DE EDUCAÇÃO TECNOLÓGICA DO RIO DE JANEIRO, <sup>3</sup>Universidade Federal Fluminense
- 17:45 Influence of ionic liquids on the properties of SBA-15:CeO<sub>2</sub>-Mn<sub>y</sub>O<sub>x</sub> nanocomposites** **A.P2.146**  
Danilo Gomes Genaro<sup>1</sup>, Fernanda Ferraz Camilo<sup>1</sup>, Tereza Silva Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema
- 17:45 Advanced ceramics reinforced with carbon nanotubes for ballistic application** **A.P2.147**  
Carlos Alberto de Oliveira Couto<sup>1</sup>, Fabio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Graphene oxide preparation with different sonication times** **A.P2.148**  
Jesus Eduardo Gonzalez Ruiz<sup>1</sup>, Lais Ronconi<sup>2</sup>, Lourdes Marcela Yataco Lazaro<sup>3</sup>, Rene Collazo Carceller<sup>4</sup>, Maria das Graças da Silva Valenzuela<sup>5</sup>, Esperidiana B. Moura<sup>6</sup>, Jose Luis Valin Rivera<sup>2</sup>, Tania Rodriguez Moliner<sup>4</sup>, Francisco Rolando Valenzuela Diaz<sup>2</sup>; <sup>1</sup>Centro de Biomateriales, <sup>2</sup>Escola Politécnica de Universidade de São Paulo, <sup>3</sup>Faculdade de Ciências Farmacêuticas da USP, <sup>4</sup>Instituto Superior Politécnico José Antonio Echeverría, <sup>5</sup>Fundação Universidade Federal do Abc, <sup>6</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Influence of filler in the mechanical and electrical properties of epoxy-based adhesives** **A.P2.149**  
Juliana Primo Basílio de Souza<sup>1</sup>, Ricardo Alexandre Amar de Aguiar<sup>1</sup>, Hector Reynaldo Menezes Costa<sup>1</sup>, João Marciano Laredo dos Reis<sup>2</sup>, Mbela Mabaya<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>Universidade Federal Fluminense
- 17:45 A study of luminescence property of graphene oxide produced by electrochemical method** **A.P2.150**  
Rodolfo Bonoto Estevam<sup>1</sup>, Rodolfo Thiago Ferreira<sup>1</sup>, Gustavo Marciniuk<sup>1</sup>, Fábio Santana dos Santos<sup>1</sup>, Alex Vieira Pedroso<sup>1</sup>, Jarem Raul Garcia Garcia<sup>1</sup>, Ariane Silva Ribas<sup>1</sup>, Andressa Oliveira Rodrigues<sup>1</sup>, Felipe Tadashi Kasuga<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

- 17:45 Study of magnetic properties of Fe-encapsulated into Carbon nanotubes growth by methane chemical vapor deposition on fluidized bed reactor** **A.P2.151**  
Alexander Caytuero Villegas<sup>1</sup>, Hugo Alvarenga Oliveira<sup>1</sup>, Fabio Barboza Passos<sup>1</sup>, D. F. Franceschini<sup>1</sup>, Elisa Baggio Saitovitch<sup>2</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas

## Wednesday, September 28<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION A.OR7 (09:45 - 10:45) - Room Auditório*

- 09:45 Graphene and 2-D Layered Chalcogenide Based Composite Paper Electrodes for Electrochemical Energy Storage Applications** **A.OR7.26\***  
Gurpreet Singh
- 10:15 Study of graphene oxide doped with silver for sensors application** **A.OR7.27**  
Marina Sparvoli<sup>1</sup>, Felipe Banin<sup>1</sup>, Arthur Fernandes Nogueira Cesarino<sup>1</sup>, Mauro Pinheiro Silva<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Faculdades Oswaldo Cruz
- 10:30 Carbon Nanotubes Functionalized with Benzoic Acid by Non-acid Route to Application in Sensors** **A.OR7.28**  
Elaine Cavalcanti Rodrigues Vaz<sup>1</sup>, Janaína Versiani dos Anjos<sup>1</sup>, Petrus d'Amorim Santa-Cruz<sup>1</sup>, Rosa Fireman Dutra<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

#### *SESSION A.OR8 (11:15 - 12:00) - Room Auditório*

- 11:15 Surface Engineering of Graphene Oxide for Theranostic Cancer Application** **A.OR8.29**  
Juliana Paiva<sup>1</sup>, Miguel Jafelicci Júnior<sup>1</sup>, Rodrigo Fernando Costa Marques<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 11:30 The meeting of the macromolecules with the world of two-dimensional materials** **A.OR8.30\***  
Guilhermino José Macedo Fechine<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie

#### *SESSION A.OR9 (14:00 - 16:15) - Room Auditório*

- 14:00 Free standing, flexible and highly-conductive films fabricated using multilayer graphene nanobelts** **A.OR9.31**  
Stanislav Moshkaley<sup>1</sup>, Mara Canesqui<sup>1</sup>, Raluca Savu<sup>1</sup>, Andrei Alaferdov<sup>1</sup>, Alfredo Vaz<sup>1</sup>, Geraldo Magela Trindade<sup>2</sup>, Ueverson Barros Lima<sup>2</sup>, Antônio Sérgio Souza<sup>2</sup>, Peter Jürgen Tatsch<sup>3</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Nacional de Grafite, <sup>3</sup>University of Campinas

- 14:15 Interlaminar fracture toughness analysis of co-bonded and secondary bonding adhesive joints in carbon composites under mode II tests** **A.OR9.32**  
Camila Belo Gomes Brito<sup>1</sup>, Rita de Cássia Mendonça Sales<sup>1,2</sup>, Ricardo Francisco Gouvêa<sup>1</sup>, Arthur Scaglioni de Oliveira<sup>2</sup>, Tanila Penteado de Faria Gonzales Leal<sup>3</sup>, Mariano Andrés Arbelo<sup>1</sup>, Mauricio Vicente Donadon<sup>1</sup>;  
<sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Faculdade de Tecnologia Professor Jessen Vidal, <sup>3</sup>Empresa Brasileira de Aeronáutica
- 14:30 Simulation-based Understanding of 2D Materials: Graphene Healing and Carbon Nitride Photocatalysts** **A.OR9.33\***  
Tiago Botari<sup>1</sup>, Volker Blum<sup>2</sup>, Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>Duke University
- 15:00 Carbon Nanotubes and Graphene: A Comparative Investigation on Hybrid Nanocomposites** **A.OR9.34**  
Antonio Avila<sup>1</sup>, Nathalia Caroline Ferreira Menezes<sup>1</sup>, Martin Cruickshank<sup>2</sup>, Iain Mckenzie<sup>2</sup>, Suchilla Garcia Leão<sup>3</sup>, Fernanda Lima<sup>1</sup>, Camila F Silva<sup>3</sup>, Guilherme Arantes<sup>3</sup>, Marina G Martins<sup>3</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>University of Strathclyde, <sup>3</sup>Universidade Federal De Minas Gerais
- 15:15  $\alpha$ -amilase immobilization onto ZnO-GO nanocomposites** **A.OR9.35**  
Laura Raldi Canal<sup>1</sup>, Márcio André Miranda<sup>2,3</sup>, Hiroshi Aoyama<sup>2</sup>, Talita Mazon<sup>1</sup>;  
<sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>Instituto de Biologia - Universidade Estadual de Campinas, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo - Campus Campinas
- 15:30 PMMA-Silica anticorrosive coatings reinforced by graphene oxide and carbon nanotubes** **A.OR9.36**  
Peter Hammer<sup>1</sup>, Samarah Vargas Harb<sup>2</sup>, Sandra Helena Pulcinelli<sup>1</sup>, Celso Valentim Santilli<sup>1</sup>, Kevin M Knowles<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>Instituto de Química de Araraquara/UNESP, <sup>3</sup>University of Cambridge
- 15:45 Thermal Conductivity Analysis of Carbon Composites** **A.OR9.37**  
Sarah Ackermann<sup>1</sup>; <sup>1</sup>C-Therm Technologies, Ltd.
- 16:00 A New Multilayer TiO<sub>2</sub> film** **A.OR9.38**  
Leinig Antonio Perazolli<sup>1</sup>, Glaucio Oliveira Testoni<sup>1</sup>, Marcelo Vianna Nogueira<sup>1</sup>, Carla Yuri Kisen<sup>1</sup>, Vinícius Teodoro<sup>1</sup>, Maria Ap. Zaghete<sup>1</sup>; <sup>1</sup>UNESP - Instituto de Química de Araraquara

# **SYMPOSIUM B - Nanocellulose materials: the keystone for a plethora of multifunctional applications**

## **Symposium organizers:**

Dr. Daniela Nunes (*Universidade Nova de Lisboa*)  
Dr. Ari Alastalo (*VTT Technical Research Centre of Finland LTD*)  
Dr. David Guerin (*Centre Technique du Papier*)  
Prof. Dr. Antonio José Felix de Carvalho (*USP*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION B.OR1 (09:45 - 10:45) - Room Jacarandá*

- 10:00 X-ray diffraction as a powerful tool to analyze the crystallinity of samples with cellulose mixed polymorphs: a comparison between methods** **B.OR1.1**  
Karen de Souza do Prado<sup>1</sup>, Márcia Aparecida da Silva Spinacé<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Abc
- 10:15 Paper electronics: a strategic area of the industry of the future** **B.OR1.2\***  
Rodrigo Ferrão de Paiva Martins<sup>1</sup>, Diana Gaspar<sup>1</sup>, Luis Pereira<sup>1</sup>, Elvira Maria Correia Fortunato<sup>1</sup>; <sup>1</sup>I3N/CENIMAT - Department of Materials Science, Faculty of Sciences and Technology, Universidade NOVA de Lisboa, Campus de Caparica, 2829-516 Caparica

### *SESSION B.OR2 (11:15 - 12:00) - Room Jacarandá*

- 11:15 Soybean straw cellulose nanofibrils as reinforcing filler in soy protein films** **B.OR2.3**  
Milena Martelli Tosi<sup>1</sup>, Natália Cristina Silva<sup>2</sup>, Bruno Esposto<sup>2</sup>, Odílio B. G. Assis<sup>3</sup>, Delia Rita Tapia-Blácido<sup>2</sup>; <sup>1</sup>Faculdade de Zootecnia e Engenharia de Alimentos, <sup>2</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto - USP, <sup>3</sup>Embrapa Instrumentação
- 11:30 Organic Thin-Film Transistors on Commercially Available Paper** **B.OR2.4\***  
Hagen Klauk<sup>1</sup>; <sup>1</sup>Max Planck Institute for Solid State Research

### *SESSION B.OR3 (14:00 - 16:15) - Room Jacarandá*

- 14:00 Optical properties of cornstarch-based films incorporated with cellulose nanofibrils** **B.OR3.5**  
Thais Ferreira da Silva<sup>1</sup>, Kelen Cristina dos Reis<sup>1</sup>, Gustavo H. D. Tonoli<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras
- 14:15 Cellulose nanofibers from native and planted Brazilian hardwoods - films and biodegradable composites** **B.OR3.6\***  
Lourival Marin Mendes<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras
- 14:45 Optically transparent cellulose nanopaper from curauá leaves fibers** **B.OR3.7**  
Pedro Ivo Cunha Claro<sup>1</sup>, Alfredo Sena<sup>2</sup>, Vanessa Bolzan Rodrigues<sup>1</sup>, Anderson Felix Manoel<sup>3</sup>, Luiz Henrique Capparelli Mattoso<sup>4</sup>, José Manoel Marconcini<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal de Lavras, <sup>3</sup>Universidade Federal do ABC, <sup>4</sup>Embrapa Instrumentação
- 15:00 Paper: an Advanced (Nano-) Material ?** **B.OR3.8\***  
Robert Schennach<sup>1</sup>; <sup>1</sup>Graz University of Technology

- 15:30 Bacterial cellulose nanocomposite as a platform for flexible organic devices B.OR3.9\***  
Marco Cremona<sup>1</sup>, Sidney José Lima Ribeiro<sup>2</sup>, Hernane Silva Barud<sup>2</sup>, Vanessa Luz e Calil<sup>1</sup>, Cristiano Legnani<sup>3</sup>, Welber Gianini Quirino<sup>3</sup>; <sup>1</sup>Department of Physics, Pontifical Catholic University of Rio de Janeiro - PUC-Rio, 22451-900, Rio de Janeiro, RJ, Brazil., <sup>2</sup>Institute of Chemistry, São Paulo State University - UNESP, CP 355, 14801-970, Araraquara, SP, Brazil, <sup>3</sup>Department of Physics, Federal University of Juiz de Fora, 36036-900, Juiz de Fora, MG, Brazil
- 16:00 Designing with sustainable materials: toys for children safety B.OR3.10**  
Luciana Pereira<sup>1</sup>, Gerson Luiz Mantovani<sup>1</sup>, Rovilson Mafalda<sup>1</sup>, Ricardo Gaspar<sup>1</sup>, Leandro Martins Pereira<sup>1</sup>, Francis Kley Moreira<sup>2</sup>, José Manoel Marconcini<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Embrapa Instrumentação

## Poster presentations

### SESSION B.P1 (17:45 - 19:30)

- 17:45 Production of nanocellulose stabilized silver nanoparticles and their antimicrobial activity against *Xanthomonas axonopodis* pv. *citri* B.P1.1**  
Caio Henrique Nasi de Barros<sup>1</sup>, Ljubica Tasic<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Cellulose Nanocrystals/Polysilsesquioxane Gels B.P1.2**  
Daniela de Moraes Zanata<sup>1</sup>, Liliene Cristina Battirolo<sup>1</sup>, Maria do Carmo Gonçalves<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Self assembled fibers of chitosan and TEMPO modified nanofibrils of cellulose B.P1.3**  
Rafael Grande
- 17:45 Mechanical properties of thermoplastic waxy starch (TPWS) films reinforced with cellulose nanocrystals (CNC) from macaúba B.P1.4**  
Anderson Felix Manoel<sup>1</sup>, Pedro Ivo Cunha Claro<sup>2</sup>, José Manoel Marconcini<sup>3</sup>, Gerson Luiz Mantovani<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Embrapa Instrumentação
- 17:45 Preparation of nanocomposites based on nanofibrils of cellulose and acrylic matrix for rigid panels B.P1.5**  
Emanoele Maria Santos Chiromito<sup>1</sup>, Eliane Trovatti<sup>1</sup>, Antonio Jose Felix Carvalho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Isothermal Crystallization Kinetics of PLA/Cellulose nanocrystals: Effect of amphiphilic molecule as a compatibilizer B.P1.6**  
Idejan Padilha Gross<sup>1</sup>, Mauro Vestena<sup>2</sup>, Alfredo Tiburcio Nunes Pires<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Beads of TEMPO Modified Cellulose Nanofibers for Cell Delivery B.P1.7**  
Antonio Jose Felix Carvalho, Renata Aquino Carvalho, Gabriella Veronese, Eugen Barbu, André Capaldo Amaral, Eliane Trovatti
- 17:45 Development of starch polymeric films reinforced with talc B.P1.8**  
Camila Rodrigues Sciena<sup>1</sup>, Elaine Cristina Paris<sup>2</sup>, Francine Aline Tavares<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Embrapa Instrumentação

- 17:45 Production of polyurethane foams from curauá polyol** **B.P1.9**  
Camila Santana Carriço<sup>1</sup>, Vânia Duarte Pasa<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Assessment of cellulose purification methods from the residue of enzymatic hydrolysis of sugarcane bagasse for the production of cellulose nanocrystals** **B.P1.10**  
Lais Angelice de Camargo<sup>1,2</sup>, Sandra Cerqueira Pereira<sup>3</sup>, Cristiane Sanchez Farinas<sup>2</sup>, José Manoel Marconcini<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>2</sup>;  
<sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Universidade Federal da Bahia
- 17:45 Nanofibers of getting in the presence of HAPn at different concentrations to release control drugs** **B.P1.11**  
Aline Aparecida Becaro<sup>1</sup>, Camila Rodrigues Sciena<sup>1</sup>, João Otávio Donizette Malafatti<sup>2</sup>, Elaine Cristina Paris<sup>1</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Manganese ions release from composites of PLA:starch biodegradable fibers** **B.P1.12**  
 João Otávio Donizette Malafatti<sup>1</sup>, Camila Rodrigues Sciena<sup>1</sup>, Wilson Alves Ribeiro Neto<sup>1</sup>, Flavia Stefanini Ribeiro<sup>1</sup>, Vanessa Priscila Scagion<sup>1</sup>, Elaine Cristina Paris<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Embrapa Instrumentação
- 17:45 Three-phase composites of polyurethane/PZT and cellulose nanocrystals** **B.P1.13**  
Alex Otávio Sanches<sup>1</sup>, Walter Katsumi Sakamoto<sup>1</sup>, Luiz Francisco Malmonge<sup>1</sup>, Darcy Hiroe Fujii Kanda<sup>1</sup>, Michael Jones Silva<sup>2</sup>, José Antonio Malmonge<sup>1</sup>;  
<sup>1</sup>Universidade Estadual Paulista, UNESP/FE - Campus de Ilha Solteira, <sup>2</sup>Universidade Estadual Paulista - Campus Rosana
- 17:45 Preparation and characterization of cellulose nanofibers reinforced poly(vinyl alcohol (PVA) composites** **B.P1.14**  
Michelle Sostag Meruvia<sup>1</sup>, Graciela I. B. Muniz<sup>2</sup>, Daniele Cristina Potulski<sup>2</sup>, Livia Cassia Viana<sup>2</sup>; <sup>1</sup>Pontifícia Universidade Católica do Paraná, <sup>2</sup>Universidade Federal do Paraná
- 17:45 Slow/controlled release fertilizers from a biopolymer-clay matrix using spray drying technique** **B.P1.15**  
Débora França<sup>1,2</sup>, Lucas Luiz Messa<sup>1</sup>, Roselena Faez<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade de São Paulo
- 17:45 Alginate/cellulose beads as supports for slow-release of nutrient** **B.P1.16**  
 Mailson de Matos<sup>1</sup>, Bruno Dufau Mattos<sup>1</sup>, Washington Magalhães<sup>2</sup>;  
<sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Green nanocomposites as carriers for slow-release of tebuconazole** **B.P1.17**  
 Bruno Dufau Mattos<sup>1</sup>, Washington Magalhães<sup>2</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Modification of the wettability of nanocellulose films by SF<sub>6</sub> plasma treatment** **B.P1.18**  
Bárbara Estefânia de Almeida Silva<sup>1</sup>, Aparecido Junior de Menezes<sup>1</sup>, Elidiane Cipriano Rangel<sup>2</sup>, Nilson Cristino Cruz<sup>2</sup>, Adriana Oliveira Delgado-Silva<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"

- 17:45 Flexible TiO<sub>2</sub>/paper platforms for UV/ozone sensing** **B.P1.19**  
Daniela Nunes<sup>1</sup>, Ana Pimentel<sup>1</sup>, Tomas Calmeiro<sup>1</sup>, Andréia Araujo<sup>1</sup>, Suman Nandy<sup>1</sup>, Joana V Pinto<sup>1</sup>, Pedro Barquinha<sup>1</sup>, Elvira Maria Correia Fortunato<sup>1</sup>, Rodrigo Ferrão de Paiva Martins<sup>1</sup>; <sup>1</sup>i3N/CENIMAT - Department of Materials Science, Faculty of Sciences and Technology, Universidade NOVA de Lisboa, Campus de Caparica, 2829-516 Caparica
- 17:45 Ultra-fast microwave assisted synthesis of ZnO nanorods on paper substrates for UV sensor application** **B.P1.20**  
Ana Pimentel<sup>1</sup>, Daniela Nunes<sup>1</sup>, Andréia Araujo<sup>1</sup>, Rodrigo Ferrão de Paiva Martins<sup>1</sup>, Elvira Maria Correia Fortunato<sup>1</sup>; <sup>1</sup>i3N/CENIMAT - Department of Materials Science, Faculty of Sciences and Technology, Universidade NOVA de Lisboa, Campus de Caparica, 2829-516 Caparica
- 17:45 Nanocomposite electrospun fibers based on polyamide 6 and cellulose whiskers** **B.P1.21**  
Kelcilene B. R. Teodoro<sup>1,2</sup>, Daniel Souza Corrêa<sup>1,2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Synthesis and Characterization of Nanocomposites based on Poly(Vinyl Alcohol)/ Poly(aniline)/Nanocellulose (PVA/PANI/NC)** **B.P1.22**  
Cristine Costa Fulchini<sup>1</sup>, Rodrigo Kenji de Oliveira<sup>1</sup>, Luis Marcelo G da Silva<sup>1</sup>, Ana Carolina Corrêa<sup>2</sup>, José Manoel Marconcini<sup>2</sup>, Everaldo Carlos Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Extraction of cellulose nanofibers from coffee residues** **B.P1.23**  
Anny Manrich<sup>1</sup>, Camila Pasquoloto<sup>2,1</sup>, Jheyce Cristina Moraes<sup>2,1</sup>, Maria Alice Martins<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Extraction of cellulose nanofibers from Pinus oocarpa residues** **B.P1.24**  
Anny Manrich<sup>1</sup>, Jheyce Cristina Moraes<sup>2</sup>, Camila Pasquoloto<sup>2</sup>, Maria Alice Martins<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Direct growth of plasmonic nanorod forests on paper substrate for low-cost flexible SERS platforms** **B.P1.25**  
Andréia Araujo<sup>1</sup>, Ana Pimentel<sup>1</sup>, Maria João Oliveira<sup>1</sup>, Manuel J. Mendes<sup>1</sup>, Ricardo Franco<sup>2</sup>, Elvira Maria Correia Fortunato<sup>1</sup>, Hugo Águas<sup>1</sup>, Rodrigo Ferrão de Paiva Martins<sup>1</sup>; <sup>1</sup>i3N/CENIMAT - Department of Materials Science, Faculty of Sciences and Technology, Universidade NOVA de Lisboa, Campus de Caparica, 2829-516 Caparica, <sup>2</sup>REQUIMTE, UCIBIO, Departamento de Química, Faculdade de Ciências e Tecnologia, Universidade NOVA de Lisboa
- 17:45 Nanocomposites of thermoplastic starch (TPS) with poly (ε-caprolactone) (PCL) and cellulose nanofibers from oil palm mesocarp fibers (OPMF)** **B.P1.26**  
Bruno Luchesi<sup>1</sup>, Vanessa Bolzan Rodrigues<sup>1</sup>, Pedro Ivo Cunha Claro<sup>1</sup>, Luiz Sanches<sup>1</sup>, ADRIANA CAMPOS<sup>2</sup>, Ana Carolina Corrêa<sup>2</sup>, Alfredo Sena<sup>3</sup>, Luiz Henrique Capparelli Mattoso<sup>2</sup>, José Manoel Marconcini<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Universidade Federal de Lavras
- 17:45 Cellulose nanocrystals from bamboo fiber using high intensity ultrasound** **B.P1.27**  
Asaph Armando Jacinto<sup>1</sup>, Márcia Aparecida da Silva Spinacé<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Giving value from waste: sugarcane bagasse nanocellulose for material applications** **B.P1.28**  
Elisa Silva Ferreira<sup>1</sup>, Camila Alves de Rezende<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP

- 17:45 Cellulose whiskers extracted from elephant grass** **B.P1.29**  
Sandra Américo do Nascimento<sup>1</sup>, Camila Alves de Rezende<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Characterization of Xanthan gum as solid electrolyte** **B.P1.30**  
César Antonio Oropesa Avellaneda<sup>1</sup>, Fabiele Collovini Tavares<sup>2</sup>, Doris Sippel Dörr<sup>3</sup>, Andressa Peglow Lüdtke<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Universidade Federal do Rio Grande do Sul, <sup>3</sup>Universidade de Santa Cruz do Sul
- 17:45 Enzymatic hydrolysis of Caroá (*Neoglaziovia variegata*) fiber for nanocellulose** **B.P1.31**  
Daniele Fernanda Chiarelli Gonçalves<sup>1</sup>, Alcides Lopes Leão<sup>1</sup>, Walter Ruggeri Waldman<sup>2</sup>, Fábio de Lima Leite<sup>2</sup>, Ariana de Souza Moraes<sup>2</sup>, Germano Andrade Siqueira<sup>3</sup>, Djanira Rodrigues Negrão<sup>1</sup>, Mario de Oliveira Neto<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Universidade Federal de São Carlos - campus Sorocaba, <sup>3</sup>Escola de Engenharia de Lorena/USP
- 17:45 Enzimatic treatment of kraft lignin with a multi enzymatic crude extract: a study of chemical structure of enzyme-modified lignin by FTIR** **B.P1.32**  
Djanira Rodrigues Negrão<sup>1</sup>, Gleison Souza<sup>2</sup>, Daniele Fernanda Chiarelli Gonçalves<sup>1</sup>, Larisa Baldo Arruda<sup>3</sup>, Tadeu Antônio Fernandes Silva Júnior<sup>4</sup>, Alcides Lopes Leao<sup>1</sup>, Regina Teresa Rosim Monteiro<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Centro de Energia Nuclear na Agricultura, <sup>3</sup>Faculdade de Ciências/Bauru, <sup>4</sup>Universidade do Sagrado Coração
- 17:45 Nanostructured polyelectrolyte multilayers formed by layer-by-layer (LbL).** **B.P1.33**  
Ricardo Klaus Kramer<sup>1</sup>, Antonio Jose Felix Carvalho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Influence of cellulose particles in the EVA for use in packaging** **B.P1.34**  
Amanda Ramos Melo<sup>1</sup>, Lívia de Rodrigues Menezes<sup>1</sup>, Emerson Oliveira da Silva<sup>1</sup>, Maria Inês Bruno Tavares<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 17:45 Silver-decorated cellulose nanocrystals: preparation and application for nanocomposite morphological investigation** **B.P1.35**  
Luiz Guilherme Lomônaco Germiniani<sup>1</sup>, Patricia Fernanda Andrade<sup>1</sup>, Lilian Goulart Schultz<sup>1</sup>, Maria do Carmo Gonçalves<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Incorporation of ZrO<sub>2</sub> nanoparticles in cellulose acetate matrices** **B.P1.36**  
Eupídio Scopel<sup>1</sup>, Patrick Conti<sup>1</sup>, Catia Pereira Barcellos<sup>1</sup>, Tamires Lacerda da Silva<sup>1</sup>, Edson Roberto Leite<sup>2</sup>, Cleocir José Dalmaschio<sup>1</sup>, Carla da Silva Meireles<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Synthesis and characterization of renewable polyurethane foams from liquefied macaúba pulp** **B.P1.37**  
Camila Santana Carriço<sup>1</sup>, Marcela Lacerda<sup>1</sup>, Brenno Santos Leite<sup>2</sup>, Vânia Duarte Pasa<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Universidade Federal de Viçosa



# **SYMPOSIUM C - Symposium on complex advanced materials: from novel superconductors to magnetic nanostructures**

## **Symposium organizers:**

Marcelo Knobel (*IFGW - Unicamp*)

Surender Kumar Sharma (*UFMA*)

Pascoal José Giglio Pagliuso (*IFGW-Unicamp*)

Marcos de Abreu Ávila (*GMQ-UFABC*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION C.OR1 (09:45 - 10:45) - Room Carvalho I*

- 09:45 When superconductivity is magnetic - the case of CeCoIn<sub>5</sub>** **C.OR1.1\***  
Andrea D Bianchi<sup>1</sup>; <sup>1</sup>Montreal University
- 10:15 Conduction electrons mediating the evolution from low-*T* AFM to high-*T* FM ordering in Gd(Co<sub>1-y</sub>Fe<sub>y</sub>)<sub>2</sub>Zn<sub>20</sub> (0 < y < 1)**  
Michael Cabrera Baez<sup>1</sup>, Andrés Naranjo Uribe<sup>2</sup>, Jorge Mario Osorio Guillén<sup>2</sup>, Carlos Rettori<sup>1,3</sup>, Marcos de Abreu Avila<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidad de Antioquia, <sup>3</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 10:30 Iron Phthalocyanine in contact with ferromagnetic thin films: some results and perspective**  
Emilia Annese<sup>1,2</sup>, Giovanni Di Santo<sup>3</sup>, Fadi Choueikani<sup>4</sup>, Edwige Otero<sup>4</sup>, Philippe Ohresser<sup>4</sup>, Julio Criginski Cezar<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Elettra Synchrotron, <sup>3</sup>ST-INSTM laboratory, Elettra Sincrotrone Trieste, s.s. 14km 163.5, 34149 Trieste, <sup>4</sup>Synchrotron SOLEIL

### *SESSION C.OR2 (11:15 - 12:00) - Room Carvalho I*

- 11:15 Economically attractive route for the synthesis of high quality magnetic nanoparticles** **C.OR2.3\***  
Liane M. Rossi<sup>1</sup>, Fernando B. Effenberger<sup>1,2</sup>, Ricardo A. Couto<sup>1</sup>, Pedro K. Kiyohara<sup>3</sup>, Sueli H. Masunaga<sup>3</sup>, Renato F. Jardim<sup>3</sup>; <sup>1</sup>Instituto de Química - USP, <sup>2</sup>Centro Universitário FEI, <sup>3</sup>Instituto de Física-USP
- 11:45 Magnetic behavior in reduced and oxidized LiNbO<sub>3</sub>:Fe particles.** **C.OR2.4**  
Rurik Farias<sup>1</sup>, Cesar Fierro-Ruiz<sup>1</sup>, José Elizalde-Galindo<sup>1</sup>, Juan Hernandez-Paz<sup>1</sup>; <sup>1</sup>Universidad Autónoma de Ciudad Juarez

### *SESSION C.OR3 (14:00 - 16:15) - Room Carvalho I*

- 14:00 Magnetic nanoparticles: biological and catalytic applications** **C.OR3.5\***  
Célia Machado Ronconi<sup>1</sup>, Evelyn Christyan da Silva Santos<sup>1</sup>, Gustavo Bezerra da Silva<sup>1</sup>, Maria Domingues Vargas<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 14:30 Magneto-Plasmonic Nanoparticles For Enhanced Hyperthermia Applications** **C.OR3.6\***  
Josep Nogues<sup>1,2</sup>, Elvira Fantechi<sup>1</sup>, Alex G. Roca<sup>1</sup>, Zhi Li<sup>1</sup>, Pau Güell<sup>1</sup>, Neus G. Bastús<sup>1</sup>, Victor Puntès<sup>1,2,3</sup>, Borja Ségulveda<sup>1</sup>; <sup>1</sup>Catalan Institute of Nanoscience and Nanotechnology, <sup>2</sup>ICREA, <sup>3</sup>Vall d'Hebron Institut de Recerca
- 15:00 Optical and Magnetic Nanomaterials: Applications in Biomedical Diagnosis and Scintillation** **C.OR3.7\***  
Latif Ullah Khan<sup>1</sup>, Hermi Felinto Brito<sup>1</sup>, Magnus Gidlund<sup>2</sup>; <sup>1</sup>Instituto de Química da Universidade de São Paulo, <sup>2</sup>Universidade de São Paulo

- 15:30 Optical and magnetic nanocomposites containing Fe<sub>3</sub>O<sub>4</sub> @ZnS coated with green emitting LaF<sub>3</sub>: Ce<sup>3+</sup>, Gd<sup>3+</sup>, Tb<sup>3+</sup> materials** **C.OR3.8**  
 Navadeep Shrivastava<sup>1</sup>, Latif Ullah Khan<sup>2</sup>, Zahid Ullah Khan<sup>2</sup>, Jose Marcelo Vargas<sup>3</sup>, Oscar Moscoso Londoño<sup>4</sup>, Hermi Felinto Brito<sup>2</sup>, Shalendra Kumar<sup>1</sup>, Marcelo Knobel<sup>4</sup>, Surender Kumar Sharma<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Centro Atomico Bariloche (CNEA), Instituto Balseiro (U. N. Cuyo) and Conicet, 8400 San Carlos de Bariloche, Río Negro, <sup>4</sup>Universidade Estadual de Campinas
- 15:45 Geometry influence of two-segments Ni nanowires on array magnetic properties** **C.OR3.9**  
 Luis Carlos Costa Arzuza<sup>1</sup>, Diego Salazar-Aravena<sup>1</sup>, Víctor Vega<sup>2</sup>, Victor Manuel Prida<sup>2</sup>, Fanny Béron<sup>1</sup>, Kleber Roberto Pirola<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>2</sup>Universidad de Oviedo
- 16:00 Influence of the size of Au seeds on the morphological evolution of Au-Fe<sub>3</sub>O<sub>4</sub> dimers to trimmers** **C.OR3.10**  
 Luelc Sousa da Costa<sup>1</sup>, Daniela Zanchet<sup>2</sup>, Oscar Moscoso Londoño<sup>3</sup>, Diego Muraca<sup>4</sup>, Marcelo Knobel<sup>4</sup>; <sup>1</sup>Instituto de Química - UNICAMP, <sup>2</sup>Institute of Chemistry-UNICAMP, <sup>3</sup>Universidade Estadual de Campinas - Institute of Physics Gleb Wataghin (IFGW), <sup>4</sup>Universidade Estadual de Campinas

## Poster presentations

### SESSION C.P1 (17:45 - 19:30)

- 17:45 Synthesis, phase composition, Mössbauer and magnetic characterizations of iron oxide nanoparticles** **C.P1.1**  
 Surender Kumar Sharma<sup>1</sup>, Sarveena<sup>2</sup>, Jose Marcelo Vargas<sup>3</sup>, Dinesh Kumar Shukla<sup>4</sup>, Mahavir Singh<sup>2</sup>, Cristiano Teles de Meneses<sup>5</sup>, Pedro Mendoza Zelis<sup>6</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>H P University Shimla, <sup>3</sup>Centro Atomico Bariloche (CNEA), Instituto Balseiro (U. N. Cuyo) and Conicet, 8400 San Carlos de Bariloche, Río Negro, <sup>4</sup>UGC DAE Consortium for Scientific Research, Indore, <sup>5</sup>Universidade Federal de Sergipe, <sup>6</sup>Instituto de Física de La Plata (IFLP- CONICET), Universidade Nacional de La Plata (UNLP), c.c. 67, 1900 La Plata
- 17:45 Commensurability and pinning strength effects in the critical currents for two dimensional superconductors with triangular and Kagomé pinning arrays.** **C.P1.2**  
Nicolas P. Vizarim<sup>1</sup>, Pablo A. Venegas<sup>2</sup>; <sup>1</sup>Programa de Pós-Graduação em Ciência e Tecnologia de Materiais, <sup>2</sup>Universidade Estadual Paulista Júlio de Mesquita Filho
- 17:45 Rapid thermal annealing induced modification in the electronic structure of Ti<sub>0.95</sub>Co<sub>0.05</sub>O<sub>2-δ</sub> thin films** **C.P1.3**  
 Ednilson da Cruz Rodrigues<sup>1</sup>, Alan Silva de Menezes<sup>1</sup>, Surender Kumar Sharma<sup>1</sup>, Shalendra Kumar<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 17:45 Surface morphology, structural and magnetic study of Ni doped CeO<sub>2</sub> nanoparticles** **C.P1.4**  
 Shalendra Kumar<sup>1</sup>, Ednilson da Cruz Rodrigues<sup>1</sup>, Alan Silva de Menezes<sup>1</sup>, Surender Kumar Sharma<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão

- 17:45 Seed mediated growth of iron oxide nanoparticles: Synthesis, phase composition and magnetic properties** **C.P1.5**  
 Thaynara Pinto de Lima<sup>1</sup>, Navadeep Shrivastava<sup>1</sup>, Alan Silva de Menezes<sup>1</sup>, Renilma de Sousa Pinheiro Fonseca<sup>1</sup>, Shalendra Kumar<sup>1</sup>, Francisco Sávio Mendes Sinfronio<sup>1</sup>, Surender Kumar Sharma<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 17:45 First principle simulations of compounds with AlB<sub>2</sub> prototype structure** **C.P1.6**  
Antônio Lucas Rigotti Manesco<sup>1</sup>, Sérgio Tuan Renosto<sup>1</sup>, Durval Rodrigues Jr.<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Effect of nano-magnetite content in a vegetable oil based polymeric matrix** **C.P1.7**  
 Gianina A. Kloster<sup>1</sup>, Diego Muraca<sup>2</sup>, Daniel Guillermo Actis<sup>3</sup>, Pedro Mendoza Zelis<sup>3</sup>, Mirta Ines Aranguren<sup>1</sup>, Marcelo Knobel<sup>4</sup>, Cintia Meiorin<sup>1</sup>, Gianina Andrea Kloster<sup>5</sup>; <sup>1</sup>Instituto de Investigaciones en Ciencia y Tecnología de Materiales, Universidad Nacional de Mar del Plata?Consejo Nacional de Investigaciones Científicas y Técnicas, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidad Nacional de la Plata, <sup>4</sup>Brazilian Nanotechnology National Laboratory, <sup>5</sup>Instituto de Investigaciones en Ciencia y Tecnología de Materiales (INTEMA), Universidad Nacional de Mar del Plata, CONICET, Mar del Plata, Argentina
- 17:45 BIOBASED NANOCOMPOSITES WITH MAGNETIC AND CHELATING PROPERTIES** **C.P1.8**  
Gianina Kloster<sup>1</sup>, Diego Muraca<sup>2</sup>, Kleber Roberto Pirota<sup>2</sup>, Norma E Marcovich<sup>1</sup>, Gianina A. Kloster<sup>1</sup>; <sup>1</sup>Instituto de Investigaciones en Ciencia y Tecnología de Materiales, Universidad Nacional de Mar del Plata?Consejo Nacional de Investigaciones Científicas y Técnicas, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Routes for synthesis and characterization of the Lu<sub>1-x</sub>Ca<sub>x</sub>Cu<sub>2</sub>Si<sub>2</sub> series** **C.P1.9**  
Matheus Radaelli<sup>1</sup>, Mario Moda Piva<sup>1</sup>, Denise Sacramento Christovam<sup>1</sup>, Ana L. A. Ribeiro<sup>1</sup>, Pascoal G. Pagliuso<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Structural and magnetic properties of CuCo films electrodeposited in the presence of trisodium citrate** **C.P1.10**  
Fernando Rogério de Paula<sup>1</sup>, André L Oestereich<sup>2</sup>, L. A. Zago<sup>3</sup>, Edna Regina Spada<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Instituto de Física de São Carlos - USP
- 17:45 Chemical substitutions effects on the structural transition of Eu<sub>3</sub>Ir<sub>4</sub>Sn<sub>13</sub> intermetallic compound** **C.P1.11**  
Ana Luisa Amadeu Ribeiro<sup>1</sup>, Pascoal G. Pagliuso<sup>1</sup>, Jean Carlo Souza<sup>1</sup>, Camilo Bruno Ramos Jesus<sup>1</sup>, Mario Moda Piva<sup>1</sup>, Matheus Radaelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Chemical substitution effects on YMn<sub>2</sub> intermetallic antiferromagnet** **C.P1.12**  
Denise Sacramento Christovam<sup>1</sup>, Jean Carlo Souza<sup>1</sup>, Camilo Bruno Ramos Jesus<sup>1</sup>, Mario Moda Piva<sup>1</sup>, Matheus Radaelli<sup>1</sup>, Pascoal G. Pagliuso<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 The influence of the Nb in the superconducting properties of BSCCO-2212 pellets treated in microwave ovens** **C.P1.13**  
Claúdio Luiz Carvalho<sup>1</sup>, Rafael Zadorosny<sup>1</sup>, Maycon Rotta<sup>2</sup>, Fernando Rogério de Paula<sup>1</sup>, Alexsander Lourenço Pessoa<sup>1</sup>; <sup>1</sup>Campus Ilha Solteira, <sup>2</sup>Instituto Federal de Mato Grosso do Sul

- 17:45 Study of the commensurability effects in type II superconducting strips with a conformal array of pinning centers** **C.P1.14**  
Daví Filenga<sup>1</sup>, Pablo A. Venegas<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Bauru
- 17:45 Sctructure and magnetic properties of chemical synthesized Co(FeHo)<sub>2</sub>O<sub>4</sub>** **C.P1.15**  
Thiago Eduardo Pereira Alves<sup>1,2</sup>, Adolfo Franco Jr.<sup>2</sup>, Hermínia Veridiana dos Santos Pessoni<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Goiás, <sup>2</sup>Universidade Federal de Goiás
- 17:45 High temperature magnetic properties of Co(FeY)<sub>2</sub>O<sub>4</sub> synthesized by combustion reaction** **C.P1.16**  
Thiago Eduardo Pereira Alves<sup>1,2</sup>, Adolfo Franco Jr.<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Goiás, <sup>2</sup>Universidade Federal de Goiás
- 17:45 Removal and Recovery of Cr(VI) from aqueous solutions by magnetic nanosorbents** **C.P1.17**  
Helena Augusta Lisboa de Oliveira<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>, Renata Aquino<sup>1</sup>, Franciscarlos Gomes da Silva<sup>1</sup>, Jerome Depeyrot<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 17:45 Growth and characterization of CeIn<sub>3</sub> heavy férmion compound in nanowire form.** **C.P1.18**  
Caique Conde Rodrigues<sup>1</sup>, Dina Tobia<sup>1</sup>, Karoline Oliveira Moura<sup>1</sup>, Camilo Bruno Ramos Jesus<sup>1</sup>, Kleber Roberto Pirota<sup>1</sup>, Pascoal G. Pagliuso<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Investigating the interplay between crystal field and topological states in rare-earth doped half-Heusler YPdBi** **C.P1.19**  
Jean Carlo Souza<sup>1</sup>, Camilo Bruno Ramos Jesus<sup>1</sup>, Guilherme Gorgen Lesseux<sup>1</sup>, Ricardo Rodrigues Urbano<sup>1</sup>, Carlos Rettori<sup>1</sup>, Pascoal G. Pagliuso<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 The role of the A ion in the Fe local structure of the AFe<sub>2</sub>As<sub>2</sub> systems (A=Sr, Eu, Ba): an EXAFS study** **C.P1.20**  
Dina Tobia<sup>1</sup>, Martín Eduardo Saleta<sup>2</sup>, Matheus Radaelli<sup>1</sup>, Mario Moda Piva<sup>1</sup>, Guilherme Gorgen Lesseux<sup>1</sup>, Camilo Bruno Ramos Jesus<sup>1</sup>, Ricardo Rodrigues Urbano<sup>1</sup>, Eduardo Granado<sup>1</sup>, Pascoal G. Pagliuso<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>2</sup>Laboratório Nacional de Luz Síncrotron
- 17:45 Microwave absorption properties of electromagnetic composites filters based on reduced graphene oxide and carbonyl iron** **C.P1.21**  
Ana Gabrielle Impere<sup>1,2</sup>, Adriana Medeiros Gama<sup>2</sup>, Emerson Sarmiento Gonçalves<sup>3,2</sup>, Maurício Ribeiro Baldan<sup>4</sup>, Adriano Luis De Paula<sup>2</sup>, Aline Fontana Batista<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto de Aeronáutica e Espaço, <sup>3</sup>Instituto Tecnológico da Aeronáutica, <sup>4</sup>Instituto Nacional de pesquisas espaciais
- 17:45 Superconductivity in Ni/Bi bilayer thin films deposited by Pulsed Laser Deposition** **C.P1.22**  
L. Y. LIU<sup>1</sup>, Y. T. Xing<sup>2</sup>, E. B. Saitovitch<sup>3</sup>, D. F. Franceschini<sup>2</sup>, I. G. Solórzano<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Universidade Federal Fluminense, <sup>3</sup>Centro Brasileiro de Pesquisas Físicas
- 17:45 Growth of ferroelectric/magnetic heterostructures** **C.P1.23**  
Leticia de Melo Costa<sup>1</sup>, Pedro Schio de Noronha Muniz<sup>2</sup>, Julio Criginski Cezar<sup>3</sup>, Thiago José de Almeida Mori<sup>2</sup>; <sup>1</sup>Technische Universität München, <sup>2</sup>Laboratório Nacional de Luz Síncrotron, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais

- 17:45 Synthesis and characterization of coaxial nanotubes of Ni/Cu/Ni produced by electrodeposition** **C.P1.24**  
JURANDI NEVES ARAÚJO JÚNIOR<sup>1</sup>, Von Ivison Mariano Paulo<sup>1</sup>, Frederico Alves Revoredo Júnior<sup>1</sup>, Mauro Ernesto Júnior<sup>1</sup>, Eduardo Padrón Hernández<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Pernambuco
- 17:45 Studying the 4f electrons in the Kondo lattice antiferromagnet Ce<sub>2</sub>RhIn<sub>8</sub>** **C.P1.25**  
Kevin Raduenz Pakuszewski<sup>1</sup>, Wendell Simões Silva<sup>2</sup>, Carlos Giles<sup>1</sup>, Fanny Rodolakis<sup>3</sup>, Juan Carlos Campuzano<sup>4</sup>, Pascoal G. Pagliuso<sup>1</sup>, Cris Adriano<sup>1</sup>;  
<sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>2</sup>Laboratório Nacional de Luz Síncrotron, <sup>3</sup>Northwestern University Argonne National Laboratory Institute of Science and Engineering, <sup>4</sup>University of Illinois Chicago
- 17:45 Microstructure design for pure and Nd<sup>3+</sup>-doped eutectics prepared by laser-heated directional solidification.** **C.P1.26**  
Marcello R. B. Andreetta<sup>1</sup>, Sergio P. Marcondes<sup>2</sup>, Erika R. M. Andreetta<sup>3</sup>;  
<sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>Universidade Paulista
- 17:45 Suppression of thermomagnetic instabilities in superconducting films by electromagnetic damping and ion irradiation** **C.P1.27**  
Danusa do Carmo<sup>1</sup>, Fabiano Colauto<sup>1,2</sup>, Antonio Marcos Helgueira de Andrade<sup>3,4</sup>, Raquel Giulian<sup>3</sup>, Ana Augusta Mendonça Oliveira<sup>5</sup>, Tom Henning Johansen<sup>6</sup>, Wilson Aires Ortiz<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Argonne National Laboratory, <sup>3</sup>Universidade Federal do Rio Grande do Sul, <sup>4</sup>Universitat Autònoma de Barcelona, <sup>5</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>6</sup>University of Oslo / Universitetet i Oslo
- 17:45 The Bloch's law for studying the magnetic properties of Zn-doped YIG nanoparticles** **C.P1.28**  
Ramón Raudel Peña Garcia<sup>1</sup>, Ariel Delgado del Toro<sup>1</sup>, Yuset Guerra Dávila<sup>1</sup>, jandrews lins gomes<sup>1</sup>, Gian Duarte<sup>2</sup>, Lidice Aparecida Gonçalves<sup>3</sup>, Eduardo Padrón Hernández<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro de Tecnologias Estratégicas do Nordeste, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de Pernambuco
- 17:45 Synthesis and characterization of CoCr<sub>2</sub>O<sub>4</sub> thin films prepared by sol-gel method** **C.P1.29**  
Ariel Delgado del Toro<sup>1</sup>, Ramón Raudel Peña Garcia<sup>1</sup>, Yuset Guerra Dávila<sup>1</sup>, jandrews lins gomes<sup>1</sup>, Lidice Aparecida Gonçalves<sup>2</sup>, Eduardo Padrón Hernández<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de Pernambuco
- 17:45 Synthesis of magnetite nanoparticles obtained by the thermal decomposition method** **C.P1.30**  
Renilma de Sousa Pinheiro Fonseca<sup>1</sup>, Francisco Sávio Mendes Sinfrônio<sup>1</sup>, Alan Silva de Menezes<sup>1</sup>, Oscar Moscoso Londoño<sup>2</sup>, Diego Muraca, Marcelo Knobel<sup>3</sup>, Surender Kumar Sharma<sup>1</sup>, Fernando Carvalho Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Instituto de Física Gleb Wataghin, Universidade Estadual de Campinas, <sup>3</sup>Universidade Estadual de Campinas
- 17:45 Magnetic properties in LnFeO<sub>3</sub> ceramics obtained by gelatin method** **C.P1.31**  
Patrícia Mendonça Pimentel<sup>1</sup>, Jairo Luís Dos Santos Dutra<sup>1</sup>, Andreia Cavalcante Lima<sup>2</sup>, José Humberto de Araújo<sup>2</sup>, Osmar R. Bagnato<sup>3</sup>, Jefferson Bettini<sup>3</sup>;  
<sup>1</sup>Universidade Federal Rural do Semi, <sup>2</sup>Universidade Federal do Rio Grande do Norte, <sup>3</sup>Laboratório Nacional de Luz Síncrotron

- 17:45 Preparation of cobalt nanoparticles by mechano-chemical activation** **C.P1.32**  
Leandro M. Socolovsky<sup>1</sup>, Donaji Velasco Arias<sup>2</sup>, Edilso Reguera<sup>2</sup>; <sup>1</sup>Consejo Nacional de Investigaciones Científicas y Técnicas, <sup>2</sup>Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada - Instituto Politécnico Nacional
- 17:45 Size and shape effect on magnetic properties of Iron oxide nanoparticles** **C.P1.33**  
Juan Manuel Orozco<sup>1</sup>, Diego Muraca<sup>2</sup>, Oscar Moscoso Londoño<sup>2</sup>, Kleber Roberto Pirota<sup>2</sup>, Marcelo Knobel<sup>2,3</sup>; <sup>1</sup>Universidad Nacional de la Plata, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Brazilian Nanotechnology National Laboratory
- 17:45 Shape control, magnetic and structural properties of hybrid Au@Fe<sub>3</sub>O<sub>4</sub> and Ag@Fe<sub>3</sub>O<sub>4</sub> nanostructures.** **C.P1.34**  
Oscar Moscoso Londoño<sup>1</sup>, Diego Muraca<sup>1</sup>, Pablo Tancredi<sup>2</sup>, Leandro M. Socolovsky<sup>3</sup>, Marcelo Knobel<sup>1,4</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidad de Buenos Aires, <sup>3</sup>Consejo Nacional de Investigaciones Científicas y Técnicas, <sup>4</sup>Brazilian Nanotechnology National Laboratory
- 17:45 Magnetic properties of copper ferrites substituted by nickel synthesized by microwave-assisted hydrothermal method** **C.P1.35**  
Jéssica Oliveira Rodrigues<sup>1</sup>, Renilma de Sousa Pinheiro Fonseca<sup>1</sup>, Navadeep Shrivastava<sup>1</sup>, Alan Silva de Menezes<sup>1</sup>, Francisco Sávio Mendes Sinfrônio<sup>1</sup>, Surender Kumar Sharma<sup>1</sup>, Fanny Béron<sup>2</sup>, Fernando Carvalho Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Structural and dielectric properties of samarium-substituted zinc spinel** **C.P1.36**  
Mikaelly Daiany Ferreira Borges<sup>1</sup>, Renilma de Sousa Pinheiro Fonseca<sup>1</sup>, Manoel Carvalho Castro Junior<sup>1</sup>, Alan Silva de Menezes<sup>1</sup>, Francisco Sávio Mendes Sinfrônio<sup>1</sup>, Fernando Carvalho Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 17:45 Controlling the magnitude of dipolar interactions with a silica Shell of tunable thickness on iron oxides nanoparticles** **C.P1.37**  
Patricia Rivas<sup>1</sup>, Pablo Tancredi<sup>1</sup>, Oscar Moscoso Londoño<sup>2</sup>, Edilso Reguera<sup>3</sup>, Marcelo Knobel<sup>4,2</sup>, Leandro M. Socolovsky<sup>1</sup>; <sup>1</sup>Consejo Nacional de Investigaciones Científicas y Técnicas, <sup>2</sup>Instituto de Física "Gleb Wataghin", <sup>3</sup>Instituto Politécnico Nacional, <sup>4</sup>Brazilian Nanotechnology National Laboratory
- 17:45 Structural, electrical and magnetic properties of mixed ferrites M<sub>0.5</sub>Zn<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub> (M=Co, Ni and Mg) prepared by combustion reaction** **C.P1.38**  
Pedro Victor Valadares Romanholo<sup>1</sup>, Thiago Eduardo Pereira Alves<sup>1</sup>, Adolfo Franco Jr.<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 17:45 Synthesis and characterization of Mn-Zn doped magnetite nanoparticles by co-precipitation method.** **C.P1.39**  
Laura Bissoli de Mello<sup>1</sup>, Fernando Aparecido Sigoli<sup>1</sup>, Italo Odone Mazali<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP
- 17:45 MAGNETIC BEHAVIOR OF Mn<sub>x</sub>Cu<sub>1-x</sub>Fe<sub>2</sub>O<sub>4</sub> CERAMIC** **C.P1.40**  
Valesca Donizeti Oliveira<sup>1</sup>, Manoel Ribeiro da Silva<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Adhimar Flávio Oliveira<sup>1</sup>, Roberto Carlos Corrêa<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Growth and Characterization of Au-Al-Yb and Au-Ge-Yb Quasicrystals and Approximants** **C.P1.41**  
Jean de Souza Matias<sup>1</sup>, Raquel A. Ribeiro<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Abc

- 17:45 Development of a Nano-scale Probe with Optical and Magnetic Properties** **C.P1.42**  
Zahid Ullah Khan<sup>1</sup>, Latif Ullah Khan<sup>2</sup>, Rafael C Trentin<sup>1</sup>, Hermi Felinto Brito<sup>2</sup>, Magnus Gidlund<sup>1</sup>; <sup>1</sup>Instituto de Ciências Biomédicas-USP, <sup>2</sup>Instituto de Química - USP
- 17:45 Determination of manganese interdiffusion parameters in CoFe/IrMn bilayers by X-ray reflectometry** **C.P1.43**  
Pablo Forlam Ribeiro Batista<sup>1</sup>, Leandro Hostalácio Freire Andrade<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2,1</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 17:45 Depth-profiling XPS study of interlayer diffusion in exchange-biased CoFe/IrMn thin films** **C.P1.44**  
Pablo Forlam Ribeiro Batista<sup>1</sup>, Alexandre Alberto Chaves Cotta<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2,1</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 17:45 Synthesis of cobalt hexacyanoferrate nanoparticles under ultrasound irradiation** **C.P1.45**  
Janiny Nunes Lacerda<sup>1</sup>, Yutao Xing<sup>1</sup>, Eduardo Ariel Ponzio<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 17:45 Processing and Characterization of MgB<sub>2</sub> multifilamentary superconducting wires** **C.P1.46**  
Humberto Rigamonti Júnior<sup>1</sup>, Eleazar José Ribeiro<sup>1</sup>, Lucas Barboza Sarno Da Silva<sup>1</sup>, Durval Rodrigues Jr.<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Temperature dependence of the magnetization saturation in cobalt ferrite nanoparticles** **C.P1.47**  
Erlaine Barreto Peixoto<sup>1</sup>, José Gerivaldo Duque<sup>2</sup>, Maria Helena Carvalho da Costa<sup>3</sup>, Cristiano Teles de Meneses<sup>1</sup>, Victor Hugo Vitorino Sarmiento<sup>1</sup>; <sup>1</sup>Universidade Federal de Sergipe, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 The effect of Ni-doping on the magnetic order in the cubic GdIn(Cu<sub>1-x</sub>Ni<sub>x</sub>)<sub>4</sub> (0.00 < x < 1.00) compounds** **C.P1.48**  
Edielma Costa Mendonça<sup>1</sup>, José Gerivaldo Duque<sup>2</sup>, Leonardo Souza Silva<sup>1</sup>, Samuel Gomes Mercena<sup>1</sup>, Erlaine Barreto Peixoto<sup>1</sup>, Cristiano Teles de Meneses<sup>1</sup>, Camilo Bruno Ramos Jesus<sup>2</sup>, Pascoal G. Pagliuso<sup>2</sup>; <sup>1</sup>Universidade Federal de Sergipe, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 17:45 Synthesis of a core-shell CoFe<sub>2</sub>O<sub>4</sub>@Au nanocomposite and its potential application as electrochemical sensor** **C.P1.49**  
Samuel Saire Saire<sup>1</sup>, Hugo Alarcón Caveró<sup>1</sup>; <sup>1</sup>Universidad Nacional de Ingeniería
- 17:45 Single crystal growth and characterization of the intermetallic cage system YCo<sub>2-x</sub>Mn<sub>x</sub>Zn<sub>20</sub>** **C.P1.50**  
Michael Cabrera Baez<sup>1</sup>, Bruno F Finatti<sup>1</sup>, Carlos Rettori<sup>1,2</sup>, Marcos de Abreu Avila<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 17:45 Study of the influence of insulator film thickness on YBCO/PBCO/LCMO type superlattices** **C.P1.51**  
Marcel Miyamura Bonilha<sup>1</sup>, Anne Hitomi Yonamine<sup>1</sup>, Sergey A Fedoseev<sup>2</sup>, Alexey V Pan<sup>2</sup>, Dayse Iara dos Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>University of Wollongong

- 17:45 Composition dependence of NiCu alloy nanowires on the magnetic properties for magnetocaloric effect applications** **C.P1.52**  
Marcelo Pederiva<sup>1</sup>, Karoline Oliveira Moura<sup>1</sup>, Luis Carlos Costa Arzuza<sup>1</sup>, Román López-Ruiz<sup>1</sup>, Víctor Vega<sup>2</sup>, Victor Manuel Prida<sup>2</sup>, Kleber Roberto Pirota<sup>1</sup>, Fanny Béron<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>2</sup>Universidad de Oviedo
- 17:45 Magnetic anisotropy induced by dispersion of Ni nanoparticles in biaxially stressed carbon films** **C.P1.53**  
Alexsandro dos Santos Evangelista da Cruz<sup>1</sup>, João Paulo Sinnecker<sup>2</sup>, Fernando Fabris<sup>3</sup>, Yutao Xing<sup>3</sup>, D. F. Franceschini<sup>3</sup>, Wallace Castro Nunes<sup>3</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin, Universidade Estadual de Campinas, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas, <sup>3</sup>Universidade Federal Fluminense
- 17:45  $\beta$ -cyclodextrin-decorated magnetic nanoparticles as a chemohyperthermia therapeutic agent** **C.P1.54**  
Evelyn Christyan da Silva Santos<sup>1</sup>, Amanda Watanabe Paraguassú<sup>1</sup>, Maria Domingues Vargas<sup>1</sup>, Flavio Garcia<sup>2</sup>, Célia Machado Ronconi<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas
- 17:45 Synthesis and characterization of nanocompounds based on rare earth orthoferrites** **C.P1.55**  
André Felipe Oliveira<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>, Edésia Martins Barros de Sousa<sup>1</sup>, José Domingos Ardisson<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 17:45 Structural characterization and magnetic of nanostructures SnO<sub>2</sub>/CeO<sub>2</sub> produced by the Pechini route** **C.P1.56**  
Maria Helena Carvalho da Costa<sup>1</sup>, Ernesto Chaves Pereira<sup>1</sup>, Adilson J A de Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Studies of the Incorporation of the Co and Mn into the ZnO Wurtzite Matrix: The Development of true Dilute Magnetic Oxides** **C.P1.57**  
Felipe dos Santos Vieira<sup>1</sup>, Viviane Maciel Almeida<sup>2</sup>, Rafael Tomaz da Silva<sup>1</sup>, Person Pereira Neves<sup>1</sup>, Alexandre Mesquita<sup>3</sup>, Xavier Gratens<sup>4</sup>, Valmir Antonio Chitta<sup>4</sup>, Hugo Bonette de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Federal de Ouro Preto, <sup>3</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>4</sup>Instituto de Física-USP
- 17:45 Modulating size and magnetic properties of magnetite nanoparticles** **C.P1.58**  
Caio José Perecin<sup>1,2</sup>, Sergio Akinobu Yoshioka<sup>2</sup>, Valmir Antonio Chitta<sup>3</sup>, Xavier Gratens<sup>3</sup>, Patrícia Léo<sup>1</sup>, Adriano Marim Oliveira<sup>1</sup>, Natália Neto Pereira Cerize<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Tecnológicas do Estado de São Paulo, <sup>2</sup>Programa de Pós-graduação Interunidades Bioengenharia, <sup>3</sup>Instituto de Física-USP
- 17:45 White emitting LaF<sub>3</sub>:Ce<sup>3+</sup>,Gd<sup>3+</sup>,Eu<sup>2/3+</sup> nanoscintillators for Gamma Rays and Neutron Detection** **C.P1.59**  
Navadeep Shrivastava<sup>1</sup>, Latif Ullah Khan<sup>2</sup>, Jose Marcelo Vargas<sup>3</sup>, Hermi Felinto Brito<sup>2</sup>, Maria Cláudia França da Cunha Felinto<sup>2</sup>, Surender Kumar Sharma<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Centro Atômico Bariloche

- 17:45 Analysis of the crystal electric field ground state of intermetallic TbRhIn<sub>5</sub> by using soft X-ray absorption spectroscopy** **C.P1.60**  
Robert Prudêncio Amaral<sup>1</sup>, Daniel Julio Garcia<sup>2</sup>, Diana Betancourth<sup>3</sup>, Pascoal G. Pagliuso<sup>4</sup>, José Gerivaldo Duque<sup>4</sup>, Raimundo Lora Serrano<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Centro Atomico Bariloche (CNEA) and CONICET, <sup>3</sup>Centro Atomico Bariloche (CNEA), Instituto Balseiro (U. N. Cuyo) and Conicet, 8400 San Carlos de Bariloche, Río Negro, <sup>4</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 17:45 Local structure and d-electron occupancy in the disordered S = 3/2 spin system BaTi<sub>1/2</sub>Mn<sub>1/2</sub>O<sub>3</sub>.** **C.P1.61**  
Raimundo Lora Serrano<sup>1</sup>, Fernando Assis Garcia<sup>2</sup>, Ulisses Ferreira Kaneko<sup>3</sup>, Eduardo Granado<sup>4</sup>, Jorg Sichelschmidt<sup>5</sup>, José Gerivaldo Duque<sup>6</sup>, Robert Prudêncio Amaral<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Instituto de Física-USP, <sup>3</sup>Instituto de Física "Gleb Wataghin" - Universidade Estadual de Campinas, <sup>4</sup>Universidade Estadual de Campinas, <sup>5</sup>Max Planck Institute for Chemical Physics of Solids, <sup>6</sup>Universidade Federal de Sergipe
- 17:45 Study of the incorporation of Co into zinc oxide matrix via mechanochemical grinding** **C.P1.62**  
Gabriel Machado Machado<sup>1</sup>, Gilson José Rodrigues<sup>1</sup>, Hugo Bonette de Carvalho<sup>1</sup>, Person Pereira Neves<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 17:45 Preparation and characterization of nanoferrites by solvothermal method** **C.P1.63**  
Tamires Lacerda da Silva<sup>1</sup>, Patrick Conti<sup>1</sup>, Eupidio Scopel<sup>1</sup>, Carla da Silva Meireles<sup>1</sup>, Jose Rafel Capua Proveti<sup>1</sup>, Cleocir José Dalmaschio<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo
- 17:45 Bi and Bi<sub>2+x</sub>Te<sub>3-x</sub> Nanowires Modified by Ion Implantation** **C.P1.64**  
Sven Mueller<sup>1</sup>, Danieli Born Guerra<sup>1</sup>, Monique Camille Camargo<sup>1</sup>, P. F.P. Fichtner<sup>2</sup>, Ricardo Meurer Papaléo<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 17:45 SYNTHESIS AND PHYSICAL PROPERTIES OF Bi<sub>1-x</sub>Pr<sub>x</sub>FeO<sub>3</sub>** **C.P1.65**  
Marcio Sena Curvello<sup>1</sup>, Alessandra Zenatti<sup>1</sup>, Marcia Tsuyama Escote<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Growth and characterization of multiferroic nanostructures** **C.P1.66**  
Thiago José de Almeida Mori<sup>1</sup>, Felipe Ferraz Morgado de Oliveira<sup>2,1</sup>, Caroline Lydie Moulis<sup>1</sup>, Leticia de Melo Costa<sup>1</sup>, Pedro Schio de Noronha Muniz<sup>1</sup>, Julio Criginski Cezar<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Magnetism of electron beam lithographed T-shaped magnetic nanostructures** **C.P1.67**  
Elis Sinnecker<sup>1</sup>, João Paulo Sinnecker<sup>2</sup>, Roberto Escobar<sup>3</sup>, Dora Altbir<sup>3</sup>, José D'Albuquerque e Castro<sup>1</sup>; <sup>1</sup>Instituto de Física, UFRJ, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas, <sup>3</sup>Universidad de Santiago de Chile
- 17:45 Possibilities for thin film growth at the PGM beamline of Brazilian Synchrotron Light Laboratory** **C.P1.68**  
Pedro Schio de Noronha Muniz<sup>1</sup>, Thiago José de Almeida Mori<sup>1</sup>, Marco Guarise<sup>1</sup>, Julio Criginski Cezar<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 17:45 Influence of heat treatment on the structure of SmBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-d</sub> superconducting ceramic** **C.P1.69**  
Rodolpho Santos Lepich<sup>1</sup>, Kelly Cordeiro Miranda<sup>1</sup>, Janaína Simões Lima<sup>1</sup>, Carlos Augusto Cardoso Passos<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo

- 17:45 Applied pressure and chemical substitution effects on BaFe<sub>2</sub>As<sub>2</sub> single crystals** **C.P1.72**  
Mario Moda Piva<sup>1</sup>, Matheus Radaelli<sup>1</sup>, Camilo Bruno Ramos de Jesus<sup>1</sup>, Dina Tobia<sup>1</sup>, Guilherme George Lesseux<sup>1</sup>, Priscila Ferrari Silveira Rosa<sup>2</sup>, Cris Adriano<sup>1</sup>, Ricardo Rodrigues Urbano<sup>1</sup>, Pascoal G. Pagliuso<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>2</sup>Los Alamos National Laboratory
- 17:45 Crystal lattice vibrations and their coupling with magnetic correlations in CuSb<sub>2</sub>O<sub>6</sub>** **C.P1.77**  
Damaris Tartarotti Maimone<sup>1</sup>, Eduardo Granado<sup>1</sup>, John Jacob Neumeier<sup>2</sup>, Aaron Christian<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Montana State University
- 17:45 Exchange interactions in quasi-two-dimensional Sr<sub>2</sub>CuWO<sub>6</sub> from inelastic neutron scattering** **C.P1.74**  
Sami Vasala<sup>1</sup>; <sup>1</sup>Centro Brasileiro de Pesquisas Físicas
- 17:45 Investigation of the band structure and Fermi surface of EuFe<sub>2</sub>As<sub>2</sub> studied by polarization dependent ARPES** **C.P1.73**  
Cris Adriano<sup>1</sup>, Kevin Raduenz Pakuszewski<sup>1</sup>, Mario Moda Piva<sup>1</sup>, Carlos Giles<sup>2</sup>, Wendell Simões Silva<sup>3</sup>, Pascoal G. Pagliuso<sup>1</sup>, Juan Carlos Campuzano<sup>4</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin", <sup>2</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>3</sup>Laboratório Nacional de Luz Síncrotron, <sup>4</sup>University of Illinois Chicago

## Tuesday, September 27<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION C.OR4 (09:45 - 10:45) - Room Carvalho I*

- 09:45 Electronic transport properties of single nickel nanowires**  
 Marcos Vinicius Puydinger dos Santos<sup>1,2</sup>, Murilo Velo<sup>1</sup>, Renan Daniel Domingos<sup>1</sup>, José Alexandre Diniz<sup>2</sup>, Fanny Béron<sup>1</sup>, Kleber Roberto Pirola<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>2</sup>Faculdade de Engenharia Elétrica e Computação (UNICAMP)
- 10:00 Dinamic nematic effects in the oxypnictide compound LaFeAsO observed by Raman scattering**  
Ulisses Ferreira Kaneko<sup>1</sup>, Paulo Freitas Gomes<sup>2</sup>, Ali Francisco Garcia Flores<sup>1</sup>, David Vaknin<sup>3</sup>, Gaston Eduardo Barberis<sup>1</sup>, Eduardo Granado<sup>1</sup>; <sup>1</sup>UNICAMP, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>Iowa State University
- 10:15 Noncollinear magnetism of Mn nanochains on Fe(110): an ab initio investigation** **C.OR4.12**  
 Ricardo Noboru Igarashi<sup>1</sup>, Ivan de Paula Miranda<sup>2</sup>, Luiz Tadeu Fernandes Eleno<sup>2</sup>, Angela Burlamaqui Klautau<sup>3</sup>, Helena Maria Petrilli<sup>2</sup>; <sup>1</sup>Universidade Anhembi Morumbi, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Federal do Pará

- 10:30 Magnetic and Transport Properties of Co/Pd Multilayers Deposited in Nanodomains** **C.OR4.13**  
Juliano Casagrande Denardin<sup>1</sup>, Sebastian Michea<sup>1</sup>, Simon Oyarzun<sup>1</sup>, Fanny Béron<sup>2</sup>, Kleber Roberto Pirota<sup>2</sup>; <sup>1</sup>Universidad de Santiago de Chile, <sup>2</sup>Instituto de Física "Gleb Wataghin"-UNICAMP

**SESSION C.OR5 (11:15 - 12:00) - Room Carvalho I**

- 11:15 Depth-resolved investigation of layered magnetic nanostructures via <sup>57</sup>Fe Mössbauer spectroscopy** **C.OR5.14\***  
Waldemar Augusto de Almeida Macedo<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 11:45 Electric transport characterization of post-growth annealing process of Co-C grown by focused-electron-beam-induced deposition** **C.OR5.15**  
 Marcos Vinicius Puydinger dos Santos<sup>1,2,3</sup>, Murilo Velo<sup>1</sup>, Renan Daniel Domingos<sup>1</sup>, Yucheng Zhang<sup>2</sup>, Xavier Maeder<sup>2</sup>, Carlos Guerra-Nunez<sup>2</sup>, Fanny Béron<sup>1</sup>, Kleber Roberto Pirota<sup>1</sup>, Stanislav Moshkalev<sup>4</sup>, José Alexandre Diniz<sup>4</sup>, Ivo Utke<sup>2</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>2</sup>Swiss Federal Laboratories for Materials Science and Technology, <sup>3</sup>Faculdade de Engenharia Elétrica e Computação (UNICAMP), <sup>4</sup>Centro de Componentes Semicondutores-UNICAMP

**SESSION C.OR6 (14:00 - 16:15) - Room Carvalho I**

- 14:00 Fundamental Aspects of Carbon-Based Electronics** **C.OR6.16\***  
Yakov Kopelevich<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP
- 14:30 Three dots system as a quantum gate** **C.OR6.17**  
Enrique Victoriano Anda<sup>1</sup>, Guillermo Gomez Silva<sup>1</sup>, Laercio Costa Ribeiro<sup>2</sup>, Pedro Orellana Dinamarca<sup>3</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>3</sup>Universidad Federico Santa María
- 14:45 Superconductor/ferromagnetic hybrids: imprinting superconducting vortex footsteps in a magnetic layer** **C.OR6.18**  
Wilson Aires Ortiz<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 15:00 Multiband superconductivity in the Mo-Re alloys** **C.OR6.19**  
Shyam Sundar<sup>1,2</sup>, L S Sharath Chandra<sup>1</sup>, M K Chattopadhyay<sup>1</sup>, S B Roy<sup>1</sup>; <sup>1</sup>Mag and Super Mat Sec, RRCAT, <sup>2</sup>Instituto de Física, UFRJ
- 15:15 Growth and characterization of  $\beta$ -Ga superconducting nanowires** **C.OR6.20**  
 Karoline Oliveira Moura<sup>1</sup>, Camilo Bruno Ramos Jesus<sup>1</sup>, Fanny Béron<sup>1</sup>, Oscar Ferreira de Lima<sup>1</sup>, Pascoal José Giglio Pagliuso<sup>1</sup>, Kleber Roberto Pirota<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP
- 15:30 Deflection of flux avalanches in superconducting films by a metallic layer** **C.OR6.21**  
Maycon Motta<sup>1</sup>, Jerémy Brisbois<sup>2</sup>, Fabiano Colauto<sup>1</sup>, Wilson Aires Ortiz<sup>1</sup>, Nguyen Ngoc Duy<sup>2</sup>, Obaid-Allah Adami<sup>2</sup>, Alejandro V. Silhanek<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Université de Liège
- 15:45 Structural, magnetic and transport characterization of singlecrystalline RNiSi<sub>3</sub> (R=Y, Gd-Tm)** **C.OR6.22**  
 Fabiana Rodrigues Arantes<sup>1</sup>, Deisy Aristizábal-Giraldo<sup>1</sup>, Raquel A. Ribeiro<sup>1</sup>, Marcos Abreu Avila<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

**16:00 Magnetism and Magnetocaloric effect in equiatomic RNi (R = Gd, Tb and Ho) compounds: Effect of rapid quenching C.OR6.23**

R. Rajivgandhi<sup>1</sup>, R. Nirmala<sup>1</sup>, J. Arout Chelvane<sup>2</sup>, A. K. Nigam<sup>3</sup>, S. Quezado<sup>4</sup>, Satish Kumar Malik<sup>5</sup>; <sup>1</sup>Indian Institute of Technology Madras, <sup>2</sup>Defence Metallurgical Research Laboratory, <sup>3</sup>Tata Institute of Fundamental Research, <sup>4</sup>Universidade Federal do Rio Grande do Norte, <sup>5</sup>Federal University of Rio Grande do Norte

# **SYMPOSIUM D - Materials science at high- pressure conditions**

## **Symposium organizers:**

Altair Sória Pereira (*UFRGS*)  
Elisa Maria Baggio-Saitovitch (*CBPF*)  
Narcizo M. Souza-Neto (*LNLS*)  
Paulo de Tarso Cavalcante Freire (*UFC*)



# Wednesday, September 28<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION D.OR1 (09:45 - 10:45) - Room Ipê*

- 09:45** **Adventures with 5d orbitals at high pressure** **D.OR1.1\***  
Daniel Haskel<sup>1</sup>; <sup>1</sup>Advanced Photon Source, Argonne National Laboratory
- 10:15** **Baric evolution of Quantum linear magnetoresistivity in CaAl<sub>2</sub>Si<sub>2</sub>** **D.OR1.3**  
Mohammed ELMASSALAMI<sup>1</sup>, Deyse Costa<sup>1</sup>, Rodrigo B Capaz<sup>1</sup>, Richart Falconi Calderon<sup>2</sup>, Bachir Ouladdiaf<sup>3</sup>; <sup>1</sup>Instituto de Fisica, UFRJ, <sup>2</sup>Universidad Juárez Autónoma de Tabasco, <sup>3</sup>Institut Laue-Langevin

### *SESSION D.OR2 (11:15 - 12:00) - Room Ipê*

- 11:15** **High Pressure Synthesis of Zeolite/Polymer Nanocomposites** **D.OR2.4\***  
Julien Haines<sup>1</sup>, Jean-Marc Thibaud<sup>1</sup>, Jérôme Rouquette<sup>1</sup>, Olivier Cambon<sup>1</sup>, Francesco Di Renzo<sup>1</sup>, Arie van der Lee<sup>2</sup>, Demetrio Scelta<sup>3</sup>, Matteo Ceppatelli<sup>3</sup>, Kamil Dziubek<sup>3</sup>, Federico Gorelli<sup>3</sup>, Roberto Bini<sup>3</sup>, Mario Santoro<sup>3</sup>; <sup>1</sup>Institut Charles Gerhardt Montpellier, <sup>2</sup>Institut Européen des Membranes, <sup>3</sup>European Laboratory for Non Linear Spectroscopy
- 11:45** **Structural and Vibrational Properties of Bi<sub>2</sub>O<sub>2</sub>Se at High Pressures: an Experimental and Theoretical Study** **D.OR2.5**  
André Luis de Jesus Pereira<sup>1</sup>, David Santamaría-Pérez<sup>2</sup>, Oscar Gomis<sup>3</sup>, Juan Angel Sans<sup>3</sup>, Lourdes Gracia<sup>4</sup>, Francisco Javier Manjón<sup>3</sup>, Armando Beltrán<sup>4</sup>, Alfonso Muñoz<sup>5</sup>, Cesta Drasar<sup>6</sup>, Pavlina Ruleova<sup>6</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>2</sup>Universitat de València, <sup>3</sup>Universidad Politécnica de Valencia, <sup>4</sup>Universitat Jaume I, <sup>5</sup>Universidad de La Laguna, <sup>6</sup>University of Pardubice

### *SESSION D.OR3 (14:00 - 16:15) - Room Ipê*

- 14:00** **EMA beamline at SIRIUS: Extreme condition x-ray Methods of Analysis** **D.OR3.6\***  
Narcizo Souza Neto<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais

## Poster presentations

**SESSION D.P1 (17:45 - 19:30)**

- 17:45 Temperature- and pressure-induced phase transitions in niccolite-type formate framework of  $[\text{H}_3\text{N}(\text{CH}_3)_4\text{NH}_3][\text{Mn}_2(\text{HCOO})_6]$**  **D.P1.1**  
Mirosław Maczka<sup>1</sup>, Anna Gagor<sup>1</sup>, Waldeci Paraguassu<sup>2</sup>, Nathalia Marinho Costa<sup>2</sup>, Adam Sieradzki<sup>3</sup>, Adam Pikul<sup>1</sup>, Jerzy Hanuza<sup>1</sup>; <sup>1</sup>Institute of Low Temperature and Structure Research, Polish Academy of Sciences, <sup>2</sup>Universidade Federal do Pará, <sup>3</sup>Wroclaw University of Technology
- 17:45 The experimental and theoretical Raman spectra study of L-Histidinium bromide monohydrate single crystals** **D.P1.2**  
Geanso Miranda de Moura<sup>1,2</sup>, Jhonatam de Oliveira Carvalho<sup>3,2</sup>, Tarciso Silva de Andrade-Filho<sup>4</sup>, Adenilson Oliveira dos Santos<sup>2</sup>, Pedro de Freitas Façanha Filho<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará, <sup>2</sup>Universidade Federal do Maranhão, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>4</sup>UNIVERSIDADE FEDERAL DO SUL E SUDESTE DO PARÁ
- 17:45 Raman spectroscopy of monohydrated L-asparagine up to 30 GPa** **D.P1.3**  
José Alves de Lima Jr.<sup>1</sup>, José Arimatea Silva<sup>1</sup>, Paulo Tarso Freire<sup>1</sup>, Josue Mendes Filho<sup>1</sup>, Francisco Erivan Melo<sup>1</sup>, Antonio Jeferson de Deus Moreno<sup>2</sup>, Alain Polian<sup>3</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Federal do Maranhão, <sup>3</sup>Université Paris 6 Pierre and Marie Curie
- 17:45 Effect of nitrogen and oxygen in the formation of graphitic structures from pyrolysis of amino acids at high pressures** **D.P1.4**  
María Alexandra Puerto Medina<sup>1</sup>, Andréia Fernandes da Silva<sup>1</sup>, Jackeline Barbosa Brito<sup>1</sup>, Tania Maria Haas Costa<sup>1</sup>, João Alziro Herz da Jornada<sup>1</sup>, Naira Maria Balzaretta<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Effect of high pressure and high temperature on graphite oxide** **D.P1.5**  
Andréia Fernandes da Silva<sup>1</sup>, María Alexandra Puerto Medina<sup>1</sup>, Jackeline Barbosa Brito<sup>1</sup>, Tania Maria Haas Costa<sup>1</sup>, João Alziro Herz da Jornada<sup>1</sup>, Naira Maria Balzaretta<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Low-Frequency Raman study of glass transition in ionic liquids at high pressure and low temperature.** **D.P1.6**  
Thamires Andrade Lima<sup>1</sup>, Vitor Hugo Paschoal<sup>1</sup>, Luiz Felipe Oliveira Faria<sup>1</sup>, Mauro Carlos Costa Ribeiro<sup>1</sup>; <sup>1</sup>Instituto de Química da Universidade de São Paulo
- 17:45 High-pressure effect in spectroscopic and structural properties of  $\text{Sm}^{3+}$  doped  $\text{GeO}_2\text{-PbO}$  glass** **D.P1.7**  
Pablo Roberto Rovani<sup>1</sup>, Alvaro Herrera<sup>1</sup>, Gustavo de Medeiros Azevedo<sup>1</sup>, Naira Maria Balzaretta<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Modification of the photoluminescence properties of  $\alpha\text{-Bi}_2\text{O}_3$  needles by a pressure-assisted heat treatment** **D.P1.8**  
Evaldo Toniolo Kubaski<sup>1</sup>, Samara Schmidt<sup>2</sup>, Thiago Sequinel<sup>3</sup>, Flavia Emilena Stelle<sup>1</sup>, Vinícius D.N. Bezzon<sup>2</sup>, Sergio Mazurek Tebcherani<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Instituto de Química de Araraquara/UNESP, <sup>3</sup>Fundação Universidade Federal da Grande Dourados
- 17:45 Unexpeted TL behaviour of Green Quartz at very low doses and at very low photon energy irradiation** **D.P1.9**  
Edy Elar Cuevas Arizaca<sup>1</sup>, Shiguelo Watanabe<sup>2</sup>, Edemar Zenardo<sup>3</sup>, Massahiro Miyamoto<sup>3</sup>, Nilo Cano; <sup>1</sup>Instituto de Física-USP, <sup>2</sup>Instituto de Física da USP, <sup>3</sup>Instituto do coração USP

- 17:45 Phase-selective crystallization of amorphous titania into anatase: the effect of hydrothermal conditions** **D.P1.10**  
Sajjad Ullah<sup>1,2</sup>, Elias Paiva Ferreira Neto<sup>2</sup>, Sidney José Lima Ribeiro<sup>1</sup>, Ubirajara Pereira Rodrigues Filho<sup>2</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Instituto de Química de São Carlos
- 17:45 Modification of the photocatalytic behavior of TiO<sub>2</sub> particles by pressure treatment** **D.P1.11**  
Evaldo Toniolo Kubaski<sup>1</sup>, Sabrina Marinho Kaplum<sup>1</sup>, Thiago Sequinel<sup>2</sup>, Samara Schmidt<sup>3</sup>, Flavia Emilena Stelle<sup>1</sup>, Vinícius D.N. Bezzon<sup>4</sup>, Sergio Mazurek Tebcherani<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Fundação Universidade Federal da Grande Dourados, <sup>3</sup>Universidade Tecnológica Federal do Paraná, <sup>4</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Synthesis of silica nanoparticles decorated with TiO<sub>2</sub> for photocatalytic degradation of the herbicide Metilviologen** **D.P1.12**  
Hakinny Loyra de Medeiros Vieira<sup>1</sup>, Tatiane Moraes Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 17:45 Synthesis of isopropyl octanoate catalyzed by metal carboxylate salts of zinc and alkali metals.** **D.P1.13**  
Swami Maruyama<sup>1</sup>, Fernando Wypych<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Xerogels and aerogels based on resorcinol and formaldehyde with added surfactant** **D.P1.14**  
Fernanda Galhardo<sup>1</sup>, Luiz Claudio Pardini<sup>2</sup>, Liana Alvares Rodrigues<sup>3</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto Tecnológico da Aeronáutica, São José dos Campos, <sup>3</sup>Escola de Engenharia de Lorena/USP
- 17:45 Polymeric Recycling: preparation and characterization of poly(ethyl terephthalate) (PET) from DET as recovered monomer** **D.P1.15**  
Paulo Souza Souza<sup>1</sup>, Cátia Santos Nunes<sup>1</sup>, Adonilson Reis Freitas<sup>1</sup>, Edvani Curti Muniz<sup>1,2,3</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Paranaense, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Thermal and mechanical characterization of UHMW-PE/LLDPE blend** **D.P1.16**  
Caroline Martins dos Santos<sup>1</sup>, Bruna Cristina da Silva<sup>1</sup>, Fabio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Mechanical Analysis sandwich having a core of PVC foam, PP and Plywood** **D.P1.17**  
Vanessa Cristina da Costa Oliveira<sup>1</sup>, Carmen Gilda Barroso Tavares Dias<sup>1</sup>, Eduardo de Jesus Silva dos Santos<sup>1</sup>, Selton de Freitas Leão<sup>1</sup>, Vanessa Maria Yae do Rosário Taketa<sup>2</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Copper/Iron based brake friction for military aircraft application** **D.P1.18**  
Thiago Duque Estrada da Silva Santos<sup>1</sup>, Inacio Regiani<sup>1</sup>; <sup>1</sup>Instituto Tecnológico da Aeronáutica, São José dos Campos
- 17:45 Effect of heat treatment on the microstructure and fracture toughness of glass-ceramics obtained from igneous rocks** **D.P1.19**  
Angelo Titton Titton<sup>1</sup>, Gustavo Roberto Ramos<sup>1</sup>, Cláudio Antonio Perottoni<sup>1</sup>, Ana Maria Segadães<sup>2</sup>, Pedro Manoel de Lima Quintanilha Mantas<sup>2</sup>, Robinson Carlos Dudley Cruz<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Universidade de Aveiro
- 17:45 High-pressure apparatus for processing up to 3 GPa** **D.P1.20**  
Sergio Renato da Silva Soares<sup>1</sup>, Leonardo Resende<sup>1</sup>, Renato Tillmann Bassini<sup>1</sup>, Marcio Venzon<sup>1</sup>, José Mauro Pimenta de Souza Messias<sup>1</sup>; <sup>1</sup>Universidade Federal de Mato Grosso

- 17:45 Sintering of alumina ceramics by hot-pressing techniques: a comparative study** **D.P1.21**  
Tatiani Falvo<sup>1,2</sup>, Flávia B. Mendes<sup>2</sup>, Marcos P. Gonçalves<sup>2</sup>, Ruth Herta G. Aliaga Kiminami<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos (UFSCAR), <sup>2</sup>Engecer Ltda.
- 17:45 Single-phase highly densified SrBi<sub>2</sub>Ta<sub>2</sub>O<sub>9</sub> compacts produced by high-pressure sintering** **D.P1.22**  
Altair Soria Pereira<sup>1</sup>, Ricson Rocha de Souza<sup>1</sup>, Vânia Caldas de Sousa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Lithium disilicate glass under High Pressure: structure and physical properties** **D.P1.23**  
Silvio Buchner<sup>1</sup>, Altair Soria Pereira<sup>1</sup>, João Cardoso de Lima<sup>2</sup>, Paulo Cesar Soares Jr<sup>3</sup>, Naira Maria Balzaretto<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Pontifícia Universidade Católica do Paraná
- 17:45 Effect of High Pressure on local structure of pure and Co-doped tin dioxide nanoparticles** **D.P1.24**  
Sergio Ferrari<sup>1</sup>, Florencia Grinblat<sup>1</sup>, Vitaliy Bilovol<sup>1</sup>, Laura Gabriela Pampillo<sup>1</sup>, Fabio Daniel Saccone<sup>2</sup>, Daniel Errandonea<sup>3</sup>; <sup>1</sup>Instituto de Tecnologías y Ciencias de la Ingeniería "Hilario Fernández Long", <sup>2</sup>Departamento de Física, Facultad de Ingeniería, UBA, <sup>3</sup>Institut Universitari de Ciència dels Materials, Universitat de Valencia
- 17:45 High Pressure-XRD study on pure and Fe-doped SnO<sub>2</sub> nanoparticles** **D.P1.25**  
Sergio Ferrari<sup>1</sup>, Florencia Grinblat<sup>1</sup>, David Santamaría-Pérez<sup>2</sup>, Alfredo Segura<sup>2</sup>, Rosario Vilaplana<sup>3</sup>, Catalin Popescu<sup>4</sup>, Daniel Errandonea<sup>2</sup>, Laura Gabriela Pampillo<sup>1</sup>, Fabio Daniel Saccone<sup>5</sup>; <sup>1</sup>Instituto de Tecnologías y Ciencias de la Ingeniería "Hilario Fernández Long", <sup>2</sup>Institut Universitari de Ciència dels Materials, Universitat de Valencia, <sup>3</sup>Centro de Tecnologías Físicas, Universitat Politècnica de València, <sup>4</sup>ALBA-CELLS, <sup>5</sup>Departamento de Física, Facultad de Ingeniería, UBA
- 17:45 High Pressure Study of Nanostructured Cu<sub>2</sub>Sb by X-ray diffraction, Extended X-Ray Absorption Fine Structure and Raman measurements.** **D.P1.26**  
Sérgio Michielon de Souza<sup>1</sup>, Daniela Menegon Trichês<sup>1</sup>, João Cardoso de Lima<sup>2</sup>, Alain Polian<sup>3</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Universidade Federal de Santa Catarina, <sup>3</sup>Institut de Minéralogie, de Physique des Matériaux et de Cosmochimie
- 17:45 Phase martensitic transformation study in mechanically alloyed Ti<sub>50</sub>Ni<sub>25</sub>Fe<sub>25</sub> alloy via high pressure** **D.P1.27**  
João Cardoso de Lima<sup>1</sup>, Ailton da Silva Ferreira<sup>1</sup>, Pablo Roberto Rovani<sup>2</sup>, Altair Soria Pereira<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 17:45 f-level occupancy and crystal structure behavior of the Ce<sub>2</sub>Rh<sub>(1-x)</sub>Ir<sub>x</sub>In<sub>8</sub> intermetallics under pressure.** **D.P1.28**  
Raimundo Lora Serrano<sup>1</sup>, Robert Prudêncio Amaral<sup>1</sup>, Cris Adriano<sup>2</sup>, Leandro Felix Bufaiçal<sup>3</sup>, José Gerivaldo Duque<sup>4</sup>, Pascoal G. Pagliuso<sup>2</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>3</sup>Universidade Federal de Goiás, <sup>4</sup>Universidade Federal de Sergipe

- 17:45 Effects of Eu-4f/5d hybridization on magnetic properties of  $\text{EuPt}_2\text{Si}_2$  compound** **D.P1.29**  
Ricardo Donizeth Dos Reis<sup>1</sup>, Larissa Sayuri Ishibe Veiga<sup>2</sup>, Gilberto Fabbris<sup>3</sup>, Daniel Haskel<sup>3</sup>, Flávio César Guimarães Gandra<sup>4</sup>, Narcizo Souza Neto<sup>2</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Brazilian Center for Research in Energy and Materials, <sup>3</sup>Advanced Photon Source, Argonne National Laboratory, <sup>4</sup>Instituto de Física "Gleb Wataghin"
- 17:45 Tuning the magnetic transition of  $\text{Tb}_5\text{Ge}_2\text{Si}_2$  compound with high-pressure and high-temperature processing** **D.P1.30**  
Alexandre Magnus Gomes Carvalho<sup>1</sup>, Andréia Fernandes da Silva<sup>2</sup>, María Alexandra Puerto Medina<sup>2</sup>, Julio Cesar Guimarães Tedesco<sup>3</sup>, Vinícius Gomes de Paula<sup>4</sup>, Adelino de Aguiar Coelho<sup>4</sup>, Naira Maria Balzaretta<sup>2</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Federal do Rio Grande do Sul, <sup>3</sup>Universidade do Estado do Rio de Janeiro, <sup>4</sup>Universidade Estadual de Campinas
- 17:45 Development of a high-pressure device to investigate the compressive elastocaloric effect** **D.P1.31**  
Nicolau Molina Bom<sup>1</sup>, Gabriel Marques Guimarães<sup>1</sup>, Adelino de Aguiar Coelho<sup>2</sup>, Alexandre Magnus Gomes Carvalho<sup>1</sup>; <sup>1</sup>Laboratório Nacional de Luz Síncrotron, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP

## Thursday, September 29<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION D.OR4 (08:30 - 10:15) - Room Ipê*

- 08:30 Effect of high pressure on some organic molecular crystals and glasses** **D.OR4.8\***  
Naira Maria Balzaretta<sup>1</sup>, María Alexandra Puerto Medina<sup>1</sup>, Jackeline Barbosa Brito<sup>1</sup>, Andreia Fernandes da Silva<sup>1</sup>, israel roger montoya matos<sup>1</sup>, Pablo Roberto Rovani<sup>1</sup>, Silvio Buchner<sup>2</sup>, Cláudio Antônio Perottoni<sup>3</sup>, Tania Maria Haas Costa<sup>1</sup>, Altair Soria Pereira<sup>1</sup>, João Alziro Herz da Jornada<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Fundação Universidade Federal de Ciências da Saúde de Porto Alegre, <sup>3</sup>Universidade de Caxias do Sul
- 09:00 Localization enhancement in the Kondo insulator  $\text{CeRu}_4\text{Sn}_6$**  **D.OR4.10\***  
Julio Antonio Larrea Jimenez<sup>1,2,3</sup>, Valentina Martelli<sup>2,3</sup>, Andre Strydom<sup>1</sup>, Hannes Winkler<sup>3</sup>, Jonhatan Hanel<sup>3</sup>, Eric Moura<sup>2</sup>, Elisa Baggio Saitovitch<sup>2</sup>, Andreas Eichler<sup>4</sup>, Henrik Ronnow<sup>5</sup>, Andrey Prokofiev<sup>3</sup>, Silke Paschen<sup>3</sup>; <sup>1</sup>University of Johannesburg, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas, <sup>3</sup>Vienna University of Technology, <sup>4</sup>Technische Universität Braunschweig, <sup>5</sup>École Polytechnique Fédérale de Lausanne
- 09:30 Bulk modulus and phase transitions determination of Mechanical Alloyed Nanocrystalline Powders under High Pressure** **D.OR4.11**  
Carlos E. M. Campos<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

**09:45 Pressure studies of the electrical transport properties of caged-type stannides  $R_3M_4Sn_{13}$**

Leticie Mendonça Ferreira<sup>1</sup>, Pascoal G. Pagliuso<sup>2</sup>, Fellipe Baptista Carneiro<sup>3</sup>, Magda Bittencourt Fontes<sup>3</sup>, E. B. Saitovitch<sup>3</sup>, Eduardo Matzenbacher Bittar<sup>3</sup>;  
<sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Centro Brasileiro de Pesquisas Físicas

# **SYMPOSIUM E - X Brazilian Electroceramics Symposium**

## **Symposium organizers:**

Marcelo Ornaghi Orlandi (*IQ-UNESP*)

Manuel Henrique Lente (*UNIFESP*)

Daniel Zanetti de Florio (*UFABC*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION E.OR1 (09:45 - 10:45) - Room Ipê*

- 09:45 Novel sintering approaches for densifying ceramic oxides with improved properties** **E.OR1.1\***  
Reginaldo Muccillo<sup>1</sup>, Eliana Navarro dos Santos Mucillo<sup>1</sup>; <sup>1</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 10:15 Phase stability and ionic conductivity of spark plasma sintered scandia-zirconia containing additives** **E.OR1.2**  
Robson Lopes Grosso<sup>1</sup>, Ana Júlia Tertuliano<sup>2</sup>, Izabel Fernanda Machado<sup>2</sup>, Eliana Navarro dos Santos Muccillo<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>2</sup>Escola Politécnica de Universidade de São Paulo
- 10:30 Synthesis and characterization of pure and Zr-substituted YMnO<sub>3</sub> compounds as SOFC electrode** **E.OR1.3**  
ZULMA MORENO BOTELLO MORENO BOTELLO<sup>1</sup>, Alberto Caneiro<sup>2,3</sup>, PASCAL ROUSSEL<sup>4,5,6,7</sup>, Gilles Henri Gauthier<sup>1</sup>; <sup>1</sup>Universidad Industrial de Santander, <sup>2</sup>CENTRO ATÓMICO DE BARILOCHE, <sup>3</sup>COMISIÓN NACIONAL DE ENERGÍA ATÓMICA, <sup>4</sup>École Nationale Supérieure de Chimie de Lille, <sup>5</sup>Université Lille Nord de France, <sup>6</sup>Unite de Catalyse et Chimie du Solide, <sup>7</sup>Université Lille 1 - Sciences et Technologies

### *SESSION E.OR2 (11:15 - 12:00) - Room Ipê*

- 11:15 A Review on Advances in Metal Oxide Semiconductors Materials for Ozone Gas Sensor Application** **E.OR2.4\***  
Valmor Roberto Mastelaro<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP
- 11:45 ZnO-SnO<sub>2</sub> nanoheterojunctions prepared via microwave-assisted non-aqueous route and their gas-sensing properties** **E.OR2.5**  
Luís Fernando da Silva<sup>1,2</sup>, Mattia A Lucchini<sup>1</sup>, Tomas Fiorido, Sandrine Bernardini<sup>3</sup>, Khalifa Aguir<sup>4</sup>, Cauê Ribeiro Oliveira<sup>5</sup>, Elson Longo<sup>2</sup>, Markus Niederberger<sup>1</sup>; <sup>1</sup>Swiss Federal Institute of Technology / Eidgenössische Technische Hochschule ETH Zürich, <sup>2</sup>Instituto de Química de Araraquara/UNESP, <sup>3</sup>Aix-Marseille University, <sup>4</sup>Université Paul Cézanne Aix-Marseille 3, <sup>5</sup>Universidade Federal de São Carlos - Campus: São Carlos

### *SESSION E.OR3 (14:00 - 16:15) - Room Ipê*

- 14:00 The influences of stoichiometric variation of fuel used in the combustion synthesis to the characteristics of the microstructural and electrical Cerium oxide doped with calcio** **E.OR3.6\***  
Evandro Garske Scarabelot<sup>1</sup>, Vânia Caldas de Sousa<sup>1</sup>, José Ramon Jurado Egea<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

- 14:30 Dielectric, ferroelectric and magnetoelectric properties of h-BaTiO<sub>3</sub> and CoFe<sub>2</sub>O<sub>4</sub> composites prepared by LHPG technique** **E.OR3.7**  
Flávio Paulo Milton<sup>1</sup>, Diego Seiti Fukano Viana<sup>2</sup>, Fabio Luis Zabotto<sup>1</sup>, Marcello R. B. Andreeta<sup>1</sup>, Ducinei Garcia<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal de São Carlos
- 14:45 On the dielectric characteristics and PTCR effect in donor-doped barium titanate ceramics** **E.OR3.8**  
Marco Aurélio de Oliveira<sup>1</sup>, Atair Carvalho Silva<sup>1</sup>, Jean Claude M'Peko<sup>2</sup>, Antonio Carlos Hernandez<sup>2</sup>, José de los Santos Guerra<sup>3</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS, <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Universidade Federal de Uberlândia
- 15:00 Quantifying the phase transition diffusivity around the morphotropic phase boundary compositions of the (Pb,Ca)TiO<sub>3</sub> solid solutions** **E.OR3.9**  
Flavia Regina Estrada<sup>1</sup>, Ducinei Garcia<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 15:15 Electric field-assisted sintering of yttria-stabilized zirconia: dependence on the frequency and the current density** **E.OR3.10**  
Sabrina Gonçalves de Macedo Carvalho<sup>1</sup>, Eliana Navarro dos Santos Muccillo<sup>1</sup>, Reginaldo Muccillo<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares
- 15:30 Study of the crystallization kinetics of TeO<sub>2</sub>-based glass-ceramics containing ferroelectric nanocrystals** **E.OR3.11**  
Renato Cruvinel de Oliveira<sup>1</sup>, Anielle Christine Almeida Silva<sup>2</sup>, Noélio Oliveira Dantas<sup>2</sup>, José de los Santos Guerra<sup>2</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS, <sup>2</sup>Universidade Federal de Uberlândia

## Poster presentations

### SESSION E.P1 (17:45 - 19:30)

- 17:45 Sensor Response of n-type Semiconductors** **E.P1.1**  
Marcelo O Orlandi<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Electrospinning of LaNiO<sub>3</sub> and LaNi<sub>0.6</sub>Fe<sub>0.4</sub>O<sub>3</sub> Nanowires** **E.P1.2**  
Bruna Niccoli Ramirez<sup>1</sup>, Daniel Felipe Simião<sup>1</sup>, Márcia Tsuyama Escote<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Mechanical, magnetic and microstructural evaluation of NiCo ferrite and its Ag-based cermet** **E.P1.4**  
Mônica Sumie Hieda<sup>1</sup>, João Paulo Machado<sup>2</sup>, Jessica Aparecida Nascimento Ferreira<sup>3,4</sup>, Mateus Botani Dias<sup>5</sup>, Cristina Bormio Nunes<sup>5</sup>, Vera Lúcia Othéro de Brito<sup>1,4</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Universidade Braz Cubas, <sup>4</sup>Instituto de Estudos Avançados, <sup>5</sup>Universidade de São Paulo
- 17:45 Effect of the excess of PbO in the synthesis of ferroelectric PLZT ceramics and thin films** **E.P1.5**  
Atair Carvalho Silva<sup>1</sup>, Elton Carvalho Lima<sup>2</sup>, José de los Santos Guerra<sup>3</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS, <sup>2</sup>Fundação Universidade Federal do Tocantins, <sup>3</sup>Universidade Federal de Uberlândia

- 17:45 Effects of Adding Alumina and Metal oxides in Mechanical Strength Pressure Uniaxial in the Ceramics Clay Base. E.P1.6**  
 Bruna Andrade<sup>1</sup>, Fábio Henrique Sales<sup>1</sup>, Marcos Davi de Carvalho Junior<sup>2</sup>, Luziana Bezerra Borralho<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Universidade Estadual do Maranhão, <sup>3</sup>Universidade Federal do Triângulo Mineiro
- 17:45 Grain Boundaries Phenomena in Nanostructured Ceramics: Multiple Inner Interfaces Investigated at High Temperature by Impedance Spectroscopy E.P1.7**  
Silvania Lanfredi<sup>1</sup>, Jessica Taeko Sanches Kohara<sup>1</sup>, Felipe Silva Bellucci<sup>2</sup>, Marcos Augusto Lima Nobre<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Ministério da Ciência Tecnologia e Inovação
- 17:45 Study of magnetoelectric coupling in (Bi<sub>1-x</sub>Nd<sub>x</sub>)(Fe<sub>0.99</sub>Co<sub>0.01</sub>) compositon using ferroic characterizations E.P1.8**  
Anuar Jose Mincache<sup>1</sup>, Odair Gonçalves Oliveira<sup>1</sup>, Ivair Aparecido Santos<sup>1</sup>, Luiz Fernando Cótica<sup>1</sup>, Gustavo Sanguino Dias<sup>1</sup>, Rafael da Silva<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 17:45 Influence of tetragonal zirconium yttrium oxide as pinning points on the obtaining of sodium-β''-alumina electrolytes E.P1.9**  
Daisy Catharina Rodrigues<sup>1</sup>, Dulcina Pinatti Ferreira de Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 17:45 The influence of sintering aids on the microstructural development of BaCe<sub>0.9</sub>Y<sub>0.1</sub>O<sub>3</sub> electrolyte E.P1.10**  
Kethlinn Ramos<sup>1</sup>, Dulcina Pinatti Ferreira de Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 17:45 Study of the electronic structure of the (Bi<sub>1-x</sub>Nd<sub>x</sub>)(Fe<sub>1-y</sub>Co<sub>y</sub>)O<sub>3</sub> multiferroic system using the maximum entropy method E.P1.11**  
 Odair Gonçalves Oliveira<sup>1</sup>, Anuar Jose Mincache<sup>1</sup>, Ivair Aparecido Santos<sup>1</sup>, Luiz Fernando Cótica<sup>1</sup>, Gustavo Sanguino Dias<sup>1</sup>; <sup>1</sup>Universidade Estadual de Maringá
- 17:45 Zn, Al and Y-Ba-Cu solid solution as Sintering Aids in BaZr<sub>0.8</sub>Y<sub>0.2</sub>O<sub>3</sub> E.P1.12**  
Leonardo Pacheco Wendler<sup>1</sup>, Márcio Raymundo Morelli<sup>1</sup>, Dulcina Pinatti Ferreira de Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 17:45 Influence of Lanthanum addition on the structural and anelastic properties of the [(Bi<sub>0.5</sub>Na<sub>0.5</sub>)<sub>0.94</sub>Ba<sub>0.06</sub>]<sub>(1-x)</sub>La<sub>x</sub>TiO<sub>3</sub> lead free electroceramics E.P1.13**  
Julio Cesar Camilo Albornoz Diaz<sup>1</sup>, Paulo Sérgio da Silva Junior<sup>1</sup>, Michel Venet Zambrano<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 17:45 Magnetic and electrical properties of Magnesium Zinc Ferrites E.P1.14**  
 Flavio Souza<sup>1</sup>, Vander Alkmin dos Santos Ribeiro<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Manoel Ribeiro da Silva<sup>1</sup>, Valesca Donizeti de Oliveira<sup>1</sup>, Rero Marques Rubinger<sup>1</sup>, Adhimar Flávio Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 An investigation of Co addition on the surface, structural and gas sensing properties of nanocrystalline ZnO films E.P1.15**  
Ariadne Cristina Catto<sup>1</sup>, Luís Fernando da Silva<sup>2</sup>, Sandrine Bernardini<sup>3</sup>, Khalifa Aguir<sup>3</sup>, Valmor Roberto Mastelaro<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos, <sup>2</sup>Instituto de Química de Araraquara/UNESP, <sup>3</sup>Université Aix-Marseille, Faculté St Jérôme
- 17:45 Synthesis and characterization of the La<sub>[(2/3)-x]Li<sub>3x</sub>TiO<sub>3</sub> (x = 0.10, 0.11, 0.12) perovskite system E.P1.16</sub>**  
Rafael Bonacin de Oliveira<sup>1</sup>, Marcello R. B. Andreetta<sup>1</sup>, Dulcina Pinatti Ferreira de Souza<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos

- 17:45 Gas sensor study on individual's pristine and focused ion beam nanofabricated SnO disks** **E.P1.17**  
Mateus Gallucci Masteghin<sup>1</sup>, Marcelo O Orlandi<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Effects of the additions of strontium gallate on Electrical conductivity of La<sub>0.9</sub>Sr<sub>0.1</sub>Ga<sub>0.8</sub>Mg<sub>0.2</sub>O<sub>3-δ</sub>** **E.P1.18**  
shirley Leite dos Reis<sup>1</sup>, Eliana Navarro dos Santos Muccillo<sup>1</sup>; <sup>1</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 17:45 Mullite Synthesis From Bauxite and Kaolin** **E.P1.19**  
Wirland Matheus de Melo Costa<sup>1</sup>, Luanda Zarría Morais Jabour<sup>1</sup>, LORENA MONIQUE MELO<sup>1</sup>, Amanda Cristina Medeiros da Silva<sup>1</sup>, Elias Fagury Neto<sup>1</sup>, Paulo Cesar Reis Filho<sup>2</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DO SUL E SUDESTE DO PARÁ, <sup>2</sup>Universidade Federal do Sul e Sudeste do Pará
- 17:45 Properties of porous samaria-doped ceria ceramics with lithium fluoride as sacrificial pore former** **E.P1.20**  
Tatiane Cristina Porfírio<sup>1</sup>, Eliana Navarro dos Santos Muccillo<sup>1</sup>, Yone Vidotto França<sup>1</sup>, Fernando Manuel Bico Marques<sup>2</sup>, Reginaldo Muccillo<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>2</sup>Universidade de Aveiro
- 17:45 Favorable Conditions for Photoluminescent Emission in Crystalline BZT** **E.P1.21**  
Agda Eunice de Souza<sup>1</sup>, Guilherme Seidi Sasaki<sup>2</sup>, Silvio Rainho Teixeira<sup>1,3</sup>, Wagner silveira Silveira<sup>4</sup>, Máximo Siu Li<sup>5</sup>, Elson Longo<sup>6</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Faculdade de Ciências e Tecnologia - Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>3</sup>Faculdade de Engenharia/UNESP-IS, <sup>4</sup>Fundação Universidade Federal da Grande Dourados, <sup>5</sup>Universidade de São Paulo, <sup>6</sup>Universidade Federal de São Carlos
- 17:45 THE STUDY OF CERAMIC ADDITIVES Mg-Mn USED AS A ISOLATORS MATERIALS** **E.P1.22**  
carlos alberto reis de freitas<sup>1</sup>, Mayara dos Santos Amarante<sup>2</sup>; <sup>1</sup>Departamento de Ciência e Tecnologia Aeroespacial, <sup>2</sup>Instituto de Estudos Avançados
- 17:45 Electromagnetic Absorption Efficiency Based on Additives of Mn-Zn Ferrites for Shielding Electronical- Aeronautical- and Spatial Equipments** **E.P1.23**  
carlos alberto reis de freitas<sup>1</sup>, ALBERTO JOSÉ FARO DE ORLANDO<sup>1</sup>; <sup>1</sup>Departamento de Ciência e Tecnologia Aeroespacial
- 17:45 Thermal and Magneto Optical characterization of P<sub>2</sub>O<sub>5</sub>-CdO-Na<sub>2</sub>O-La<sub>2</sub>O<sub>3</sub> glass sensitized by Nd<sup>3+</sup> and Cr<sup>3+</sup>** **E.P1.24**  
Victor Ciro Solano Reynoso<sup>1</sup>, Raul Fernando Cuevas<sup>2</sup>; <sup>1</sup>UNESP-Campus de Ilha Solteira, <sup>2</sup>Universidade Federal de Uberlândia
- 17:45 Diffuse phase transition and dielectric properties of rare-earth modified PZT ferroelectric ceramics** **E.P1.25**  
Suzana Pereira Hessel<sup>1</sup>, Atair Carvalho Silva<sup>2</sup>, Ruyan Guo<sup>3</sup>, Amar S. Bhalla<sup>3</sup>, José de los Santos Guerra<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Faculdade de Engenharia/UNESP-IS, <sup>3</sup>University of Texas San Antonio
- 17:45 FORMULATION OF DIOPSIDE GLASS POWDER SUSPENSION FOR TAPE CASTING** **E.P1.26**  
Raul Julian Revelo Tobar<sup>1</sup>, Sergio Gomes Machado Filho<sup>1</sup>, Carlos Alberto Fortulan<sup>1</sup>, Eduardo Bellini Ferreira<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Influence of the grain size on dielectric and ferroelectric properties of PMN-PT/CFO magnetoelectric composites** **E.P1.27**  
Diego Seiti Fukano Viana<sup>1</sup>, José Antônio Eiras<sup>1</sup>, Ducinei Garcia<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos

- 17:45 Evolution of crystalline phases and morphotropic phase boundary of (Bi, Na)TiO<sub>3</sub>-(Bi,K)TiO<sub>3</sub>-BaTiO<sub>3</sub> lead-free ceramics** **E.P1.28**  
David Antonio Barbosa Quiroga<sup>1</sup>, Michel Venet Zambrano<sup>1</sup>, Ariano De Giovanni Rodrigues<sup>1</sup>, Odila Florencio<sup>1</sup>, Paulo Sérgio da Silva Junior<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Highly textured KNN-based piezoelectric ceramics by conventional sintering** **E.P1.29**  
Angelica Maria Mazuera Zapata<sup>1</sup>, Paulo Sérgio da Silva Junior<sup>1</sup>, Michel Venet Zambrano<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Microstructural, structural and electrical properties of bilayered BaTi<sub>0.95</sub>Zr<sub>0.05</sub>O<sub>3</sub>/Ba<sub>0.75</sub>Sr<sub>0.25</sub>TiO<sub>3</sub> ceramics** **E.P1.30**  
Eduardo Antonelli<sup>1</sup>, Antonio Guerreiro Serrano<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Influence of synthesis and sintering parameters on structure and phase transitions of Ba<sub>0.77</sub>Ca<sub>0.23</sub>TiO<sub>3</sub> - BaTi<sub>0.85</sub>Zr<sub>0.15</sub>O<sub>3</sub> 50/50 composite ceramics** **E.P1.31**  
Eduardo Antonelli<sup>1</sup>, Renato Boschilia Junior<sup>1</sup>, Antonio Carlos Hernandez<sup>2</sup>, Thiago Martins Amaral<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Instituto de Física de São Carlos
- 17:45 Synthesis and characterization of a double-perovskite anode for solid oxide fuel cells** **E.P1.32**  
Natalia Kondo Monteiro<sup>1</sup>, Gabriel Alves Candido da Silva<sup>1</sup>, Fabio Coral Fonseca<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Preparation and properties of hydrophobic Faujasite Zeolite** **E.P1.33**  
Bruno Cano Mascarenhas<sup>1</sup>, Francine Aline Tavares<sup>1</sup>, Elaine Cristina Paris<sup>2</sup>;  
<sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Embrapa Instrumentação
- 17:45 Synthesis and immobilization of the SiO<sub>2</sub> nanoparticles for adsorption of organic pollutants** **E.P1.34**  
Francine Aline Tavares<sup>1</sup>, Bruno Cano Mascarenhas<sup>1</sup>, Elaine Cristina Paris<sup>2</sup>;  
<sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária - Embrapa Instrumentação São Carlos
- 17:45 Low temperature synthesis of gadolinium-doped cerium oxide nanoparticles** **E.P1.35**  
Leticia Poras Reis de Moraes<sup>1</sup>, Natalia Kondo Monteiro<sup>1</sup>, Marina Ferreira de Souza Machado<sup>1</sup>, Vincenzo Esposito<sup>2</sup>, Daniel de Florio<sup>3</sup>, Debora Marani<sup>2</sup>, Fabio Coral Fonseca<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>2</sup>Technical University of Denmark / Danmarks Tekniske Universitet, <sup>3</sup>Universidade Federal do ABC
- 17:45 Grain boundary resistance change in SnO<sub>2</sub> varistors by the insertion of SnO micro-disks** **E.P1.36**  
Rafael Camargo Bertinotti<sup>1</sup>, Mateus Gallucci Masteghin<sup>1</sup>, Marcelo O Orlandi<sup>1</sup>;  
<sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Study of electrochemical properties of the Prussian blue obtained via pentacyanidoferrate complex** **E.P1.37**  
Marcio Cristiano Monteiro<sup>1</sup>, Kalil Cristhian Figueiredo Toledo<sup>1</sup>, Bruno Morandi Pires<sup>1</sup>, Rene Wick<sup>2</sup>, Juliano Alves Bonacin<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP, <sup>2</sup>University of Zurich
- 17:45 2D layered gadolinium-doped cerium oxide nanomaterials** **E.P1.38**  
Fabio Coral Fonseca<sup>1</sup>, Leticia Poras Reis de Moraes<sup>1</sup>, Vincenzo Esposito<sup>2</sup>, Daniel de Florio<sup>3</sup>, Debora Marani<sup>2</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>2</sup>Technical University of Denmark / Danmarks Tekniske Universitet, <sup>3</sup>Universidade Federal do ABC

- 17:45 Synthesis of Ni nanoparticles in lanthanum chromite ceramic matrix** **E.P1.39**  
Victor Buratto Tinti<sup>1</sup>, Fábio Coral Fonseca<sup>2</sup>, Daniel de Florio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Electrical characterization of gadolinia-doped ceria obtained from nanopowder through two-step sintering assisted by ZnO and CoO addition** **E.P1.40**  
Lúcia Adriana Villas Boas<sup>1</sup>, Dulcina Pinatti Ferreira de Souza<sup>2</sup>; <sup>1</sup>Faculdade de Ciências e Engenharia - UNESP/Tupã, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Synthesis and properties of high-density nanostructured BiFeO<sub>3</sub> ceramics obtained by spark plasma sintering** **E.P1.41**  
Eduardo Azzolini Volnistem<sup>1</sup>, Gustavo Sanguino Dias<sup>1</sup>, Luiz Fernando Cótica<sup>1</sup>, Ducinei Garcia<sup>2</sup>, José Antônio Eiras<sup>2</sup>, Ivair Aparecido Santos<sup>1,3</sup>, Diego Seiti Fukano Viana<sup>2</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>University of Texas San Antonio
- 17:45 Study of Composite Films Obtained by the Insertion of Indium Tin Oxide Nanowires in Polyvinyl Butyral Polymer** **E.P1.42**  
Fernando Modesto Borges Oliveira<sup>1</sup>, Marcelo O Orlandi<sup>2</sup>, Elson Longo<sup>3</sup>, José A. Varela<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Instituto de Química de Araraquara/UNESP, <sup>3</sup>Instituto de Química - IQ - Unesp - Araraquara
- 17:45 Electrical properties of glass-ceramic produced using sugarcane bagasse ash** **E.P1.43**  
Silvio Rainho Teixeira<sup>1</sup>, Neri Alves<sup>1</sup>, Tiago Carneiro Gomes<sup>1</sup>, Wagner Silveira<sup>2</sup>, Renata da Silva Magalhães<sup>1</sup>, Agda Eunice de Souza<sup>1</sup>, Vinicius Duarte Jesus<sup>1</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Fundação Universidade Federal da Grande Dourados
- 17:45 Co- and Zn- effect on SnO<sub>2</sub>-based varistor film** **E.P1.44**  
Glauco Meireles Mascarenhas Morandi Lustosa<sup>1</sup>, João Paulo de Campos da Costa<sup>1</sup>, Leinig Antonio Perazolli<sup>1</sup>, Maria Ap. Zaghete<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Doped ceria and metal borides as composite materials for high temperature water splitting and synthetic fuel production by solar thermochemical conversion** **E.P1.45**  
Daniel de Florio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Study and Development of Ceramic Materials for use in Solid Oxide Fuel Cell Anodes using Renewable Fuels in Direct Operation** **E.P1.47**  
Daniela Bianchi Ponce Leon Lima<sup>1</sup>, Daniel de Florio<sup>2</sup>; <sup>1</sup>Instituto Federal do Paraná, <sup>2</sup>Universidade Federal do ABC
- 17:45 Preparation of Sr<sub>2</sub>(MgMo)<sub>1-x</sub>Ru<sub>x</sub>O<sub>6</sub> ceramics for use in a solid oxide fuel cell anode** **E.P1.48**  
Matheus Eiji Ohno Bezerra<sup>1</sup>, Fabio Coral Fonseca<sup>2</sup>, Daniel de Florio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Evaluation of the faujasite zeolite:CoFe<sub>2</sub>O<sub>4</sub> composite for pollutant adsorption in aqueous medium** **E.P1.49**  
Henrique Cesar Musetti<sup>1</sup>, Oneide Chire Quispe<sup>2</sup>, Bruno Cano Mascarenhas<sup>2</sup>, Elaine Cristina Paris<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Embrapa Instrumentação

- 17:45 Influence of the microstructure at magnetic and electrical properties of copper ferrite doped with niobium** **E.P1.50**  
 Flavio Souza<sup>1</sup>, Vander Alkmin dos Santos Ribeiro<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Manoel Ribeiro da Silva<sup>1</sup>, Valesca Donizeti de Oliveira<sup>1</sup>, Rero Marques Rubinger<sup>1</sup>, Adhimar Flávio Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Obtaining and evaluation of magnetic support in the CuO photocatalist properties** **E.P1.51**  
Lílian Cruz Santos<sup>1</sup>, Camila Rodrigues Sciena<sup>1</sup>, Bruno Cano Mascarenhas<sup>1</sup>, João Otávio Donizette Malafatti<sup>1</sup>, Elaine Cristina Paris<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Embrapa Instrumentação
- 17:45 Multi: a software of the JST-XRD suite for pseudo 3D X-ray powder diffraction plot. An easy tool for identifying phase transitions** **E.P1.52**  
Julia Sawaki Tanaka<sup>1</sup>, Carlos Oliveira Paiva-Santos<sup>1</sup>, Diego Luiz Tita<sup>1</sup>, Isabella Franco de Bastos Cirello<sup>1</sup>, Vinícius D.N. Bezzon<sup>1</sup>, Selma Gutierrez Antonio<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Processing and characterization of physical properties of (Bi<sub>0.5</sub>,Na<sub>0.5</sub>)TiO<sub>3</sub>-(Bi<sub>0.5</sub>,K<sub>0.5</sub>)TiO<sub>3</sub> lead-free piezoceramics** **E.P1.53**  
Giovanna Cristina da Silva Batista<sup>1</sup>, Manuel Henrique Lente<sup>1</sup>; <sup>1</sup>Federal University of São Paulo
- 17:45 Crystal growth and characterization of lead-free based Cu-doped K<sub>0.48</sub>Na<sub>0.52</sub>NbO<sub>3</sub> fibers by micro-pulling-down** **E.P1.54**  
Marcus Vinicius Silva<sup>1</sup>, Ana Maria do Espírito Santo<sup>1</sup>, Sonia Licia Baldochi<sup>2</sup>, José Antônio Eiras<sup>3</sup>, Manuel Henrique Lente<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Dihedral angle measurements on YSZ-30%vol. Al<sub>2</sub>O<sub>3</sub> Polycrystalline Ceramic Composites** **E.P1.55**  
Sérgio Augusto Natali Amaral<sup>1</sup>, Sergio Natali Amaral<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 17:45 OBTAINMENT OF SrBi<sub>2</sub>Nb<sub>2</sub>O<sub>9</sub> DOPED WITH BISMUTH OXIDE BISMUTH FOR APPLICATION IN DIELECTRIC ANTENNAS** **E.P1.56**  
 Emmanuelle Oliveira Sancho<sup>1</sup>, Antônio Jefferson Mangueira Sales<sup>1</sup>, Antonio Sérgio Bezerra Sombra<sup>1</sup>, Juscelino Chaves Sales<sup>2</sup>, Samuel Oliveira Saturno<sup>3</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Universidade Estadual do Vale do Acaraú, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Ceará
- 17:45 STUDY REGARDING THE INFLUENCE OF TIME AND CALCINATION TEMPERATURE IN THE EVOLUTION OF BARIUM MOLYBDATE AND STRONTIUM PHASES (Ba<sub>0.5</sub>Sr<sub>0.5</sub>) MoO<sub>4</sub>.** **E.P1.57**  
 Pâmella Rayo de Luar Campos Gonçalves<sup>1</sup>, Meirinalva Batista Miranda Coelho<sup>1</sup>, José Manuel Rivas Mercury<sup>1</sup>, Içamira Costa Nogueira<sup>2</sup>, Iedo Alves de Souza<sup>1</sup>, Elson Longo<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Universidade Federal de São Carlos (UFSCAR), <sup>3</sup>Universidade Estadual Paulista Júlio de Mesquita Filho
- 17:45 Effect of Electrical Resistivity and Dielectric Constant of Alumina Doped Niobia** **E.P1.58**  
 Pâmella Rayo de Luar Campos Gonçalves<sup>1</sup>, Fábio Henrique Sales<sup>1</sup>, Meirinalva Batista Miranda Coelho<sup>1</sup>, Marcelo Moizinho Oliveira<sup>1</sup>, José Manuel Rivas Mercury<sup>1</sup>, Elson Longo<sup>2</sup>, Iedo Alves de Souza<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Universidade Estadual Paulista Júlio de Mesquita Filho

# Tuesday, September 27<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION E.OR4 (09:45 - 10:45) - Room Ipê*

- 09:45 ENAMELING COATING TECHNOLOGY OF PIPES. E.OR4.12\***  
Signo Thadeus Reis<sup>1</sup>, Genda Chen<sup>1</sup>, Liang Fan<sup>1</sup>; <sup>1</sup>Missouri University of Science and Technology
- 10:15 Room Temperature Magnetoelectric Effect in Single Phase Oxides E.OR4.13**  
José Antônio Eiras<sup>1</sup>, Barbara Maraston Fraygola<sup>2,1</sup>, Fabio Luis Zabotto<sup>1</sup>, Manuel Henrique Lente<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>École Polytechnique Fédérale de Lausanne, <sup>3</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 10:30 Effect of Bi<sub>2</sub>Fe<sub>4</sub>O<sub>9</sub> secondary phase on the Structural, Dielectric and Magnetic properties of BiFeO<sub>3</sub> ceramic E.OR4.14**  
Prasun Banerjee<sup>1</sup>, Adolfo Junior Franco<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás

### *SESSION E.OR5 (11:15 - 12:00) - Room Ipê*

- 11:15 Facile preparation of Lithium Niobate Ceramics E.OR5.15\***  
Neftalí Lenin Villarreal Carreño<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 11:45 Ni-Ba-doped KNbO<sub>3</sub> ceramics obtained by two preparation methods: syntheses and optical properties E.OR5.16**  
Manuel Henrique Lente<sup>1</sup>, Ronaldo Crosio Gennari<sup>2</sup>, José Antônio Eiras<sup>3</sup>, Rossano Lang Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Universidade Federal de São Carlos

### *SESSION E.OR6 (14:00 - 16:15) - Room Ipê*

- 14:00 Metal Oxide Nanosurfaces and Hetero-interfaces for Energy Harvesting Applications E.OR6.17\***  
Prof. Dr. Sanjay Mathur<sup>1</sup>, Dr. Thomas Fischer<sup>1</sup>, Dr. Yakup Goenuellue<sup>1</sup>; <sup>1</sup>University of Cologne
- 14:30 The role of oxygen on CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> ceramics: from sintering to electrical properties E.OR6.18\***  
Anderson A. Felix<sup>1</sup>, Vinícius D.N. Bezzon<sup>1</sup>, Elson Longo<sup>1</sup>, Damjan Vengust<sup>2</sup>, Matjaz Spreitzer<sup>2</sup>, Danilo Suvorov<sup>2</sup>, José A. Varela<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Institute Jozef Stefan
- 15:00 Effects of Sr/La co-doping on the dielectric properties of CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub> E.OR6.19**  
Rodrigo A. Espinoza-González<sup>1</sup>, Sorach P. Vidal<sup>1</sup>; <sup>1</sup>Universidad de Chile

- 15:15 Controlling the breakdown electric field in SnO<sub>2</sub> based varistors by the insertion of SnO<sub>2</sub> nanobelts** **E.OR6.20**  
Mateus Gallucci Masteghin<sup>1</sup>, Marcelo O Orlandi<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 15:30 Development of a chamber using self-heating elements to detect gas sensor activity in semiconductors** **E.OR6.21**  
Mario Cilense<sup>1</sup>, Sonia Maria Zanetti<sup>1</sup>, João Paulo de Campos da Costa<sup>1</sup>;  
<sup>1</sup>Instituto de Química de Araraquara/UNESP



# **SYMPOSIUM F - Advanced and Analytical Microscopy and Spectroscopy of Nanostructures and Engineering Materials**

**Symposium organizers:**

Guillermo Solorzano (*PUC-Rio*)  
Daniel Lorscheitter Baptista (*UFRGS*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION F.OR1 (09:45 - 10:45) - Room Seringueira*

- 09:45**    **Understanding Thermal Stability of Ceramics Nanosystem applied in electrocatalyst and photoelectrocatalyst : A “In situ” and “Ex situ” TEM study**    **F.OR1.1\***  
Edson Roberto Leite
- 10:15**    **Monoatomic gold catalysts supported on palladium nanoparticles: preliminary results on aberration-corrected imaging using the newly installed Titan<sup>3</sup> Themis 300 in LNNano**    **F.OR1.2**  
Érico Teixeira Neto<sup>1</sup>, Marina Morais Tófilo<sup>2,1</sup>, Ângela Albuquerque Teixeira Neto<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Estadual de Campinas
- 10:30**    **Synthesis of monoatomic gold catalysts supported on metal nanoparticles for oxidation reactions**    **F.OR1.3**  
Marina Morais Tófilo<sup>1,2</sup>, Ângela Albuquerque Teixeira Neto<sup>1</sup>, Érico Teixeira Neto<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Faculdade de Engenharia Química - UNICAMP

### *SESSION F.OR2 (11:15 - 12:00) - Room Seringueira*

- 11:15**    **Nanostructured photocatalysts of titanate nanotubes and Ag<sub>3</sub>PO<sub>4</sub> with enhanced visible light activity**    **F.OR2.4**  
Ricardo Nascimento Pombo do Amaral<sup>1</sup>, Paula Mendes Jardim<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 11:30**    **1D Sodium Niobate Synthesized by Alkaline Hydrothermal Route**    **F.OR2.5**  
Beatriz Rodrigues Canabarro<sup>1</sup>, Paula Mendes Jardim<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 11:45**    **Experimental study of the Microstructural and Mineralogical behavior of concrete manufactured in Colombia exposed to high temperatures, claims valuation methodology**    **F.OR2.6**  
Martin Eduardo Espitia<sup>1,2</sup>, Andrés Mauricio Muñoz Garcia<sup>1,3</sup>, Henry Yesid Bustos<sup>1</sup>, Edgar Monroy<sup>1</sup>; <sup>1</sup>Corporación Universitaria Minuto de Dios, <sup>2</sup>Universidad EAN Escuela de Administración de Negocios, <sup>3</sup>Instituto Tecnológico Metropolitano

### *SESSION F.OR3 (14:00 - 16:15) - Room Seringueira*

- 14:00**    **Texture and phase analysis in nanocrystalline Ni thin films by precession electron diffraction microscopy**    **F.OR3.7\***  
Paulo Ferreira<sup>1</sup>; <sup>1</sup>Materials Science and Engineering Program, University of Texas at Austin, USA

- 14:30 Nanoscale analysis of calcium phosphate films obtained by magnetron sputtering during the initial stages of deposition** **F.OR3.8**  
 Elvis Oswaldo López Meza<sup>1</sup>, Alexandre Silva Mello<sup>1</sup>, Marcos Farina<sup>2</sup>, Alexandre Malta Rossi<sup>1</sup>, André Linhares Rossi<sup>1</sup>; <sup>1</sup>Centro Brasileiro de Pesquisas Físicas, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 14:45 Electron energy loss spectroscopy as a tool for measuring electron beam damage in proteins** **F.OR3.9**  
Marcelo Alexandre De Farias<sup>1</sup>, Marin van Heel<sup>2,1,3</sup>, Jefferson Bettini<sup>1</sup>, Rodrigo Villares Portugal<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>Leiden University / Universiteit Leiden, <sup>3</sup>Imperial College London
- 15:00 A study of the substrate surface chemical states at the interface TiN/Si by X-Ray Photoelectron Spectroscopy** **F.OR3.10**  
Vinícius Gabriel Antunes<sup>1</sup>, Carlos Alejandro Figueroa<sup>2</sup>, Fernando Alvarez<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>2</sup>Universidade de Caxias do Sul

## Tuesday, September 27<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION F.OR4 (09:45 - 10:45) - Room Seringueira*

- 09:45 Electron irradiation effects on the structural stability of nano objects** **F.OR4.11\***  
Paulo F. P. Fichtner<sup>1,2</sup>, Mariana de Mello Timm<sup>1</sup>, Z. E. Fabrim<sup>1</sup>, Daniel Lorscheitter Baptista<sup>1</sup>; <sup>1</sup>Physics Institute, Federal University of Rio Grande do Sul, Brazil, <sup>2</sup>Metallurgy Department, Engineering School, Federal University of Rio Grande do Sul, Brazil
- 10:15 MultiSIMNRA, a computational tool for reliable RBS-FRS depth profile analysis** **F.OR4.12**  
Manfredo Harri Tabacniks<sup>1</sup>, Antonio Domingues Santos<sup>1</sup>, Luciana Reyes Pires Kassab<sup>2</sup>, Tiago Fiorini da Silva<sup>1</sup>, Cleber Lima Rodrigues<sup>1</sup>, Nemitala Added<sup>1</sup>, Matej Mayer<sup>3</sup>; <sup>1</sup>Instituto de Física-USP, <sup>2</sup>Faculdade de Tecnologia de São Paulo, <sup>3</sup>Max-Planck-Institut für Plasmaphysik
- 10:30 Study of the naphthenic corrosion rate in the crude oils and molecules model** **F.OR4.13**  
Heloisa Pinto Dias<sup>1</sup>, Eliane Valéria de Barros<sup>1</sup>, Wanderson Romão<sup>2</sup>, Gloria Viegas Aquije<sup>2</sup>, Eustaquio de Castro, Debora Domingos Cavaglieri<sup>2</sup>, Fernanda Endringer Pinto<sup>1</sup>, Antonio Augusto Lopes Marins<sup>1</sup>, Pedro Vitor Morbach Dixini<sup>1</sup>, Robson Rodrigues Moura<sup>3</sup>, Alexandre Oliveira Gomes<sup>3</sup>; <sup>1</sup>Universidade Federal do Espírito Santo, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>3</sup>Petrobras

### **SESSION F.OR5 (11:15 - 12:00) - Room Seringueira**

- 11:15 Nanoscale characterization with ChemiSTEM technology: a powerful tool for the understanding of materials behavior** F.OR5.14  
JEAN DILLE<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 11:30 Oxygen impact on the electronic and vibrational properties of black phosphorus probed by infrared nanospectroscopy** F.OR5.15  
Daniel Grassescchi<sup>1</sup>, Dario Bahamon<sup>1</sup>, Francisco Carlos Barbosa Maia<sup>2</sup>, Raul de Oliveira Freitas<sup>2</sup>, Christiano J. S. de Matos<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>Laboratório Nacional de Luz Síncrotron
- 11:45 Synchrotron infrared nanospectroscopy for the investigation of photonic and molecular nanomaterials** F.OR5.16  
Raul de Oliveira Freitas<sup>1</sup>; <sup>1</sup>Laboratório Nacional de Luz Síncrotron

### **SESSION F.OR6 (14:00 - 16:15) - Room Seringueira**

- 14:00 Combined spectroscopy approaches towards the study of truly 1D carbon-based structures** F.OR6.17\*  
Paola Ayala<sup>1,2</sup>; <sup>1</sup>Yachay Tech, <sup>2</sup>University of Vienna
- 14:30 STM/STS STUDY OF THE THERMAL STABILITY OF SWITCHING PHENOMENA OF MOLYBDENUM DISULFIDE** F.OR6.18  
Alejandro Cristians Rios Cuadros<sup>1</sup>, Diogo Duarte dos Reis<sup>2</sup>, Frederico Dias Brandão<sup>1</sup>, Klaus Wilhelm Heinrich Krambrock<sup>1</sup>, Angelo Malachias de Souza<sup>1</sup>, Rogério Magalhaes Paniago<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Universidade Federal de Mato Grosso do Sul
- 14:45 Nanomechanical characterization and Raman mapping of crystallographic spatial domains in tungsten oxide thin films** F.OR6.19  
Jose Luis Enriquez-Carrejo<sup>1</sup>, Manuel Antonio Ramos-Murillo<sup>1</sup>, Jose Mireles-Jr-Garcia<sup>1</sup>, Abel Hurtado-Macias<sup>2</sup>; <sup>1</sup>Universidad Autónoma de Ciudad Juarez, <sup>2</sup>Centro de Investigación en Materiales Avanzados

## **Poster presentations**

### **SESSION F.P1 (17:45 - 19:30)**

- 17:45 Cellulose- lignin bioblend beads: preparation, characterization and functionalization** F.P1.1  
Lidiane de Oliveira Pinto<sup>1</sup>, Rubia Figueredo Gouveia<sup>1</sup>, Mathias Strauss<sup>1</sup>, Juliana da Silva Bernardes<sup>1</sup>; <sup>1</sup>Brazilian Nanotechnology National Laboratory
- 17:45 Structural and morphologic analysis of polymer blends of natural rubber with sugar cane bagasse ashes and low density polyethylene blends through silanization process** F.P1.2  
Giovanni Barrera Torres<sup>1,2</sup>, Caroline Silva Danna<sup>2</sup>, rafael Jesus gonçaves Rubira<sup>2</sup>, Carlos José Leopoldo Constantino<sup>2</sup>, Silvio Rainho Teixeira<sup>2</sup>, Aldo Eloizo Job<sup>2</sup>; <sup>1</sup>Instituto Tecnológico Metropolitano, <sup>2</sup>FCT-UNESP Campus de Presidente Prudente

- 17:45 Polyester matrix reinforced by hybrid fabric of fiberglass and jute fiber** **F.P1.3**  
Jair Francisco Souza Magalhães<sup>1</sup>, César Tadeu Nasser Medeiros Branco<sup>1</sup>, Ailton da Silva Nascimento<sup>1</sup>, Edwillson Gonçalves de Oliveira Filho<sup>2,1</sup>, Fábio Santos de Sousa<sup>2,1</sup>, José Maria Braga Pinto<sup>2,1</sup>, Luciano Monteiro Almeida<sup>1</sup>, Roberto Tetsuo Fujiyama<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Sintering study of ferrites, BaTiO<sub>3</sub> and their ceramic composites** **F.P1.4**  
Mayara dos Santos Amarante<sup>1</sup>, Rosana Silva Xavier<sup>2</sup>, Manuel Henrique Lente<sup>3</sup>, Luis Antonio Genova<sup>4</sup>, Vera Lúcia Othéro de Brito<sup>5</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>4</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>5</sup>Instituto de Estudos Avançados
- 17:45 Hybrid polymeric composites with aligned and continuous natural and synthetic fibers** **F.P1.5**  
Luciano Monteiro Almeida<sup>1</sup>, Ailton da Silva Nascimento<sup>1</sup>, César Tadeu Nasser Medeiros Branco<sup>1</sup>, Edwillson Gonçalves de Oliveira Filho<sup>2,1</sup>, Fábio Santos de Sousa<sup>2,1</sup>, Jair Francisco Souza Magalhães<sup>1</sup>, José Maria Braga Pinto<sup>2</sup>, Roberto Tetsuo Fujiyama<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Analysis of structural distortions associated with Eshelby twist in individual InP nanowires by Spatially resolved Precession Electron Diffraction (SPED)** **F.P1.6**  
Daniel Mario Ugarte<sup>1,2</sup>, Luiz Galvão Tizei<sup>3</sup>, Mônica Alonso Cotta<sup>2</sup>, Alexander Eggeman<sup>1</sup>; <sup>1</sup>University of Cambridge, <sup>2</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>3</sup>Université Paris-Sud
- 17:45 Optical properties of silica hybrid materials/ organic doped with copper halides nanoparticles** **F.P1.7**  
Raquel Riciati do Couto Vilela<sup>1</sup>, Dario Antonio Donatti<sup>1</sup>, Fábio Simões de Vicente<sup>1</sup>, Dimas Roberto Vollet<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista- Campus Rio Claro
- 17:45 Evaluation of polyamide 6.6 properties incorporated montmorillonite nanoclay** **F.P1.8**  
Nathália de Souza Giolo<sup>1</sup>, Sabrina Faria de Lima<sup>1</sup>, Anderson Maia<sup>1</sup>, Rondes Ferreira da Silva Torin<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Mauá
- 17:45 Exploiting the azimuthal phase structure of electron vortex beams to control the excitation of surface plasmon multipoles** **F.P1.9**  
Daniel Mario Ugarte<sup>1,2</sup>, Caterina Ducati<sup>1</sup>; <sup>1</sup>University of Cambridge, <sup>2</sup>Instituto de Física "Gleb Wataghin"-UNICAMP
- 17:45 Composites with natural fibers continuous and aligned: evaluation of influence of the type, the volume fraction and spacing of the fibers** **F.P1.10**  
Fábio Santos de Sousa<sup>1,2</sup>, César Tadeu Nasser Medeiros Branco<sup>2</sup>, Luciano Monteiro Almeida<sup>2</sup>, Edwillson Gonçalves de Oliveira Filho<sup>1,2</sup>, Jair Francisco Souza Magalhães<sup>2</sup>, Ailton da Silva Nascimento<sup>2</sup>, José Maria Braga Pinto<sup>2</sup>, Roberto Tetsuo Fujiyama<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará, <sup>2</sup>Universidade Federal do Pará
- 17:45 Lithium niobate Raman spectroscopy: temperature effect.** **F.P1.11**  
Rurik Farias<sup>1</sup>, Cesar Fierro-Ruiz<sup>1</sup>, Juan Hernandez-Paz<sup>1</sup>; <sup>1</sup>Universidad Autónoma de Ciudad Juárez

- 17:45 Optical absorption and emission properties of Er<sup>3+</sup> ion in New Phosphate– Silicate glasses: Judd-Ofelt intensity parameters** **F.P1.12**  
Victor Hugo De Oliveira<sup>1</sup>, Zélia Maria Da Costa Ludwig<sup>1</sup>, Valdemir Ludwig<sup>1</sup>, Diogo Rúbio Sant'Anna<sup>1</sup>, Frederico Girardi Knop<sup>1</sup>, Anderson Rodrigues Teixeira<sup>1</sup>, Célia Regina da Costa<sup>2</sup>, Maria Jose Bell<sup>1</sup>, Virgílio de Carvalho dos Anjos<sup>1</sup>, Geraldo Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Escola de Artes, Ciências e Humanidades, Universidade de São Paulo
- 17:45 Studing phosphate glasses by Differential Thermal Analysis(DTA) and Differential Scan Calorimetry(DSC)** **F.P1.13**  
Frederico Girardi Knop<sup>1</sup>, Victor Hugo De Oliveira<sup>1</sup>, Zélia Maria Da Costa Ludwig<sup>1</sup>, Célia Regina da Costa<sup>2</sup>, Valdemir Ludwig<sup>1</sup>, Diogo Rubio Sant'Anna das Dores<sup>1</sup>, Anderson Rodrigues Teixeira<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Politecnico di Milano
- 17:45 Highly luminescent polycarbonate films doped with diaquatris(thenoyltrifluoroacetate)europate(III) complex - UV exposition effect** **F.P1.14**  
Duclerc Fernandes Parra<sup>1</sup>, Vinícius da Silva Lima<sup>1</sup>, Maria Cláudia França da Cunha Felinto<sup>2</sup>, Pedro Lima Forster<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>2</sup>Universidade de São Paulo
- 17:45 Photo-oxidation of modified Polypropylene nanocomposite** **F.P1.15**  
Luiz Gustavo Hiroki Komatsu<sup>1</sup>, Washington Luiz Oliani<sup>1</sup>, Ademar Benévolo Lugão<sup>1</sup>, Duclerc Fernandes Parra<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Microstructural characterization of traditional and modern ceramics via scanning electron microscopy** **F.P1.16**  
Pâmela Sabrina Bento<sup>1</sup>, Rosinei Batista Ribeiro, Bianca Siqueira Martins Domingos<sup>1</sup>, Gilbert Silva<sup>2</sup>, Jorge Luiz Rosa<sup>3</sup>, Brendon Willian Guedes Barbosa<sup>4</sup>; <sup>1</sup>Faculdades Integradas Teresa D'ávila, <sup>2</sup>Universidade Federal de Itajubá, <sup>3</sup>Escola de Engenharia de Lorena/USP, <sup>4</sup>ETEC Padre Carlos Leôncio da Silva
- 17:45 Study on the effects of titanium oxide based nanomaterials as catalysts on the hydrogen sorption kinetics of magnesium hydride** **F.P1.17**  
Anderson de Farias Pereira<sup>1</sup>, Paula Mendes Jardim<sup>1</sup>, Monique Osorio Talarico da Conceição<sup>2</sup>, Dilson Silva dos Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Centro Universitário de Volta Redonda
- 17:45 Time-resolved photoluminescence spectroscopy – a modular approach from Horiba scientific** **F.P1.18**  
Linda Casson<sup>1</sup>, Bridget ODonnell<sup>1</sup>, Igor Carvalho<sup>1</sup>, Joao Lucas Rangel<sup>1</sup>; <sup>1</sup>HORIBA Scientific
- 17:45 Morphological and microstructural analysis of Pb-Co electrodeposits** **F.P1.19**  
Claudia Carrasco<sup>1</sup>, Pablo Tobosque, Marisol Maril, Carlos Camurri, Carlos Rodríguez; <sup>1</sup>Universidad de Concepción
- 17:45 Optical characterization of SiO<sub>2</sub> thin films over p-type Si wafer** **F.P1.20**  
Sávio José Zaccaro<sup>1</sup>, Rero Marques Rubinger<sup>1</sup>, Adhimar Flávio Oliveira<sup>1</sup>, Danilo Roque Huanca<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Synthesis of luminescent magnetic nanoparticles** **F.P1.21**  
Raphael Lucas Sousa Silva<sup>1</sup>, Alberthmeiry Teixeira de Figueiredo<sup>1</sup>, Fermin Herrera Aragón<sup>2</sup>, Máximo Siu Li<sup>3</sup>; <sup>1</sup>Universidade Federal de Goiás-Regional Catalão, <sup>2</sup>Universidade de Brasília, <sup>3</sup>Instituto de Física de Saõ Carlos - USP

- 17:45 The influence of partial capping and annealing on the morphology of InAs quantum dots grown by MOVPE on GaAs** **F.P1.22**  
Paula Caldas<sup>1</sup>, Hongen Xie<sup>2</sup>, Rodrigo Prioli Menezes<sup>2,1</sup>, Fernando A. Ponce<sup>2</sup>, Luciana Dornelas<sup>3</sup>, Roberto Jakomin<sup>4</sup>, Maurício Pamplona Pires<sup>5</sup>, Patricia L Souza<sup>3</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Arizona State University, <sup>3</sup>Laboratório de Semicondutores - CETUC/PUC-Rio, <sup>4</sup>Universidade Federal do Rio de Janeiro, <sup>5</sup>Instituto de Física, UFRJ
- 17:45 Photoluminescence in materials science – an affordable NIR PL solution from Horiba scientific** **F.P1.23**  
Alex Siemiarczuk<sup>1</sup>, Igor Carvalho<sup>1</sup>, Joao Lucas Rangel<sup>1</sup>; <sup>1</sup>HORIBA Scientific
- 17:45 Evaluation properties of the of polypropylene flame retardant compounds modified with Functional additives and Phthalo Pigment through the correlated thermal measures with their impact properties** **F.P1.24**  
Anderson Maia<sup>1</sup>, Marcos Akira d'Ávila<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Research on the behavior of nanoclay dispersion, and its action as a compatibilizer agent in the formation of the nanocomposite polyamide 6 / Polyethylene and nanoclay.** **F.P1.25**  
Fernando Augusto de Oliveira<sup>1</sup>, Lucas de Souza Ferreira<sup>1</sup>, Anderson Maia<sup>1</sup>, Rondes Ferreira da Silva Torin<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Mauá
- 17:45 Focal Series Reconstruction of Bridgman grown Bismuth Telluride** **F.P1.26**  
Karla Balzuweit<sup>1</sup>, Thais Milagres Oliveira<sup>2</sup>, Von Braun Nascimento<sup>1</sup>, Edmar A Soares<sup>1</sup>, Vagner Eustáquio de Carvalho<sup>1</sup>, Luiz Orlando Ladeira<sup>1</sup>, Braulio Soares Archanjo<sup>3</sup>, Thiago de Lourenço e Vasconcelos<sup>3</sup>, Carlos Alberto Senna<sup>3</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Electron Microscopy for Material Science - University of Antwerpen, <sup>3</sup>Instituto Nacional de Metrologia, Qualidade e Tecnologia
- 17:45 Study of the morphology exhibited by MWCNT and Polyurethane nanocomposites using synchrotron small angle X-ray scattering** **F.P1.27**  
Ana Pacheli Heitmann Rodrigues<sup>1</sup>, Elisa Carvalho Castro<sup>1</sup>, Rodrigo Lassarote Lavall<sup>1</sup>, Iaci Miranda Pereira<sup>2</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Centro Tecnológico do Exército
- 17:45 Characterization and catalyst activity of nanoparticles of pure nickel ferrite and dispersed in a silica matrix** **F.P1.28**  
Thairine Silva Araújo<sup>1</sup>, Patrícia Mariana Alves Caetano<sup>1</sup>, Adriana Silva de Albuquerque<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>, José Domingos Ardisson<sup>1</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 17:45 Synthesis of nanostructured semiconductor materials: the study of local structure and correlation with the photoluminescence of ZnS, Zn<sub>1-x</sub>Cu<sub>x</sub>S and Zn<sub>1-x</sub>Mn<sub>x</sub>S** **F.P1.29**  
Ana Laura Curcio<sup>1</sup>, Ariano De Giovanni Rodrigues<sup>2</sup>, Alexandre Mesquita<sup>3</sup>, Maria Ines Basso Bernardi<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>3</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>4</sup>Instituto de Física de São Carlos - Universidade de São Paulo
- 17:45 Layers decoration on FIB cross-sections using XeF<sub>2</sub> delineation etch** **F.P1.30**  
Ronald Tararam<sup>1</sup>, Saulo Jacobsen<sup>1</sup>, Emmanuel Petitprez<sup>1</sup>, Cristiano Krug<sup>2</sup>, Artur Coelho<sup>1</sup>, Marcelo Lubaszewski<sup>1</sup>; <sup>1</sup>Centro Nacional de Tecnologia Eletrônica Avançada, <sup>2</sup>Universidade Federal do Rio Grande do Sul

- 17:45 Ceria nanowires fabricated by electrospinning** **F.P1.31**  
Renato Fernando Caron<sup>1</sup>, Bruno M. Serafim<sup>1</sup>, Cyro K. Saul<sup>1</sup>, Ney Mattoso<sup>1</sup>,  
 Evaldo Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Influence of addition of silica fume in concrete compressive resistance and its microstructure** **F.P1.32**  
Hygor Andrew da Silva<sup>1</sup>, Elton José Pereira Felix<sup>1</sup>, Alexandre Cunha Machado<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas
- 17:45 Characterization of films formed on zinc surface by immersion in oxalic acid solutions and their effect on the corrosion resistance** **F.P1.33**  
 Marcelo de oliveira<sup>1</sup>, Isolda Costa<sup>1</sup>, Jesualdo Luiz Rossi<sup>1</sup>, José Mário Ferreira Júnior<sup>1</sup>; <sup>1</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 17:45 Dynamic force scanning probe microscopy: Jumping from attractive to repulsive tip/surface interaction** **F.P1.34**  
Evandro Martin Lanzoni<sup>1</sup>, Christoph Deneke<sup>1</sup>, Carlos Alberto Costa<sup>1</sup>; <sup>1</sup>Brazilian Nanotechnology National Laboratory
- 17:45 Structural characterization and temperature effects of the nanostructured SnTe** **F.P1.35**  
Zeane Vieira Borges<sup>1</sup>, Claudio Michel Poffo<sup>1</sup>, João Cardoso de Lima<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Santa Catarina
- 17:45 Luminescent Properties and short-range structure of Mg-doped ZnO nanoparticles** **F.P1.36**  
 Rodrigo Cury de Oliveira<sup>1</sup>, Maria Inês Basso Bernardi<sup>2</sup>, Alexandre Mesquita<sup>1</sup>;  
<sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Instituto de Física de São Carlos - USP
- 17:45 Development of polymer matrix composites reinforced by stalk palm fiber.** **F.P1.37**  
Edwillson Gonçalves de Oliveira Filho<sup>1</sup>, Domingos Sávio Tavares Mendes Júnior<sup>2</sup>, Fábio Santos de Sousa<sup>1</sup>, Luciano Monteiro Almeida<sup>2</sup>, Jair Francisco Souza Magalhães<sup>2</sup>, César Tadeu Nasser Medeiros Branco<sup>2</sup>, José Maria Braga Pinto<sup>1</sup>, Ailton da Silva Nascimento<sup>2</sup>, Jean Silva Rodrigues<sup>1</sup>, Roberto Tetsuo Fujiyama<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará, <sup>2</sup>Universidade Federal do Pará
- 17:45 Determining temperatures of relaxation processes  $\gamma$ ,  $\beta$  and  $\alpha$  of the polypropylene and polyethylene by Raman Spectroscopy** **F.P1.38**  
 Durval Bertoldo Menezes<sup>1,2</sup>, Andreas Reyer<sup>2</sup>, Fernando Costa Basilio<sup>3</sup>, Alexandre Marletta<sup>3</sup>, Maurizio Musso<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Triângulo Mineiro, <sup>2</sup>Universität Salzburg, <sup>3</sup>Universidade Federal de Uberlândia
- 17:45 Fluorescence spectroscopy and UV-VIS absorption applied to water quality evaluation** **F.P1.39**  
 Carolina de Sena Madureira Figueiró<sup>1</sup>, Seila Rojas de Souza<sup>1</sup>, Márcia Regina Russo<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal da Grande Dourados
- 17:45 HRTEM of Amorphous and Crystalline Bi Nanoparticles Prepared by Pulsed Laser Deposition** **F.P1.40**  
L. Y. LIU<sup>1</sup>, Y. T. Xing<sup>2</sup>, D. F. Franceschini<sup>2</sup>, I. G. Solórzano<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Universidade Federal Fluminense

- 17:45 Study of corrosion rate in steel AISI 1020 submitted to thermal degradation in brazilians oils** **F.P1.41**  
Eliane Valéria de Barros<sup>1,2</sup>, Heloisa Pinto Dias<sup>2</sup>, Wanderson Romão<sup>1,2</sup>, Alexandre Oliveira Gomes<sup>3</sup>, Robson Rodrigues Moura<sup>3</sup>, Gloria Maria Farias Viegas Aquije<sup>1</sup>, Pedro Vitor Morbach Dixini<sup>1,2</sup>, Debora Domingos Cavaglieri<sup>1</sup>;  
<sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Universidade Federal do Espírito Santo, <sup>3</sup>Petrobras
- 17:45 Glass and glass ceramic of niobium phosphate** **F.P1.42**  
Brenno Luigi de Pastena<sup>1</sup>, Bruno Oliveira Thomazini<sup>1</sup>, Jorge Henrique da Silva Araújo<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 17:45 Production of CeO<sub>2</sub> thin films by modified spray pyrolysis** **F.P1.43**  
Paula Kekes Aal<sup>1</sup>, Ana Lúcia Ferreira<sup>2</sup>, Thiago Gomes da Silva<sup>1</sup>, Edilson Silveira<sup>1</sup>, Evaldo Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Assessing electronic states of InAsP/GaAs self-assembled quantum dots by photoluminescence** **F.P1.44**  
Rafaela Moos<sup>1</sup>, Igor Konieczniak<sup>1</sup>, Graciely Elias dos Santos<sup>1</sup>, Angelo Luiz Gobbi<sup>2</sup>, Ayrton André Bernussi<sup>3</sup>, Wilson Carvalho Jr.<sup>4</sup>, Gilberto Medeiros Ribeiro<sup>5</sup>, Evaldo Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Brazilian Nanotechnology National Laboratory, <sup>3</sup>Texas Tech University, <sup>4</sup>BR Photonics, <sup>5</sup>Universidade Federal de Minas Gerais
- 17:45 Optical characterization and photoacoustic effects of the nanostructured SnTe** **F.P1.45**  
Zeane Vieira Borges<sup>1</sup>, Claudio Michel Poffo<sup>1</sup>, João Cardoso de Lima<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Santa Catarina
- 17:45 Quartz crystal oscillators as atomic force microscopy sensors** **F.P1.46**  
Felipe Ptak Lemos<sup>1</sup>, Paula Caldas<sup>1</sup>, Rodrigo Prioli Menezes<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 17:45 Characterization of PtPd Bimetallic Nanoparticles through MEIS and STEM techniques** **F.P1.47**  
Vagner Zeizer Carvalho Paes<sup>1</sup>, Marcus Vinicius Castegnaro<sup>1</sup>, Daniel Lorscheitter Baptista<sup>1</sup>, Pedro Luis Grande<sup>1</sup>, Jonder Moraes<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 QUATI: time-resolved XAS beamline at SIRIUS** **F.P1.48**  
Santiago J. A. Figueroa<sup>1</sup>, Daniela Coelho de Oliveira<sup>1</sup>, Amelie Rochet<sup>1</sup>, Junior Cintra Mauricio<sup>1</sup>, Carlos Doro Neto<sup>1</sup>, Anna Paula S. Levinsky<sup>1</sup>, Harry Westfahl Jr<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials
- 17:45 Short-range structure and photoluminescent properties of the CaTiO<sub>3</sub>:Pr,La and SrTiO<sub>3</sub>:Pr,La phosphors** **F.P1.49**  
 Guilherme Kubo Ribeiro<sup>1</sup>, Lucas Angelini Deltreggia<sup>1</sup>, Fábio Simões de Vicente<sup>1</sup>, Maria Inês Basso Bernardi<sup>2</sup>, Alexandre Mesquita<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Instituto de Física de São Carlos - USP
- 17:45 Table top femtosecond x-ray source for time resolved x-ray diffraction experiments** **F.P1.50**  
George Nicolas Kontogiorgos<sup>1</sup>, Carlos Manuel Giles<sup>1</sup>, Carlos William Galdino<sup>1</sup>;  
<sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP

- 17:45 Development of a SAXS Equipment for the Nanomaterials Characterization** **F.P1.51**  
Rauni Coelho Costa<sup>1</sup>, José Brant de Campos<sup>1</sup>, Jorge Luis Machado Amaral<sup>1</sup>, Herman Pessoa Lima Júnior<sup>2</sup>, Rodrigo Felix Cardoso<sup>1,2</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas
- 17:45 High temperature stability of photocatalytic SiO<sub>2</sub>@TiO<sub>2</sub> coating to self-cleaning treatments on ceramic tiles surfaces.** **F.P1.52**  
Jean Mimar Santa Cruz Yabarrena<sup>1</sup>, Vitor Pires Martinez<sup>1</sup>, Elias Paiva Ferreira Neto<sup>1</sup>, Ubirajara Pereira Rodrigues Filho<sup>1</sup>, Sajjad Ullah; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo
- 17:45 The study of concrete compressive strength exposed to high temperatures and the heat effects on its microstructure.** **F.P1.53**  
Raphaell Willian Myzaell dos Santos<sup>1</sup>, Alexandre Cunha Machado<sup>1</sup>, Manoel Martins Filho<sup>1</sup>, Jorge Luís Lauriano Gama<sup>1</sup>; <sup>1</sup>Instituto Federal De Alagoas
- 17:45 Structural characteristics of silica gels by Light Scattering** **F.P1.54**  
Bruna Patrocínio Lima<sup>1</sup>, Dario Antonio Donatti<sup>1</sup>, Fábio Simões de Vicente<sup>1</sup>, Dimas Roberto Vollet<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista- Campus Rio Claro
- 17:45 Study of Cadmium fixation on nanocomposite Mn<sub>3</sub>O<sub>4</sub> / Fe<sub>3</sub>O<sub>4</sub> used in environmental remediation.** **F.P1.55**  
Ildebrando Freires de Brito<sup>1</sup>, Isabel Souza Dinola<sup>1</sup>, Fernando Loureiro Stavale<sup>2</sup>, Gabriela Cordeiro Silva<sup>3</sup>, Ana Pacheli Heitmann Rodrigues<sup>4</sup>, Angela de Mello Ferreira<sup>5</sup>; <sup>1</sup>Instituto de Ensino Superior Fucapi, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas, <sup>3</sup>Pontifícia Universidade Católica de Minas Gerais, <sup>4</sup>Universidade Federal de Minas Gerais, <sup>5</sup>Centro Federal de Educação Tecnológica de Minas Gerais
- 17:45 Development based on microcantilever biosensor for detection of ethanol.** **F.P1.56**  
Paulo Sergio de Paula Herrmann Jr<sup>1,2</sup>, Alexandre Margarido<sup>3,2</sup>, Fernando M. Araujo Moreira<sup>3</sup>, Renato V. Gonçalves<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>4</sup>Institute of Physics of São Carlos
- 17:45 Stress relaxation at temperatures well below T<sub>g</sub>** **F.P1.57**  
Rodrigo Cardoso dos Passos<sup>1</sup>, Daniel Roberto Cassar<sup>1</sup>, Edgar Dutra Zanotto<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 17:45 Mechanical properties of polymer composites reinforced by unidirectional fibers of buçú palm** **F.P1.58**  
Igor dos Santos Gomes<sup>1</sup>, Rodolfo Franco de Moraes Pantoja<sup>1</sup>, César Tadeu Nasser Medeiros Branco<sup>1</sup>, Roberto Tetsuo Fujiyama<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 17:45 Influence of the surface microchemical environment on the surface-assembling and stability of AgNPs: a large length-scale assessment** **F.P1.59**  
Francisco de Assis Sousa<sup>1</sup>, Victor Teixeira Noronha<sup>1</sup>, Amauri Jardim de Paula<sup>1</sup>, Antonio Gomes Souza Filho<sup>1</sup>, Cristiane A Silva<sup>2</sup>, Francisco Afrânio Cunha<sup>1</sup>, Pierre Basílio Almeida Fachine<sup>1</sup>, Terezinha Feitosa Machado<sup>3</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>Brazilian Nanotechnology National Laboratory, <sup>3</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Physico-chemical and mineralogical characterization of fiber-cement materials for construction industry in Colombia** **F.P1.60**  
Martin Eduardo Espitia<sup>1</sup>, Andrés Mauricio Muñoz Garcia<sup>2</sup>, Henry Yesid Bustos<sup>1</sup>, Adriana Blandon<sup>1</sup>, Edgar Monroy<sup>1</sup>, Fredy Niño<sup>1</sup>; <sup>1</sup>Corporación Universitaria Minuto de Dios, <sup>2</sup>Instituto Tecnológico Metropolitano

- 17:45 Potential application of nickel and cobalt ferrites in amoxicillin adsorption** **F.P1.61**  
Patrícia Mariana Alves Caetano<sup>1</sup>, Thairine Silva Araújo<sup>1</sup>, Paula Sevenini Pinto<sup>2</sup>,  
 Adriana Silva de Albuquerque<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2</sup>, Waldemar  
 Augusto de Almeida Macedo<sup>1</sup>, José Domingos Ardisson<sup>1</sup>; <sup>1</sup>Centro de  
 Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas  
 Gerais
- 17:45 Morphology, surface potential and defects formation in ZnO nanostructures grown under different pressure conditions** **F.P1.62**  
Bruno Caldas Coelho<sup>1</sup>, Rafael Vieira Perrella<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Thalita  
 Chiaramonte<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Microtubes TiO<sub>2</sub> photocatalytic produced by the technique of Solution Blow Spinning** **F.P1.63**  
Tiago Cesar Gimenes<sup>1</sup>, Fernando Rogério de Paula<sup>1</sup>, Edna Regina Spada<sup>2</sup>;  
<sup>1</sup>Universidade Estadual Paulista, Campus de Ilha Solteira, <sup>2</sup>Universidade de São  
 Paulo
- 17:45 The Coherent X-ray Nanoprobe Beamline (CARNAUBA) for the Sirius storage ring: an X-ray microscope** **F.P1.64**  
Hélio C. N. Tolentino<sup>1</sup>, Márcio Medeiros Soares<sup>1</sup>, Carlos Alberto Pérez<sup>1</sup>, Flavio  
 Cesar Vicentin<sup>1</sup>, Douglas Galante<sup>1</sup>, Veronica de Carvalho Teixeira<sup>1</sup>, Dalton  
 Abdala<sup>1</sup>, Harry Westfahl Jr<sup>1</sup>; <sup>1</sup>Laboratório Nacional de Luz Síncrotron
- 17:45 Graphene-assisted formation of ordered platinum patterns by self-assembly on SiO<sub>2</sub> substrate** **F.P1.65**  
Ana Carolina Ribeiro Figueiredo<sup>1</sup>, Y. T. Xing<sup>1</sup>, Dante Ferreira Franceschini  
 Filho<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 17:45 Scanning electron microscopy characterization of 2G HTS type** **F.P1.66**  
Lia Souza Coelho<sup>1</sup>, Antonio Renato Bigansolli<sup>1</sup>, Durval Rodrigues Jr.<sup>2</sup>;  
<sup>1</sup>Universidade Federal Rural do Rio de Janeiro, <sup>2</sup>Universidade de São Paulo -  
 Escola Engenharia Lorena
- 17:45 Characterization and properties of ballistic materials for body armor systems** **F.P1.67**  
Iaci Miranda Pereira<sup>1</sup>, Viviane Vivas<sup>1</sup>; <sup>1</sup>Centro Tecnológico do Exército
- 17:45 Photocatalytic and bactericidal potentials of Ag nanoparticles on Ag<sub>3</sub>PO<sub>4</sub>** **F.P1.68**  
Leandro Silva Matos<sup>1</sup>, Gleice Botelho<sup>1</sup>, Wyllamanny da Silva Pereira<sup>1</sup>, Elson  
 Longo<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Instituto  
 de Química de Araraquara/UNESP
- 17:45 Determining glass transition temperature of the polystyrene by Raman spectroscopy** **F.P1.69**  
 Durval Bertoldo Menezes<sup>1,2</sup>, Andreas Reyer<sup>2</sup>, Paulo Alliprandini Filho<sup>3</sup>,  
 Maurizio Musso<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do  
 Triângulo Mineiro, <sup>2</sup>Universität Salzburg, <sup>3</sup>Universidade Federal dos Vales do  
 Jequitinhonha E Mucuri
- 17:45 Nanogels of the polypropylene modified by gamma irradiation and incorporation of AgNPs biocide** **F.P1.70**  
Washington Luiz Oliani<sup>1</sup>, Luiz Gustavo Hiroki Komatsu<sup>1</sup>, Ademar Benévolo  
 Lugão<sup>1</sup>, Duclerc Fernandes Parra<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e  
 Nucleares
- 17:45 Mesocrystals Luminescent BaZrHfO<sub>3</sub> Synthesized Via Hydrothermal Process Assisted by Microwave** **F.P1.71**  
Rafael Uarth Fassbender

- 17:45 Electron Backscattering Diffraction analysis Direct Metal Laser Sintering Stainless Steel F.P1.72**  
C. Labre<sup>1</sup>, A. L. Pinto<sup>2</sup>, I. G. Solórzano<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Centro Brasileiro de Pesquisas Físicas
- 17:45 Concrete microstructure study with emphasis on interfacial transition zone F.P1.73**  
Maryanna Nobre Cavalcante<sup>1</sup>, Rodrigo Mero Sarmiento da Silva<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas
- 17:45 Computational determination of silver nanowires morphology from electron microscopy images F.P1.74**  
Cristiano Jaeger Stradolini<sup>1</sup>, Sandro Fernandes Firmino<sup>1</sup>, Gabriela Pasa Panesso<sup>1</sup>, Raquel Silva Thomaz<sup>1</sup>, Pedro Migowski<sup>1</sup>, Ana Maria Marques<sup>1</sup>, Adriano F. Feil<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul
- 17:45 Crystalline zinc oxide thin films deposited on glass substrates at low temperatures F.P1.75**  
Jose Ulian Cardoso Almeida<sup>1</sup>, Alex Vinicius Souza Araújo<sup>1</sup>, Marcelo Bento Pisani<sup>1</sup>; <sup>1</sup>Universidade Estadual de Santa Cruz



# **SYMPOSIUM G - Applications of Neutrons to Materials Research**

**Symposium organizers:**

Eduardo Granado (*IFGW-UNICAMP*)  
Elisa Baggio-Saitovitch (*CBPF*)  
Cristiano Luis Pinto de Oliveira (*IF-USP*)  
Paulo F. P. Fichtner (*UFRGS*)



# Wednesday, September 28<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION G.OR1 (09:45 - 10:45) - Room Jacarandá*

- 09:45 Working with the world's biggest microscope** **G.OR1.1\***  
Heloisa N. Bordallo<sup>1,2</sup>; <sup>1</sup>University of Copenhagen / Københavns Universitet,  
<sup>2</sup>European Spallation Source ERIC
- 10:15 Neutron Studies of the Magnetic Properties of Superconductors** **G.OR1.2\***  
Jeffrey W Lynn<sup>1</sup>; <sup>1</sup>National Institute of Standards and Technology

### *SESSION G.OR2 (11:15 - 12:00) - Room Jacarandá*

- 11:15 RMB: the new brazilian multipurpose research reactor** **G.OR2.3\***  
Jose Augusto Perrotta<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares
- 11:45 Quasi-elastic and Inelastic Neutron Scattering: Revealing confined liquid dynamics in dental cements**  
Marcella Cabrera Berg<sup>1</sup>, Heloisa N. Bordallo, Ana Raquel Benetti; <sup>1</sup>University of Copenhagen / Københavns Universitet

### *SESSION G.OR3 (14:00 - 16:15) - Room Jacarandá*

- 14:00 The European Spallation Source: A Source for Discovery** **G.OR3.5\***  
Dimitri Argyriou<sup>1</sup>; <sup>1</sup>European Spallation Source ERIC
- 14:30 Modeling a State of the Art Neutron User Program at the Brazilian Multipurpose Reactor (RMB)** **G.OR3.6\***  
Juscelino B. Leão<sup>1</sup>; <sup>1</sup>National Institute of Standards and Technology
- 15:00 Neutron Imaging – an advanced neutron scattering tool with real space resolution** **G.OR3.7**  
Markus Strobl<sup>1</sup>; <sup>1</sup>University of Copenhagen / Københavns Universitet
- 15:15 Neutron tomography at IPEN-CNEN/SP: images and applications** **G.OR3.8\***  
Reynaldo Pugliesi<sup>1</sup>, Marco Antonio Stanojev Pereira<sup>1</sup>, Marcos Leandro Garcia Andrade<sup>1</sup>; <sup>1</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 15:45 TEM Studies of Ion Irradiated Materials Using the MIAMI\* Facility at the University of Huddersfield** **G.OR3.9\***  
Steve Donnelly<sup>1</sup>, J. A. Hinks<sup>1</sup>, G. Greaves<sup>1</sup>; <sup>1</sup>University of Huddersfield

## Poster presentations

**SESSION G.P1 (17:45 - 19:30)**

- 17:45 Spin Dynamics and Correlations in the quasi-FCC Frustrated Antiferromagnetic Sr<sub>2</sub>YRuO<sub>6</sub> G.P1.1**  
Eduardo Granado<sup>1</sup>, Steven M. Disseler<sup>2</sup>, Jeffrey W. Lynn<sup>2</sup>, Renato F. Jardim<sup>3</sup>, Milton S. Torikachvili<sup>4</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>National Institute of Standards and Technology, <sup>3</sup>Instituto de Física da Universidade de São Paulo, <sup>4</sup>San Diego State University
- 17:45 Influence of a noble gas layer for enhancing precipitation coarsening induced by irradiation in an austenitic stainless steel for nuclear applications G.P1.3**  
Ítalo Martins Oyarzabal<sup>1</sup>, Mariana de Mello Timm<sup>1</sup>, Willian Martins Pasini<sup>1</sup>, Franciele Silva Mendes de Oliveira<sup>1</sup>, Francine Tatsch<sup>1</sup>, Livio Amaral<sup>1</sup>, F. C. Zawislak<sup>1</sup>, Paulo F. P. Fichtner<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Effect of electric field in the characterization of pultruded GFRP boron-free composite insulator for the extra high voltage by the ionizing radiation G.P1.4**  
Hissae Fujiwara<sup>1</sup>, Gustavo José Vasconcelos Xavier<sup>2</sup>, Edmilson José Silva Júnior<sup>1</sup>, Armando Hideki Shinohara<sup>1</sup>, Edson Guedes Costa<sup>3</sup>, Henrique Batista Duffles Teixeira Lott Neto<sup>4</sup>, Paulo Roberto Ranzan Britto<sup>4</sup>, Márcio A. B. Fontan<sup>4</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Aposentado pela CHESF, <sup>3</sup>Universidade Federal de Campina Grande, <sup>4</sup>Sistema de Transmissão do Nordeste SA
- 17:45 Changes of confinement of intracellular water lead to changes of thermal properties of cancer cells G.P1.5**  
Murillo Longo Martins<sup>1</sup>, Alexander B. Dinitzen<sup>1</sup>, Rasmus Hartmann-Petersen<sup>1</sup>, Svemir Rudic<sup>2</sup>, Heloisa N. Bordallo<sup>1</sup>; <sup>1</sup>University of Copenhagen / Københavns Universitet, <sup>2</sup>ISIS Facility
- 17:45 Structural and magnetic properties of Ca<sub>2</sub>MnReO<sub>6</sub> as a function of temperature: High intensity and High resolution measurements. G.P1.6**  
MARCOS TADEU D ORLANDO ORLANDO<sup>1</sup>, Eduardo Granado<sup>2</sup>, Arthur Sant'Ana Cavichini<sup>1</sup>, Janaina Bastos Depianti<sup>1</sup>, Jose Luis Passamai Jr<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Gamma and Neutron Detection of Un-doped and Doped (Eu, Dy, B) Calcium Silicate Polycrystal G.P1.7**  
Carlos David Gonzales Lorenzo<sup>1</sup>, Shiguo Watanabe<sup>1</sup>, Roseli Fernandes Gennari<sup>1</sup>, Camen Cecilia Bueno<sup>2</sup>, Nilo Francisco Cano<sup>3</sup>; <sup>1</sup>Instituto de Física-USP, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>3</sup>UNIVERSIDADE FEDERAL DE SÃO PAULO - Campus Baixada Santista

# **SYMPOSIUM H - From atomistic to multiscale modeling: new developments and applications in Materials Science**

## **Symposium organizers:**

Alexandre Fontes da Fonseca (*Unicamp*)

Marília J. Caldas (*USP*)

Pedro Venezuela (*UFF*)

Paulo Cesar Piquini (*UFESM*)



# Wednesday, September 28<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION H.OR1 (09:45 - 10:45) - Room Seringueira*

- 09:45 The physics of excess electrons at the interface of complex oxides H.OR1.1\***  
Anderson Janotti<sup>1</sup>; <sup>1</sup>University of Delaware
- 10:15 The role of metallic contacts in the degradation of TlBr Radiation Detectors H.OR1.2**  
Cedric Rocha Leão<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 10:30 Theoretical investigation of the hydrated Na-montmorillonite structure and its dehydration process H.OR1.3**  
Carla Grijó Fonseca<sup>1</sup>, Viviane da Silva Vaiss<sup>1</sup>, Fernando Wypych<sup>2</sup>, Renata Diniz<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Universidade Federal do Paraná

### *SESSION H.OR2 (11:15 - 12:00) - Room Seringueira*

- 11:15 Multiferroic order and phase transitions in two-dimensional materials H.OR2.4\***  
Leandro Seixas Rocha<sup>1,2</sup>, Aleksandr S. Rodin<sup>2</sup>, Alexandra Carvalho<sup>2</sup>, Antonio Helio Neto<sup>2</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>National University of Singapore
- 11:45 MaX - MAterials design at the eXascale: a European centre of excellence H.OR2.5**  
Andrea Ferretti<sup>1</sup>; <sup>1</sup>CNR-Nano

### *SESSION H.OR3 (14:00 - 16:15) - Room Seringueira*

- 14:00 Progress and challenges in the Flatland beyond graphene H.OR3.6\***  
Roberto Rivelino<sup>1</sup>; <sup>1</sup>Universidade Federal da Bahia
- 14:30 Conformational Study of the Interaction between the Sulfate and the Graphene Sheets H.OR3.7**  
João Paulo Almeida de Mendonça<sup>1</sup>, Alessandro Henrique de Lima<sup>1</sup>, Georgia Maria Amaral Junqueira<sup>1</sup>, Welber Gianini Quirino<sup>1</sup>, Maikel Yusat Ballester Furones<sup>1</sup>, Fernando Sato<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 14:45 Molecular dynamics of xylan-cellulose interactions H.OR3.8**  
Caroline Simoes Pereira<sup>1</sup>, Rodrigo Leandro Silveira<sup>1</sup>, Munir Salomao Skaf<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 15:00 Thermodynamics of crystalline cellulose aggregation H.OR3.9**  
Rodrigo Leandro Silveira<sup>1</sup>, Munir Salomao Skaf<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 15:15 Molecular dynamics simulations of functionalized nanoparticles in aqueous solutions H.OR3.10**  
Oscar Samuel Cajahuaranga Macollunco<sup>1</sup>, Caetano Rodrigues Miranda<sup>1</sup>; <sup>1</sup>Instituto de Física-USP

- 15:30 Nanomechanotaxis: Curvature Driven Motion at Nanoscale** **H.OR3.11**  
Leonardo Dantas Machado<sup>1</sup>, Nicola Pugno<sup>2</sup>, Davide Bigoni<sup>2</sup>, Francesco Dal Corso<sup>2</sup>, Douglas Soares Galvão<sup>3</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Università degli Studi di Trento, <sup>3</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 15:45 Parallel Green's functions molecular dynamics for materials science simulations** **H.OR3.12**  
Fábio Andrijauskas<sup>1</sup>, Vitor Rafael Coluci<sup>1</sup>; <sup>1</sup>School of Technology, UNICAMP, Limeira-SP, Brazil
- 16:00 Modelling of the Irradiation of a Nanoporous Iron Target** **H.OR3.13**  
Lucio Flavio dos Santos Rosa<sup>1</sup>, Roger Webb; <sup>1</sup>University of Surrey

## Poster presentations

### *SESSION H.P1 (17:45 - 19:30)*

- 17:45 Ab Initio Study of Layered Double Hydroxides Containing Iron and Its Potential Use as Fertilizer** **H.P1.1**  
Pedro Ivo Rodrigues Moraes<sup>1</sup>, Sergio Rodrigues Tavares<sup>1</sup>, Viviane da Silva Vaiss<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Density Functional Theory calculations and comparison of Gemfibrozil dimer structure with experimental single-crystal X-ray results.** **H.P1.2**  
Aguinaldo Robinson de Souza<sup>1</sup>, Gilbert Bannach<sup>1</sup>, Bruno Barreto da Cunha Holanda<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru
- 17:45 Comparison of two structural models of zeolite A by ab initio calculations** **H.P1.3**  
Viviane da Silva Vaiss<sup>1</sup>, Florence Pereira Novais Antunes<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Characterization of miltefosine-loaded pluronic F127 polymeric micelles** **H.P1.4**  
Johanna Valenzuela Osés<sup>1</sup>, Valker Araujo Feitosa<sup>1</sup>, Mónica Cristina García<sup>2</sup>, Carlota Oliveira Rangel Yagui<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidad Nacional de Cordoba
- 17:45 Ab initio simulations of the intercalation of iron(III) porphyrinates in Zn<sub>2</sub>Al-LDH and LHS containing zinc: evaluation of their basic and acid sites.** **H.P1.5**  
Sergio Rodrigues Tavares<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>, Fernando Wypych<sup>2</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Universidade Federal do Paraná
- 17:45 DFT investigation of the intercalation of dodecyl sulfate (DDS) and dodecylbenzene sulfonate (DBS) in layered zinc hydroxide salts (LHS) and Zn-Al layered double hydroxides (LDH).** **H.P1.6**  
Sergio Rodrigues Tavares<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>, Fernando Wypych<sup>2</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Universidade Federal do Paraná
- 17:45 Theoretical and computational study of materials in the shallow layer by geophysical methods, support for safe construction in Colombia and monitoring of housing** **H.P1.7**  
Andrés Mauricio Muñoz Garcia<sup>1</sup>, Martin Eduardo Espitia<sup>1</sup>, Henry Yesid Bustos<sup>1</sup>, Edgar Monrroy<sup>1</sup>; <sup>1</sup>Corporación Universitaria Minuto de Dios
- 17:45 Model based process window for FSW of AA7075-T6** **H.P1.8**  
Elizabeth Hoyos<sup>1</sup>, Diana María López<sup>2</sup>, Juan Jose Toro<sup>2</sup>, Yesid Montoya<sup>1</sup>; <sup>1</sup>Universidad EIA, <sup>2</sup>Universidad Nacional de Colombia

- 17:45 Elaboration and Structural Study of hydrotalcite-like Compounds with interlayer phosphate anion** **H.P1.9**  
Juliana Fischer Haddad<sup>1</sup>, Pedro Ivo Rodrigues Moraes<sup>1</sup>, Sergio Rodrigues Tavares<sup>1</sup>, Florence Pereira Novais Antunes<sup>1</sup>, Gustavo Senra Gonçalves de Carvalho<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Numerical and experimental thermal analysis of an aluminum alloy solidified in unidimensional upward device** **H.P1.10**  
Gianfranco de Mello Stieven<sup>1</sup>, Daniele dos Reis Soares<sup>1</sup>, Edilma Pereira Oliveira<sup>2</sup>, Erb Ferreira Lins<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Universidade Federal do Sul e Sudeste do Pará
- 17:45 Mechanical and thermal stability of  $\alpha$ ,  $\beta$ , and  $\delta$  graphyne nanoscrolls** **H.P1.11**  
Daniel Alejandro Solis<sup>1</sup>, Cristiano Francisco Woellner<sup>1</sup>, Daiane Damasceno Borges<sup>1</sup>, Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 17:45 Negative Thermal Expansion of Graphynes and Graphdiynes** **H.P1.12**  
Sergio Andres Hernandez<sup>1</sup>, Alexandre Fontes da Fonseca<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Experimental (FTIR) and DFT Study on (1:1) Cocrystal of gemfibrozil with some cofomers.** **H.P1.13**  
Aguinaldo Robinson de Souza<sup>1</sup>, Gilbert Bannach<sup>1</sup>, Bruno Barreto da Cunha Holanda<sup>2</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>Science and Technology of Materials
- 17:45 Theoretical Evaluation of Excited-State Optical Absorption of Conjugated Oligomers and Polymers** **H.P1.14**  
Eliézer Fernando Oliveira<sup>1</sup>, Begoña Milián-Medina<sup>2</sup>, Francisco Carlos Lavarda<sup>1</sup>, Johannes Gierschner<sup>3</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>University of Valencia, <sup>3</sup>Institute for Advanced Studies in Nanoscience
- 17:45 Ab initio calculations of the physicochemical properties of the compound montmorillonite (MMT)** **H.P1.15**  
Camila Raiane Ferreira<sup>1</sup>, Sandra Helena Pulcinelli<sup>1</sup>, Pablo D. Borges<sup>2</sup>, Celso Valentim Santilli<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Fundação Universidade Federal de Viçosa
- 17:45 The Role of the Alkali Metals on the Formation of Layered Chalcogenides Structures: The Example of Quaternary  $A_2M^II M^IV_3Q_8$  Compounds** **H.P1.16**  
Rafael Besse<sup>1</sup>, Juarez L. F. Da Silva<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos, <sup>2</sup>Instituto de Química de São Carlos
- 17:45 Computational screening method for forecasting the efficiencies of polymer solar cells** **H.P1.17**  
Cristiano Zanlorenzi<sup>1</sup>, Gabriela Martinez<sup>2</sup>, Leni Akcelrud<sup>2</sup>, Roberto Mendonça Faria<sup>3</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Universidade Federal do Paraná, <sup>3</sup>Universidade de São Paulo
- 17:45 PbSe as a topological crystalline insulator** **H.P1.18**  
Ernesto Osvaldo Wrasse<sup>1</sup>, Augusto Lelis Araujo<sup>2</sup>, Tomé Mauro Schmidt<sup>2</sup>, Gerson Ferreira Junior<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Federal de Uberlândia
- 17:45 Illustrative implementation of Langevin dynamics in the isothermal-isobaric ensemble** **H.P1.19**  
Oscar Samuel Cajahuaringa Macollunco<sup>1</sup>, Alex Antonelli<sup>2</sup>; <sup>1</sup>Instituto de Física-USP, <sup>2</sup>Instituto de Física "Gleb Wataghin"

- 17:45 Theoretical study of TiO<sub>2</sub> doped for use in photocatalysis: optical absorption and band gap calculations using density functional theory** **H.P1.20**  
Greice Kelly dos Santos Brito<sup>1</sup>, Paulo José Pereira de Oliveira<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo/Campus Cachoeiro
- 17:45 Theoretical study of the properties of molybdenite and graphite with different functional applications: structural, elastic, energetic, thermodynamic and vibrational analyses** **H.P1.21**  
Florence Pereira Novais Antunes<sup>1</sup>, Sergio Rodrigues Tavares<sup>1</sup>, Viviane da Silva Vaiss<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Comparative Theoretical and Experimental Study of the polymorphs of NaNbO<sub>3</sub>.** **H.P1.22**  
Bruna Nádia Neves da Silva<sup>1</sup>, Florence Pereira Novais Antunes<sup>1</sup>, Gustavo Senra Gonçalves de Carvalho<sup>1</sup>, Maurício Antonio Pereira da Silva<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Local environment structure and dynamics of CO<sub>2</sub> in the ionic liquid 1-ethyl-3-methylimidazolium bis(trifluoromethanesulfonyl)imide** **H.P1.23**  
Tuanan da Costa Lourenço<sup>1</sup>, Luciano Tavares da Costa<sup>1</sup>, Gabriela de Carvalho Costa<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 17:45 Theoretical study of metal-organic framework IRMOF-1 and molecules from industrial gas stream** **H.P1.24**  
 Gabriela de Carvalho Costa<sup>1</sup>, Tuanan da Costa Lourenço<sup>1</sup>, Luciano Tavares da Costa<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 17:45 Structure and Dynamics of Poly(urethane-urea) from Molecular Dynamics Simulations** **H.P1.25**  
Flávia Cristina Assis Silva<sup>1</sup>, Rodrigo Azevedo Reis<sup>1</sup>, Luciano Tavares da Costa<sup>2</sup>; <sup>1</sup>Universidade do Estado do Rio de Janeiro, <sup>2</sup>Universidade Federal Fluminense
- 17:45 DFT studies of tetracationic 5,10,15,20-tetrakis(1-methyl4-pyridyl)-21H,23H porphyrin** **H.P1.26**  
Eduardo Diaz Suarez<sup>1</sup>, Danilo Castro Pereira<sup>2</sup>, Filipe Camargo Dalmatti Alves Lima<sup>1</sup>, Vera Regina Leopoldo Constantino<sup>2</sup>, Helena Maria Petrilli<sup>1</sup>; <sup>1</sup>Instituto de Física-USP, <sup>2</sup>Instituto de Química - USP
- 17:45 Thermal properties of graphene oxide/boron nitride composites** **H.P1.27**  
Marcelo Augusto Ferreira<sup>1</sup>, Cristiano Francisco Woellner<sup>1</sup>, Pedro Alves da Silva Autreto<sup>2</sup>, Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>2</sup>Universidade Federal do ABC
- 17:45 Free Energy of Solvation of Carbon Nanotubes in the Pyridinium-Based Ionic Liquids** **H.P1.28**  
Eudes Eterno Fileti<sup>1</sup>, Vitaly V. Chaban<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Hexagonal array of nickel nanotubes: static and dynamic analysis as a function of geometric parameters** **H.P1.29**  
 jandrews lins gomes<sup>1</sup>, Yuset Guerra Dávila<sup>1</sup>, Ramón Raudel Peña Garcia<sup>1</sup>, Ariel Delgado del Toro<sup>1</sup>, Frederico Alves Revoredo Júnior<sup>1</sup>, Ialy Fernanda Gonzaga Martins<sup>1</sup>, Eduardo Padrón Hernández<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco

- 17:45 Molecular modeling and electrochemical investigation of the sulfamethazine oxidation mechanism on electrode based on reduced graphene and gold nanoparticles** **H.P1.30**  
 Ivana Cesarino<sup>1</sup>, Rafael Plana Simões<sup>1</sup>, Francisco Carlos Lavarda<sup>2</sup>, Augusto Batagin Neto<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Faculdade de Ciências/Bauru, <sup>3</sup>Universidade Estadual Paulista - Campus Itapeva
- 17:45 Phosphate ester hydrolysis by nucleophilic catalysis: Looking for a hydroxylamine based Catalyst** **H.P1.31**  
Elizabeth Luciana Marinho Miguel<sup>1</sup>, Josefredo Rodriguez Pliego<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Effect of intertube interactions on the impact response of helical carbon nanotubes forests** **H.P1.32**  
Vanessa Cadan Scheffer<sup>1</sup>, Vitor Rafael Coluci<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Analytical and numerical analysis of composites reinforced by unidirectional fibers** **H.P1.33**  
César Tadeu Nasser Medeiros Branco<sup>1</sup>, Ailton da Silva Nascimento<sup>1</sup>, Edwillson Gonçalves de Oliveira Filho<sup>2,1</sup>, Fábio Santos de Sousa<sup>2,1</sup>, Jair Francisco Souza Magalhães<sup>1</sup>, José Maria Braga Pinto<sup>1</sup>, Luciano Monteiro Almeida<sup>1</sup>, Roberto Tetsuo Fujiyama<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Electronic structure of diblock oligomers with  $\pi$ -bridges for solar cell applications** **H.P1.34**  
 Gabriel Gomes Baltazar Alves<sup>1</sup>, Eliézer Fernando Oliveira<sup>2</sup>, Francisco Carlos Lavarda<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>Universidade Estadual Paulista - Campus Bauru
- 17:45 The role of exchange interaction in 2D ordered arrays of cobalt hollow-spheres** **H.P1.35**  
Yuset Guerra Dávila<sup>1</sup>, Jandrews Lins Gomes<sup>1</sup>, Ramón Raudel Peña Garcia<sup>1</sup>, Ariel Delgado del Toro<sup>1</sup>, Frederico Alves Revoredo Júnior<sup>1</sup>, Ialy Fernanda Gonzaga Martins<sup>1</sup>, Lidice Aparecida Gonçalves<sup>2</sup>, Eduardo Padrón Hernández<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de Pernambuco
- 17:45 Modulating the electronic properties of bismuth vanadate for application in photoelectrochemical cells** **H.P1.36**  
Enésio Marinho da Silva Jr<sup>1</sup>, Cedric Rocha Leão<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Computational study of field enhancement factor for a carbon nanotubes capped arrays** **H.P1.37**  
Mauro Vanderlei Amorim<sup>1</sup>, Fernando Fuzinato Dall'Agnol<sup>2</sup>; <sup>1</sup>Instituto Federal de São Paulo, <sup>2</sup>Universidade Federal de Santa Catarina
- 17:45 Computational Study of PH<sub>3</sub> and CO Adsorption on the Ga<sub>12</sub>As<sub>12</sub> Nanocluster** **H.P1.38**  
Carine Ribeiro dos Santos<sup>1</sup>, Arlan da Silva Gonçalves<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo
- 17:45 Study of the interactions between antibacterial peptides and lipid membranes: a computational investigation** **H.P1.39**  
Felipe de Oliveira Outi<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

- 17:45 Dynamics of Water Nanodroplets Impacting on Graphene: A Molecular Dynamics Study** H.P1.40  
Ygor Morais Jaques<sup>1</sup>, Gustavo Brunetto<sup>2</sup>, Douglas Soares Galvão<sup>2</sup>;  
<sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 17:45 Extending the internally-consistent hybrid functional to oxygen-containing systems** H.P1.41  
Marília J. Caldas<sup>1</sup>, Tales José da Silva<sup>1</sup>; <sup>1</sup>Instituto de Física da Universidade de São Paulo
- 17:45 Structural, Morphological and Textural Characterization of Silica and Niobia/Silica Xerogels obtained by Sol-Gel Process** H.P1.42  
Cíntia Rodrigues Coelho<sup>1</sup>, Gustavo Henrique de Magalhães Gomes<sup>1</sup>, Luiz Fernando de Sousa Lima<sup>1</sup>, Nelcy D. S. Mohallem<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Strain effects on Porous Nanotubes** H.P1.43  
Guilherme da Silva Lopes Fabris<sup>1</sup>, Chad Junkermeier<sup>2</sup>, Ricardo Paupitz Barbosa dos Santos<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Bauru, <sup>2</sup>The Pennsylvania State University, <sup>3</sup>Universidade Estadual Paulista- Campus Rio Claro

## Thursday, September 29<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION H.OR4 (08:30 - 10:15) - Room Seringueira*

- 08:30 Structural, Electronic, and Optical properties of Graphene Nanoribbons on Gold substrates: Insights from Ab-Initio Calculations** H.OR4.14\*  
Andrea Ferretti<sup>1</sup>, Shudong Wang<sup>1</sup>, Claudia Cardoso<sup>1</sup>, Deborah Prezzi<sup>1</sup>, Alice Ruini<sup>2,1</sup>, Elisa Molinari<sup>2,1</sup>; <sup>1</sup>CNR-Nano, <sup>2</sup>University of Modena and Reggio Emilia
- 09:00 Origin of and tuning the optical and fundamental band gaps in transparent conducting oxides: The case of M<sub>2</sub>O<sub>3</sub> (M = Al, Ga, In)** H.OR4.15  
Fernando Pereira Sabino<sup>1</sup>, Rafael Besse<sup>1</sup>, Luiz Nunes de Oliveira<sup>1</sup>, Su-Huai Wei<sup>2</sup>, Juarez L. F. Da Silva<sup>3</sup>; <sup>1</sup>São Carlos Institute of Physics, <sup>2</sup>Beijing Computational Science Research Center, <sup>3</sup>São Carlos Institute of Chemistry
- 09:15 Ab initio study of the nanocomposite MoS<sub>2</sub>-PVA: structural, electronic and vibrational analyses.** H.OR4.16  
Florence Pereira Novais Antunes<sup>1</sup>, Sergio Rodrigues Tavares<sup>1</sup>, Fernando Wypych<sup>2</sup>, Alexandre Amaral Leitão<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Universidade Federal do Paraná
- 09:30 Modeling Form Factors and Structure factors on Small Angle Scattering: revealing structure and organization of nanostructures** H.OR4.17  
Cristiano Luís Pinto de Oliveira<sup>1</sup>; <sup>1</sup>Instituto de Física-USP

- 09:45 Theoretical and computational study of the anisotropy in the Colombian subsurface H.OR4.18**  
Andrés Mauricio Muñoz Garcia<sup>1</sup>, Julio Muñoz<sup>1</sup>, Luis Alfredo Montes Vides<sup>2</sup>;  
<sup>1</sup>Instituto Tecnológico Metropolitano, <sup>2</sup>Universidad Nacional de Colombia
- 10:00 Computational Design of Novel Nanostructures on the Basis of P<sub>4</sub>-Derivatives of Metalloporphyrins H.OR4.19**  
Aleksey E Kuznetsov<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos



# **SYMPOSIUM I - Surface Science: fundamentals and models**

## **Symposium organizers:**

Abner de Siervo (*IFGW - UNICAMP*)

Edmar A. Soares (*DF-ICEx UFMG*)

Fernando Stavale (*CBPF*)

Pedro Augusto de Paula Nascente (*DEMA-UFSCar*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION I.OR1 (09:45 - 10:45) - Room Carvalho III*

- 09:45 Scanning tunneling microscopy studies of porphyrins as prototype functional molecules: from supramolecular aggregates over surface mediated reactions to the energy to switch an individual molecule** **I.OR1.1\***  
Hubertus Marbach<sup>1</sup>; <sup>1</sup>University of Erlangen-Nürnberg
- 10:15 Structural and electronic transformations in Bi<sub>2</sub>Se<sub>3</sub>/Bi<sub>4</sub>Se<sub>5</sub> observed by Scanning Tunneling Microscopy and X-Ray Diffraction** **I.OR1.2**  
Pedro Rezende Gonçalves<sup>1</sup>, Thaís Chagas Peixoto Silva<sup>1</sup>, Angelo Malachias de Souza<sup>1</sup>, Mário Sérgio de Carvalho Mazzoni<sup>1</sup>, Rogério Magalhaes Paniago<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Minas Gerais
- 10:30 Non-collinear magnetic coupling revealed by spin polarized scanning tunneling microscopy** **I.OR1.3**  
Rafael Lopes de Souza<sup>1</sup>, Maximiliano Delany Martins<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear

### *SESSION I.OR2 (11:15 - 12:00) - Room Carvalho III*

- 11:15 Hydrophilic selectivity towards the clay surfaces: Noncontact AFM first principles study** **I.OR2.4**  
Raphael da Silva Alvim<sup>1,2</sup>, Caetano Rodrigues Miranda<sup>1,2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Federal do ABC
- 11:30 Dynamics of Biphenylene Carbon (Graphenylene) Hydrogenation** **I.OR2.5**  
Vinicius de Oliveira Splugues<sup>1</sup>, Pedro Alves da Silva Autreto<sup>2</sup>, Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do ABC
- 11:45 Growth of metal linear atomic chains on NiAl surfaces** **I.OR2.6**  
Bruno Fedosse Zornio<sup>1</sup>, Edison Zacarias da Silva<sup>2</sup>, Miguel A. San-Miguel<sup>1</sup>;  
<sup>1</sup>Instituto de Química - UNICAMP, <sup>2</sup>Instituto de Física "Gleb Wataghin" - UNICAMP

### *SESSION I.OR3 (14:00 - 16:15) - Room Carvalho III*

- 14:15 Electronic and Chemical nano-imaging of wonder materials beyond graphene** **I.OR3.7\***  
Maria C. Asensio<sup>1,2</sup>; <sup>1</sup>Synchrotron SOLEIL, <sup>2</sup>Université Paris Saclay
- 14:45 Black phosphorus surface chemistry probed by APXPS** **I.OR3.8**  
Tulio Rocha<sup>1</sup>, Gabriel Pereira Freitas<sup>1,2</sup>, Wendell Simões Silva<sup>1</sup>, Fernando Stavale<sup>3</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>3</sup>Centro Brasileiro de Pesquisas Físicas

- 15:00 Ultra-Thin Films of Au Deposited on Pd(111) Characterized by X-ray Photoelectron Diffraction I.OR3.10**  
Alexandre Pancotti<sup>1</sup>, Abner de Siervo<sup>2</sup>, Pedro A. P. Nascente<sup>3</sup>, Richard Landers<sup>4</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Instituto de Física Gleb Wataghin, Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>4</sup>Instituto de Física "Gleb Wataghin" - UNICAMP
- 15:15 Theoretical investigation of the metallic bismuth growth on the semiconductor surfaces stimulated by electron beam. I.OR3.11**  
Carlos Eduardo Silva<sup>1</sup>, Juan Andrés<sup>2</sup>, Elson Longo<sup>3</sup>, Edison Zacarias da Silva<sup>4</sup>, Miguel A. San-Miguel<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP, <sup>2</sup>Universitat Jaume I, <sup>3</sup>Instituto de Química de Araraquara/UNESP, <sup>4</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 15:30 Direct evidence of partially relaxed strain states in epitaxial InAs:GaAs(001) islands using transmission electron microscopy on nanomembranes I.OR3.12**  
Bárbara Rosa<sup>1</sup>, Lucas Atila Bernardes Marçal<sup>1</sup>, Rodrigo Ribeiro Andrade<sup>2</sup>, Luciana Dornelas<sup>3,4</sup>, Christoph Deneke<sup>5</sup>, Wagner Nunes Rodrigues<sup>6,2</sup>, Ricardo Wagner Nunes<sup>1</sup>, Patrícia Lustoza Souza<sup>3,4</sup>, Maurício Pamplona Pires<sup>7,3,4</sup>, Angelo Malachias<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Centro de Microscopia da UFMG, <sup>3</sup>Instituto Nacional de Ciência e Tecnologia de Nanodispositivos Semicondutores, <sup>4</sup>Laboratório de Semicondutores - CETUC/PUC-Rio, <sup>5</sup>Laboratório Nacional de Luz Síncrotron, <sup>6</sup>Universidade Federal De Minas Gerais, <sup>7</sup>Instituto de Física, UFRJ
- 15:45 X-Ray Spectroscopy and Electronic Structure of Transition Metal Compounds I.OR3.13\***  
Rodrigo José Mossaneck<sup>1</sup>, Miguel Abbate<sup>1</sup>, Eduardo Bonini Guedes<sup>1</sup>, Viviane Stoeberl<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

## Poster presentations

### SESSION I.P1 (17:45 - 19:30)

- 17:45 Surface Characterization of an Ultra-Thin Film of Nb<sub>x</sub>O<sub>y</sub> Formed on Nb(100) I.P1.1**  
Dener P. Santos<sup>1</sup>, Ana Carolina S. A. Rezende<sup>1</sup>, Abner de Siervo<sup>2</sup>, Alexandre Pancotti<sup>1</sup>, Pedro A. P. Nascente<sup>3</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Iron growth and intercalation on CVD graphene on Ir(111) I.P1.2**  
Rodrigo César de Campos Ferreira<sup>1</sup>, Luis Henrique de Lima<sup>2</sup>, Lucas Barreto<sup>3</sup>, Abner de Siervo<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>2</sup>Universität Zürich, <sup>3</sup>Universidade Federal do ABC
- 17:45 Calibration of the homemade UHV-STM at Labnano/CDTN I.P1.3**  
Ulisses Saraiva de Oliveira<sup>1</sup>, Gabriel Vieira Maia<sup>1</sup>, Rafael Lopes de Souza<sup>1</sup>, Maximiliano Delany Martins<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Surface of biopolymer thin films by layer-by-layer assembly: fractal dimension I.P1.4**  
Marcelle Bruna de Mendonça Spera<sup>1</sup>, Marisa Masumi Beppu<sup>1</sup>, Thiago Bezerra Taketa<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

- 17:45 Study of the metal-organic frameworks (MOFs): chemical structure, properties and applications** **I.P1.5**  
Aline Geice Vitor Silva<sup>1</sup>, Wander Luiz Vasconcelos<sup>1</sup>, Daniela Cordeiro Leite Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Properties of thin films deposited by PIII&D and Reactive Sputtering from aluminum acetylacetonate** **I.P1.6**  
Felipe Darriba Battaglin<sup>1</sup>, Rafael Parra Ribeiro<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Influence of experimental parameters on the structural properties of TiO<sub>2</sub> films grown electrochemically** **I.P1.7**  
Amanda Santos de Lima<sup>1</sup>, Anna Paulla Simon<sup>1</sup>, Mariana de Souza Sikora<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Photocatalytic activity of TiO<sub>2</sub> doped with N obtained by microwave-assisted hydrothermal** **I.P1.8**  
Gabriela Byzynski Soares<sup>1</sup>, Diogo Paschoalini Volanti<sup>2</sup>, Cauê Ribeiro Oliveira<sup>3</sup>, Elson Longo<sup>4</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>3</sup>Empresa Brasileira de Pesquisa Agropecuária, <sup>4</sup>UNESP-Araraquara
- 17:45 Photocatalytic activity of  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>@TiO<sub>2</sub> composite obtained by microwave-assisted hydrothermal** **I.P1.9**  
Massilon O. Luizon<sup>1</sup>, Gabriela Byzynski Soares<sup>2</sup>, Diogo Paschoalini Volanti<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Probing the SPION magnetization with an analytical balance, and the intriguing interaction of superparamagnetic nanoparticles with paramagnetic ions.** **I.P1.10**  
Fernando Menegatti de Melo<sup>1</sup>, Sabrina da Nobrega Almeida<sup>1</sup>, Carlos Alberto Ospina Ramirez<sup>2</sup>, Antonio Domingues Santos<sup>3</sup>, Henrique Eisi Toma<sup>1</sup>; <sup>1</sup>Instituto de Química da Universidade de São Paulo, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Instituto de Física da Universidade de São Paulo
- 17:45 The Influence of morphology and crystalline structure in the kinetics of nanoquartz and amorphous silica** **I.P1.11**  
Beatriz Ferreira Mendes<sup>1</sup>, Marco César Soares<sup>1</sup>, Murilo Ferreira Marques Santos<sup>1</sup>, Egont Alexandre Schenkel<sup>1</sup>, Antônia Alana Lima Pacheco<sup>1</sup>, Eric Fujiwara<sup>1</sup>, Carlos K. Suzuki<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Computational studies of Silica Nanoparticles within binary fluid/oil interfaces** **I.P1.12**  
Renan Augusto Pontes Ribeiro<sup>1</sup>, Lucas Stori de Lara<sup>1</sup>, Alexandre Camilo Junior<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Preparation and characterization of epoxy-silica organic inorganic hybrids** **I.P1.13**  
Ruben Oblitas<sup>1</sup>, Peter Hammer<sup>2</sup>, Celso Santilli<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Synthesis and characterization of copolymer: poly(acid-p-hydroxybenzoic-co-p-aminophenol)** **I.P1.14**  
Rafael da Silva<sup>1</sup>, João Afonso da Silva Neto<sup>1</sup>, Jussara Vieira Silva<sup>1</sup>, João Marcos Madurro<sup>1</sup>, Ana Graci Brito-Madurro<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia
- 17:45 Modification of decaniobates [Nb<sub>10</sub>O<sub>28</sub>]<sup>6-</sup> to obtain acid-base solids** **I.P1.15**  
Luisa Fernanda Gutierrez<sup>1</sup>, Jose Jobanny Martinez<sup>1</sup>, Hugo Alfonso Rojas<sup>1</sup>, Maria Helena Brijaldo<sup>2</sup>, Fabio Barboza Passos<sup>2</sup>; <sup>1</sup>Universidad Pedagógica y Tecnológica de Colombia, <sup>2</sup>Universidade Federal Fluminense

- 17:45 Synthesis and spectroscopic characterization of microporous materials containing vanadium using quiral organic molecules derivatives of piperidines. I.P1.16**  
Janine Contro<sup>1</sup>, Alex Silva Paula<sup>2</sup>, Ariano De Giovanni Rodrigues<sup>3</sup>, Marcus Giotto<sup>4</sup>, Carlos Pacheco<sup>5</sup>, Valmir Fadel<sup>2</sup>, José Geraldo Nery<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista, <sup>2</sup>UNESP - Instituto de Biologia, Letras e Ciências Exatas de São José do Rio Preto, <sup>3</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>4</sup>University of Connecticut, <sup>5</sup>The Pennsylvania State University
- 17:45 Spectroscopy determination of the size dispersion of 3-mercaptopropionic acid capped CdTe QDs I.P1.17**  
Brener Rodrigo Carvalho Vale<sup>1</sup>, José Carlos Leandro de Sousa<sup>1</sup>, Marcelo Gonçalves Vivas<sup>2</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei, <sup>2</sup>Universidade Federal de Alfenas
- 17:45 Interaction between CdTe/MPA Quantum Dots and Carbon Dots I.P1.18**  
Brener Rodrigo Carvalho Vale<sup>1</sup>, Roberto Vaz<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 The effect of chain size and the external group of the surface ligands on the growth kinetics of water-soluble CdTe QDs I.P1.19**  
Rafael Silveira Mourão<sup>1</sup>, Brener Rodrigo Carvalho Vale<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Highly luminescent carbon dots via hidrothermal route: understanding their spectroscopic properties. I.P1.20**  
Rafael Silveira Mourão<sup>1</sup>, Brener Rodrigo Carvalho Vale<sup>1</sup>, Roberto Vaz<sup>1</sup>, Tereza Inês Rodrigues Souza<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Golden Coating Optimization for Better Characterization of Non Conductive Samples I.P1.21**  
Emília Pereira Veras<sup>1</sup>, Diana Robertada Silva Medeiros<sup>1</sup>, Eugênio Teixeira Filho<sup>1</sup>, Artejose Revoredo da Silva<sup>1</sup>, Djalma Ribeiro Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 17:45 Obtaining nitrogen martensite on pure iron nitrided and pure iron enriched with chrome nitrided by plasma I.P1.22**  
Sabrina Rodrigues Meira<sup>1</sup>, Euclides Alexandre Bernardelli<sup>1</sup>, Márcio Mafra<sup>1</sup>, Felipe Augusto de Aguiar Possoli<sup>1</sup>, Paulo César Borges<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Characterization of electrodeposited Co and Cu formed from recycled spent Li-Ion batteries and its application in electroflotation process I.P1.23**  
Carol de Souza Berger<sup>1</sup>, Vinicius Guilherme Celante<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo
- 17:45 Mode I crack propagation tests in adhesively bonded joints I.P1.24**  
Silvio de Barros<sup>1</sup>, Marcos Henrique Falcão da Costa<sup>1</sup>, Gabriel de Brito Mello<sup>1</sup>, Luiz Carlos da Silva Nunes<sup>2</sup>, Paulo Pedro Kenedi<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>Universidade Federal Fluminense
- 17:45 IMPROVE THE IMPLANT SURFACES OF DENTAL TREATMENT FERNANDO LUZIA FRANÇA<sup>1</sup>; <sup>1</sup>CENTRO FEDERAL DE EDUCAÇÃO TECNOLÓGICA DE MINAS GERAIS I.P1.25**
- 17:45 TITANIUM SURFACE MODIFICATION BY NITROGEN PIII INSIDE CONDUCTIVE TUBES I.P1.26**  
Nazir Monteiro dos Santos<sup>1</sup>, Mario Ueda<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais

- 17:45 Effects of the plasma immersion ion implantation parameters on the formation of S-phase in super duplex steels** **I.P1.27**  
Willian Rafael de Oliveira<sup>1</sup>, Gelson Biscaia de Souza<sup>1</sup>, Bruna Corina Emanuely Schibichski<sup>1</sup>, Francisco Carlos Serbena<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Low-temperature plasma carburizing of sintered pure iron: Influence of methane and nitrogen pulse** **I.P1.28**  
Rafhael De Nez<sup>1</sup>, Alisson Prodócimo<sup>1</sup>, Thiago Souza Lamim<sup>2</sup>, Cristiano Binder<sup>2</sup>, Márcio Mafra<sup>1</sup>, Euclides Alexandre Bernardelli<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Federal de Santa Catarina
- 17:45 Development of a Cell for Electrochemical Crevice Corrosion Tests** **I.P1.29**  
Kassia Cristina Kafer Escher<sup>1</sup>, Jair Pedralli Pedralli<sup>1</sup>, Paulo César Borges<sup>1</sup>, Carlos Marcus Gomes da Silva Cruz<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Development of a low cost abrasive wear analysis technique based on the wear profile volume calculation.** **I.P1.30**  
 Carlos Wagner Moura e Silva<sup>1</sup>, João Pedro Conte Sobrinho<sup>1</sup>, Lara Rezende Souza<sup>1</sup>; <sup>1</sup>CENTRO FEDERAL DE EDUCAÇÃO TECNOLÓGICA DE MINAS GERAIS
- 17:45 Corrosion Investigation of dissimilar alloys 2024-T3 and 7475-T761 welded by FSW** **I.P1.31**  
Caio Palumbo Abreu<sup>1,2</sup>, Hercílio Gomes de Melo<sup>3</sup>, Vincent Vivier<sup>1</sup>, Nadine Pébère<sup>4</sup>, Isolda Costa<sup>2</sup>; <sup>1</sup>Université Paris 6 Pierre and Marie Curie, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>Université de Toulouse
- 17:45 Mechanical properties and corrosion resistance of supermartensitic stainless steel surfaces nitrated by plasma immersion ion implantation** **I.P1.32**  
 Bruna Corina Emanuely Schibichski<sup>1</sup>, Gelson Biscaia de Souza<sup>1</sup>, Willian Rafael de Oliveira<sup>1</sup>, Francisco Carlos Serbena<sup>1</sup>, Cláudia E. B. Marino<sup>2</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa, <sup>2</sup>Universidade Federal do Paraná
- 17:45 Evaluation of the Electrochemical Behavior of low carbon steel processed by ECAP via route A in C<sub>6</sub>H<sub>8</sub>O<sub>7</sub> 0,1 M + Na<sub>2</sub>HPO<sub>4</sub> 0,2 M and NaCl 0,25 M solution** **I.P1.33**  
 Jorgimara de Oliveira Braga<sup>1</sup>, Tania Maria Cavalcanti Nogueira<sup>1</sup>, Jefferson Fabrício Cardoso Lins<sup>1</sup>, Gabriel Gonçalves Pessoa de Castro<sup>1</sup>, Ana Carolina Duarte Duarte<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 17:45 Experimental analysis of damages in a motor piston to gasoline operating with addition of hidroxy gas** **I.P1.34**  
ROBSON Guimarães SANABIO<sup>1</sup>, Rubens Maribondo Nascimento<sup>2</sup>, Thiago Chellapa<sup>2</sup>, Valter Bezerra Dantas Dantas<sup>2</sup>, Isaac Pericles Maia Medeiros<sup>2</sup>; <sup>1</sup>Universidade Estadual do Ceará, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 17:45 Random Walk Method applied to investigate the Porous Size Distribution Measured by NMR and Surface Relaxivity** **I.P1.35**  
Everton Lucas de Oliveira<sup>1</sup>, Arthur Gustavo de Araujo-Ferreira<sup>1</sup>, Carlos Alberto Fortulan<sup>2</sup>, Tito Jose Bonagamba<sup>1</sup>; <sup>1</sup>Sao Carlos Institute of Physics - University of Sao Paulo, <sup>2</sup>Sao Carlos School of Engineering - University of Sao Paulo

- 17:45 Random Walk Method applied to investigate the Porous Size Distribution Measured by NMR and Surface Relaxivity I.P1.36**  
Everton Lucas de Oliveira<sup>1</sup>, Arthur Gustavo de Araujo-Ferreira<sup>1</sup>, Carlos Alberto Fortulan<sup>2</sup>, Tito Jose Bonagamba<sup>1</sup>; <sup>1</sup>Sao Carlos Institute of Physics - University of Sao Paulo, <sup>2</sup>Sao Carlos School of Engineering - University of Sao Paulo

## Tuesday, September 27<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION I.OR4 (14:00 - 16:15) - Room Jacarandá*

- 14:00 Shedding light onto surfaces: using soft X-ray spectroscopy to understand what happens at the top of your sample I.OR4.14\***  
Julio Criginski Cezar<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 14:30 Silicon film deposition parameters on Ti alloy by DC magnetron sputtering I.OR4.15**  
André Felipe Ribeiro Moreira<sup>1</sup>, Aline Capella de Oliveira<sup>1</sup>, Douglas Marcel Gonçalves Leite<sup>2</sup>, Marcos Massi<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 14:45 Semiconductors surface preparation for atomic layer deposition of high-k dielectric I.OR4.16**  
Silma Alberton Corrêa<sup>1</sup>, Alex Treviso<sup>1</sup>, Fernanda Chiarello Stedile<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 15:00 Intrinsic viscosity and the rigid sphere model for characterization of ZrO<sub>2</sub> functionalized nanoparticles in organic solvents I.OR4.17**  
William Alberto Leonel Ferreira<sup>1</sup>, Bruno Henrique Ramos de Lima<sup>2</sup>, Edson Roberto Leite<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>nchemi Engenharia de Mateirias LTDA
- 15:15 Chromium nitride thin films produced by hollow cathode reactive discharge and plasma immersion ion implantation and deposition I.OR4.18**  
Carina Barros Mello<sup>1</sup>, Michelle Santos<sup>2</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Federal de São Paulo
- 15:30 Scale effects in surface wettability and their implications on oil recovery I.OR4.19**  
Ronaldo Giro<sup>1</sup>, Rafael Rodrigues Del Grande<sup>1</sup>, Mathias Bernhard Steiner<sup>1</sup>; <sup>1</sup>IBM Research - Brazil
- 15:45 Adhesion tests in composite repairs used in oil industry I.OR4.20**  
Lais Amaral Alves<sup>1</sup>, Bruno Cambraia Lemos<sup>2</sup>, Phelippe De Araújo Pereira<sup>1</sup>, Mariana Banea<sup>1</sup>, Silvio de Barros<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>PETROBRAS
- 16:00 Photoelectron Diffraction study of the Bi<sub>2</sub>Se<sub>3</sub>(0001) surface.**  
Willians Principe Fernandes<sup>1</sup>, Abner de Siervo<sup>2</sup>, Edmar Avellar Soares<sup>3</sup>; <sup>1</sup>Universidade Federal de São João del-Rei, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>3</sup>Universidade Federal de Minas Gerais

# **SYMPOSIUM J - Surface Science: Recent Developments in Technological Applications**

**Symposium organizers:**

Marcelo Eduardo Huguenin Maia da Costa (*PUC-Rio*)  
Carlos Alejandro Figueroa (*UCS and Plasmar Tecnologia*)  
Sergio de Souza Camargo Jr (*COPPE and Escola Politecnica UFRJ*)  
Maria de Fátima Brito Souza (*Unicamp*)



# Tuesday, September 27<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION J.OR1 (09:45 - 10:45) - Room Carvalho III*

- 09:45 Surface Engineering Nanostructures: Low energy Ion Bombardment Nano-structuring Process** **J.OR1.1\***  
Fernando Alvarez<sup>1</sup>; <sup>1</sup>UNICAMP, Instituto de Física Gleb Wataghin - 13081-970 Campinas Sp, Brazil
- 10:15 Electropolymerized polyaniline used as energy surface modifier for stainless steel: from completely wetting to a non-wetting surface.** **J.OR1.2**  
Filipe Signorelli<sup>1</sup>, Maria de Fátima Brito Sousa<sup>1</sup>, Celso Aparecido Bertran<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 10:30 Silver nanoparticles synthesis in situ Langmuir films by ultraviolet decomposition of silver sulfadiazine** **J.OR1.3**  
Douglas Ricardo de Assis<sup>1</sup>, Miguel Jafelicci Júnior<sup>1</sup>, Marian Rosaly Davolos<sup>1</sup>; <sup>1</sup>Instituto de Química - IQ - Unesp - Araraquara

### *SESSION J.OR2 (11:15 - 12:00) - Room Carvalho III*

- 11:15 Preparation of TiO<sub>2</sub> nanoparticles modified with porphyrins for photocatalysis** **J.OR2.4**  
Caique Prado Machado de Oliveira<sup>1</sup>, Dayse Carvalho da Silva Martins<sup>2</sup>, Ana Luísa Lage<sup>2</sup>, Nelcy Della Santina Mohallem<sup>2</sup>, Marcelo Machado Viana<sup>2</sup>; <sup>1</sup>Pontifícia Universidade Católica de Minas Gerais, <sup>2</sup>Universidade Federal de Minas Gerais
- 11:30 Applying the DiPEVa four-dimensional approach for surface tension prediction for liquids metals, salts, oxides, hydroxides and mixed inorganic materials** **J.OR2.5**  
Cláudio Nunes Pereira<sup>1</sup>, Guilherme Cañete Vebber<sup>2</sup>; <sup>1</sup>Tecnano Pesquisas e Serviços Ltda, <sup>2</sup>Universidade Estadual do Rio Grande do Sul
- 11:45 Immobilization of protease onto polyaniline supported methyl methacrylate and divinylbenzene monolithic polymer** **J.OR2.6**  
Rafael Bento de Sousa<sup>1</sup>, Daniel Alves de Lima, Victor M. Cardoso, Samantha Salomão Caramori, Maísa B. Costa, Valmir Jacinto Silva, Denilson Rabelo; <sup>1</sup>Universidade Estadual de Goiás

### *SESSION J.OR3 (14:00 - 16:15) - Room Carvalho III*

- 14:00 Superomniphobic Aluminum Surfaces via Etching and Fluorination Coatings** **J.OR3.7\***  
Thomaz Cabral Rangel<sup>1</sup>, Daniel Eduardo Weibel<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

- 14:30 The influence of carbon concentration on the tribological behavior of nickel-chromium-aluminum-carbon alloy** **J.OR3.8**  
Heitor Augusto Pinto Cavalli<sup>1</sup>, Ane Cheila Rovani<sup>1</sup>, Marjorie Benegra<sup>1</sup>, Rodrigo Lupinacci Villanova<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 14:45 Tribological and wear analysis of plasma nitrided Ti-6Al-4V alloy** **J.OR3.9**  
Lucas Travi<sup>1</sup>, Ruth Hinrichs<sup>1</sup>, Fernando Ritter<sup>1</sup>, Marcos A. Z. Vasconcellos<sup>1</sup>;  
<sup>1</sup>Universidade Federal do Rio Grande do Sul
- 15:00 Hydrogen etching on silicon interlayer towards well-adhered DLC on steel at low temperature** **J.OR3.10**  
Angela Elisa Crespi<sup>1</sup>, Leonardo Mathias Leidens<sup>1</sup>, Carlos Alejandro Figueroa<sup>1</sup>;  
<sup>1</sup>Universidade de Caxias do Sul
- 15:15 Characterization of co-deposited Ni-Cr and Ni-Cr-B nanocomposites coatings** **J.OR3.11**  
jorge Morales Hernández<sup>1</sup>, Araceli Mandujano Ruíz<sup>1</sup>, Jaime Camargo González<sup>1</sup>, Deyli Anaid Galíndez Espinoza<sup>1</sup>; <sup>1</sup>Centro de Investigación y Desarrollo Tecnológico en Electroquímica S.C; Parque Tecnológico Sanfandila, Pedro Escobedo, C.P. 76703 Querétaro, México
- 15:30 Static and dynamic deposition of CoNiCrAlY coatings via HVPS process** **J.OR3.12**  
Felipe Rocha Caliani<sup>1,2</sup>, Felipe Souza Miranda<sup>1</sup>, Gilberto Petraconi Filho<sup>1</sup>, Leonid Ivanovich Charakhovski<sup>3</sup>, Alexei Mikhailovich Essiptchouk<sup>4</sup>, Danieli Aparecida Pereira Reis<sup>5</sup>; <sup>1</sup>Instituto Tecnológico da Aeronáutica, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>3</sup>National Academy of Sciences of Belarus, Luikov Heat and Mass Transfer Institute, <sup>4</sup>Universidade Estadual Paulista - Campus São José dos Campos, <sup>5</sup>Universidade Federal de São Paulo
- 15:45 Polycarbonate/Melamine for Coatings** **J.OR3.13**  
Thiago do Carmo Rufino<sup>1</sup>, Maria Isabel Felisberti<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 16:00 Microstructured Furfuryl Resin obtained by PDMS mold transfer** **J.OR3.14**  
Alexandre Aumiller<sup>1</sup>, Walter Miyakawa<sup>2</sup>, Rafael Louzada<sup>2</sup>, Fábio Dondeo<sup>2</sup>;  
<sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Instituto de Estudos Avançados

## Poster presentations

### *SESSION J.P1 (17:45 - 19:30)*

- 17:45 Evaluation of the effect of the process parameters of a Ni5Al alloy deposited by Arc spray in the porosity and adherence of the coating** **J.P1.1**  
Lucas Alan de Aguiar<sup>1</sup>, Ramón Sigifredo Cortés Paredes<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Study of surface roughness of polymeric composites through the tangential milling process** **J.P1.2**  
Sarah David Müzel<sup>1</sup>, Eduardo Pires Bonhin<sup>2</sup>, Larissa Ribas de Lima Soares<sup>2</sup>, Julio Cesar Molina<sup>3</sup>, Manoel Cleber de Sampaio Alves<sup>2</sup>; <sup>1</sup>UNIVERSIDADE ESTADUAL PAULISTA "JÚLIO DE MESQUITA FILHO", <sup>2</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>3</sup>UNESP-Câmpus de Itapeva

- 17:45 Microstructural and Corrosion Evaluation of Inconel 718 and Hastelloy X Coatings** **J.P1.3**  
 Sidnei GUERREIRO da Silva<sup>1</sup>, Hector Reynaldo Meneses Costa<sup>1</sup>, William Dias Alfradique Valente<sup>1</sup>, Marco Vinicius da Silva<sup>1</sup>, Verona Biancardi Oliveira<sup>2</sup>;  
<sup>1</sup>Centro Federal de Educação Tecnológica, <sup>2</sup>Universidade do Estado do Rio de Janeiro
- 17:45 Surface characterization of plasma nitrided maraging 300 steel** **J.P1.4**  
 Adriano Gonçalves dos Reis<sup>1,2</sup>, Danieli Aparecida Pereira Reis<sup>3,4</sup>, Antonio Jorge Abdalla<sup>3,5</sup>, Antonio Augusto Couto<sup>6,2</sup>, Tarcila Sugahara<sup>4</sup>, Jorge Otubo<sup>3,4</sup>;  
<sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>3</sup>Instituto Tecnológico de Aeronáutica, <sup>4</sup>Universidade Federal de São Paulo, <sup>5</sup>Instituto de Estudos Avançados, <sup>6</sup>Universidade Presbiteriana Mackenzie
- 17:45 The Influence of the Pretreatment in the Aluminum Alloy AA 2024-T4 on the Electrodepositing of the Polymer 5-Amino-1-Naphthol** **J.P1.5**  
 Alvaro Roberto Martins<sup>1</sup>, Roy Victor Escobar<sup>1</sup>, Wellington de Souza Lima<sup>1</sup>, Susanna I. Cordoba de Torresi<sup>2</sup>, Jadielson Lucas Antonio<sup>2</sup>, Elaine Pavini Cintra<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Instituto de Química da Universidade de São Paulo
- 17:45 Growth and Characteristics of NCD/MCD/NCD Multilayer Coatings on WC-Co substrates** **J.P1.6**  
 José Vieira da Silva Neto<sup>1</sup>, Mariana Amorim Fraga<sup>1</sup>, André Contin<sup>1</sup>, Raonei Alves Campos<sup>2</sup>, Evaldo José Corat<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 17:45 Characterization of NiCoCrAlY bond coating on Ti-6Al-4V substrate** **J.P1.7**  
 Filipe Estevão de Freitas<sup>1</sup>, Danieli Aparecida Pereira Reis<sup>1</sup>, Adriano Gonçalves dos Reis<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Estadual Paulista Júlio de Mesquita Filho
- 17:45 Cordierite-metal joint development for usage in ultra-high vacuum environment** **J.P1.8**  
 Tatiani Falvo<sup>1,2</sup>, Flávia B. Mendes<sup>1</sup>, Osmar R. Bagnato<sup>3</sup>, Marcos P. Gonçalves<sup>1</sup>;  
<sup>1</sup>Engecer Ltda., <sup>2</sup>Universidade Federal de São Carlos (UFSCAR), <sup>3</sup>Laboratório Nacional de Luz Síncrotron (LNLS)
- 17:45 Influence of speed and depth of cut in power and surface finish machining of superalloy VAT-32® with alumina-based ceramic tool** **J.P1.9**  
 Eduardo Pires Bonhin<sup>1</sup>, Sarah David Müzel<sup>1</sup>, Marcel Yuzo Kondo<sup>1</sup>, Marcos Valério Ribeiro<sup>1</sup>, José Vitor Souza<sup>1</sup>; <sup>1</sup>UNIVERSIDADE ESTADUAL PAULISTA "JÚLIO DE MESQUITA FILHO"
- 17:45 Influence of process parameters on the morphology, dimension and microstructure of Ti-CP and Ti-6Al-4V tracks obtained by laser surface remelting** **J.P1.10**  
 Edwin Sallica Leva<sup>1</sup>, Rubens Caram<sup>1</sup>, João Batista Fogagnolo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Conversion coating on magnesium alloy sheet (AZ31) by vanillic acid treatment** **J.P1.11**  
 Guilherme Pazini Abatti<sup>1</sup>, Thiago Ferreira da Conceição<sup>1</sup>, Alfredo Tiburcio Nunes Pires<sup>1</sup>, Almir Spinelli<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina

- 17:45 Superhydrophobicity: Influence of PTFE nanostructure on anisotropically etched silicon surfaces J.P1.12**  
 Alexandre Fassini Michels<sup>1</sup>, Carla Daniela Boeira<sup>1</sup>, Carlos Alejandro Figueroa<sup>1</sup>, Adriano Moehlecke<sup>2</sup>, Daniel Eduardo Weibel<sup>3</sup>, Flavio Horowitz<sup>3</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Pontifícia Universidade Católica do Rio Grande do Sul, <sup>3</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Synthesis and morphological characterization of Co , Cu and Mn films electrodeposited from the recycling of spent batteries and its application in galvanic protection of AISI 1045 carbon steel corrosion J.P1.13**  
Luiza Botan Favale<sup>1</sup>, Livia Serra Selvatici<sup>1</sup>, Eduardo dos Santos Loureiro<sup>1</sup>, Marcos Benedito Jose de Freitas<sup>2</sup>, Pedro Vitor Morbach Dixini<sup>1</sup>, Vinicius Guilherme Celante<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Universidade Federal do Espírito Santo
- 17:45 Characterization of PEO coatings on aluminium in the presence of silver J.P1.14**  
Andressa Rodrigues<sup>1</sup>, Marco Antonio Albuquerque Gaspar<sup>1</sup>, Janaina Soares Santos<sup>1</sup>, Giovanni Pimenta Mambrini<sup>1</sup>, Francisco Trivinho-Strixino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba
- 17:45 Effect of number of electrochemical cycles in polyaniline electrosynthesis on carbon felt J.P1.15**  
 Anne Karoline dos Santos Poli<sup>1</sup>, Gustavo Machado Domingues Caetano<sup>2,3</sup>, Adriana Medeiros Gama<sup>2</sup>, Mauricio Ribeiro Baldan<sup>4</sup>, Emerson Sarmento Gonçalves<sup>1,2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço, <sup>3</sup>ETEP Faculdades, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Evaluation of fretting wear behaviour of DLC hard coatings deposited on stainless steel J.P1.16**  
Eugenia Laura Dalibon<sup>1</sup>, Jorge Nahuel Pecina<sup>1</sup>, Amado Cabo<sup>2</sup>, Vladimir Jesús Trava-Airoldi<sup>3</sup>, Sonia Patricia Brühl<sup>1</sup>; <sup>1</sup>Universidad Tecnológica Nacional, <sup>2</sup>IONAR S.A., <sup>3</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Synthesis and characterization of hybrid polymer for the adsorption of imazethapyr in aqueous medium J.P1.17**  
Gabriel Rabelo Coelho<sup>1</sup>, Juliana Casarin<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>, César Ricardo Teixeira Tarley<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Characterization of TiN thin films deposited by reactive magnetron sputtering in an industrial equipment J.P1.18**  
Bruna Louise Perotti<sup>1</sup>, Letícia Tessari Bim<sup>1</sup>, Carla Daniela Boeira<sup>1</sup>, Carlos Alejandro Figueroa<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul
- 17:45 Comparative corrosion resistance study of the of polypyrrole and polyaniline films electrodeposited on aluminum J.P1.19**  
Rodrigo Barbosa Hilario<sup>1</sup>, Andrea Santos Liu<sup>1</sup>, Liu Yao Cho<sup>2</sup>, Adriana Medeiros Gama<sup>3</sup>, Mauricio Ribeiro Baldan<sup>4</sup>, Emerson Sarmento Gonçalves<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade do Vale do Paraíba, <sup>3</sup>Divisão de Materiais, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Treatment of surface analysis in steel plates sae paint eletrostatics J.P1.20**  
Eduardo Costa Estambasse<sup>1</sup>, Paulo Cesar Rabelo<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia Senai Londrina
- 17:45 Laser surface alloying in Ti-Nb sintered parts. J.P1.21**  
Sérgio dos Anjos Silva<sup>1</sup>, João Batista Fogagnolo<sup>1</sup>, Rubens Caram<sup>1</sup>, Vicente Amigó Borrás<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidad Politécnica de Valencia

- 17:45 Surface finish evaluation of green alumina bodies by turning using three types of cutting tool** **J.P1.22**  
Marcos Gonçalves Júnior<sup>1</sup>, Cesar Renato Foschini<sup>1</sup>, Marcos Tadeu Tibúrcio Gonçalves<sup>1</sup>, Ivaldo De Domenico Valarelli<sup>1</sup>, Luiz Eduardo de Angelo Sanchez<sup>1</sup>, Carlos Alberto Fortulan<sup>2</sup>; <sup>1</sup>Faculdade de Engenharia - Campus de Bauru, <sup>2</sup>USP - Escola de Engenharia de São Carlos
- 17:45 Removal of Cu(II) from aqueous solution using a modified PVC surface: Characterization and application** **J.P1.23**  
Gustavo Rocha Castro<sup>1</sup>, Alexandre de Oliveira Jorgetto<sup>1</sup>, Valber Albuquerque Pedrosa<sup>1</sup>, Adrielli Cristina Peres Silva<sup>1</sup>, Marcos Henrique P Wondracek<sup>1</sup>, Janaíne Rocio Ivassechen<sup>1</sup>; <sup>1</sup>Instituto de Biociencias de Botucatu - UNESP
- 17:45 Growth of superconductor and ferroelectric materials** **J.P1.24**  
Felipe Ferraz Morgado de Oliveira<sup>1,2</sup>, Caroline Lydie Moulis<sup>3,4</sup>, Thiago José de Almeida Mori<sup>3</sup>, Pedro Schio de Noronha Muniz<sup>3</sup>, Julio Criginski Cezar<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Laboratório Nacional de Luz Síncrotron, <sup>4</sup>Instituto de Física "Gleb Wataghin" - UNICAMP
- 17:45 Preparation and characterization of cubic silsesquioxane organically modified with benzimidazol** **J.P1.25**  
Tamires Rocha Souza<sup>1</sup>, Natasha Mirela Inhã Godoi<sup>1</sup>, Daniela Silvestrini Fernandes<sup>1</sup>, Devaney Ribeiro do Carmo<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho
- 17:45 Surface energetics studies of nanomaterials** **J.P1.26**  
Kristina Lilova<sup>1</sup>, Danilo Massaki Oshima<sup>2</sup>, Link Brown<sup>1</sup>; <sup>1</sup>Setaram Inc., <sup>2</sup>Dairix
- 17:45 Corrosion evaluation of metal parts in biodiesel by Atomic Force Microscopy and Vickers Micro Hardness** **J.P1.27**  
Murilo de Araújo<sup>1</sup>, Alexandre Cestari<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo - IFSP - Campus Matão
- 17:45 Superhydrophobic state on Ti-6Al-4V surface using laser ablation** **J.P1.28**  
Ivan Kwei Liu Kam<sup>1,2</sup>, Jonas Jakutis Neto<sup>1</sup>; <sup>1</sup>Instituto de Estudos Avançados, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Influence of time on thickness and wear resistance of red mud coating in aluminum alloy** **J.P1.29**  
Lívia Sottovia<sup>1</sup>, Maria Lucia Pereira Antunes<sup>1</sup>, Rafael Parra Ribeiro<sup>2</sup>, Bruno Oliveira Garcia<sup>1</sup>, Felipe Saura<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Sorocaba, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Incorporation of niobium in coatings produced by plasma electrolytic oxidation of titanium** **J.P1.30**  
Fabio Rodrigues Orsetti<sup>1</sup>, Thaís Matiello Gonçalves<sup>2</sup>, Lívia Sottovia<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>, Ana Maria Ferrari Lima<sup>3</sup>; <sup>1</sup>UNESP - Campus Sorocaba, <sup>2</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Use of mining waste for plasma surface treatment** **J.P1.31**  
Maria Lucia Pereira Antunes<sup>1</sup>, Vivian Farias de Lima<sup>1</sup>, Elidiane Cipriano Rangel<sup>2</sup>, Nilson Cristino Cruz<sup>1</sup>; <sup>1</sup>UNESP - Campus Sorocaba, <sup>2</sup>Universidade Estadual Paulista - Campus Sorocaba

- 17:45 Surface modification and corrosion protection of steel by electrosynthesized polyaniline/magnetite nanoparticles composite films** **J.P1.32**  
Giuliana Thalina Franco<sup>1</sup>, Lucas Henrique Eiras dos Santos<sup>1</sup>, Carlos Marcus Gomes da Silva Cruz<sup>2</sup>, Artur de Jesus Motheo<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Grazing incidence synchrotron X-ray diffraction and Mössbauer spectroscopy analyses of plasma nitrided ASTM F138 stainless steel** **J.P1.33**  
Danilo Olzon Dionysio de Souza<sup>1,2</sup>, Edilaine Honório Silva<sup>3</sup>, Maristela Olzon-Dionysio<sup>2</sup>, Sylvio Dionysio de Souza<sup>2</sup>, L. G. Martinez<sup>4</sup>, José Domingos Fabris<sup>2</sup>, José Domingos Ardisson<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Federal University of the Jequitinhonha and Mucuri Valleys, <sup>3</sup>Studiecentrum voor Kernenergie, <sup>4</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Residual stress and nanostructuring of stainless steel (AISI 316L) prompted by xenon ion bombardment at different impinging angles** **J.P1.34**  
Silvia Azevedo dos Santos Cucatti<sup>1</sup>, Roosevelt Droppa Jr.<sup>2</sup>, Carlos Alejandro Figueroa<sup>3</sup>, Manuela Klaus<sup>4</sup>, Christoph Genzel<sup>4</sup>, Fernando Alvarez<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>2</sup>Universidade Federal do ABC, <sup>3</sup>Universidade de Caxias do Sul, <sup>4</sup>Helmholtz-Zentrum Berlin für Materialien und Energie
- 17:45 Roughness Analysis of Pearlitic Steel Wire Drawn** **J.P1.35**  
Ana Carolina Duarte Duarte<sup>1</sup>, Rachel Santos Mendes<sup>1</sup>, Manuela Fontana<sup>1</sup>, Gabriel Gonçalves Pessoa de Castro<sup>1</sup>, Jefferson Fabrício Cardoso Lins<sup>1</sup>, Jorgimara de Oliveira Braga<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 17:45 The settling effect evaluation on stainless steel parts processed by gelcasting process** **J.P1.36**  
Louise Fernanda Rodrigues Oliveira<sup>1</sup>, Fernando Santos Ortega<sup>1</sup>; <sup>1</sup>Centro Universitário FEI
- 17:45 Behavior of fatigue life in the steel SAE 1020 submitted to arc welding with coated electrode AWS E 7018 – case study** **J.P1.37**  
Mauro Pedro Peres<sup>1</sup>, Francisco José Grandinetti<sup>1</sup>, Haroldo Wilson Lourenço Silva<sup>2</sup>, Ramon Moreira Peres<sup>2</sup>, Daniel Grandinetti<sup>1</sup>; <sup>1</sup>Universidade de Taubaté, <sup>2</sup>UNESP Guaratinguetá
- 17:45 LOW-TEMPERATURE PLASMA ASSISTED CARBURIZING OF THE AISI 410 MARTENSITIC STAINLESS STEEL: MICROSTRUCTURE AND CORROSION RESISTENCE** **J.P1.38**  
Maressa Vilela Garcia<sup>1</sup>, Orlando Lima Ferreira<sup>2</sup>, Miguel valentin Iginó<sup>2</sup>, Marcos Antonio Coelho Berton<sup>2</sup>, Rodrigo Perito Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Instituto Senai de Inovação em Eletroquímica
- 17:45 Chemical Deposition of Polypyrrole on Copper Surface** **J.P1.39**  
Bárbara Ramos Ferreira<sup>1</sup>, Liu Yao Cho<sup>1</sup>, Andrea Santos Liu<sup>2</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 17:45 Corrosion behavior in welded joints of super duplex stainless steel ASTM A890/890M grade 6A.** **J.P1.40**  
Eloá Lopes Maia<sup>1</sup>, Marcelo Martins<sup>2</sup>, Eduardo Bertoni da Fonseca<sup>3</sup>, Paulo Roberto Mei<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Sulzer S/A, <sup>3</sup>Laboratório Nacional de Nanotecnologia

- 17:45 Radiation of the parts 316 stainless steel previously coated with NiCrAlY by the method HVOF with CO<sub>2</sub> laser** **J.P1.41**  
Silvelene Alessandra Silva<sup>1</sup>, Maria Fernanda de Souza Ferreira<sup>2</sup>, Glaucia Regina Silva Pita<sup>1</sup>, Ana Claudia Costa Oliveira<sup>3</sup>, Getúlio Vasconcelos<sup>4,1</sup>; <sup>1</sup>Instituto de Estudos Avançados, <sup>2</sup>ETEP Faculdades, <sup>3</sup>Fundação Universidade Federal do Pampa, <sup>4</sup>Instituto Tecnológico de Aeronáutica
- 17:45 Corrosion resistance of carbon steel coated with SiO<sub>x</sub>/SiO<sub>x</sub>C<sub>y</sub>H<sub>z</sub>/SiO<sub>x</sub> multilayers : variation of the parameters on the deposition of the SiO<sub>x</sub> layer** **J.P1.42**  
Rita de Cássia Cipriano Rangel<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Francesco Fracassi<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Sorocaba, <sup>2</sup>Università degli Studi di Bari Aldo Moro
- 17:45 SiC interlayer by laser-cladding on WC-Co substrates for CVD diamond deposition** **J.P1.43**  
Andre Contin<sup>1</sup>, Raonei Alves Campos<sup>2</sup>, Mariana Amorim Fraga<sup>1</sup>, Getúlio Vasconcelos<sup>3</sup>, José Vieira da Silva Neto<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>1</sup>, Evaldo José Corat<sup>1</sup>; <sup>1</sup>Instituto Nacional de pesquisas espaciais, <sup>2</sup>Universidade Federal do Sul e Sudeste do Pará, <sup>3</sup>Instituto de Estudos Avançados
- 17:45 Green smart anticorrosive coating based on APDTC and PVAc for aluminium alloy protection** **J.P1.44**  
Vanessa Salgado<sup>1</sup>, HERBERT DUCHATSCH JOHANSEN<sup>1</sup>; <sup>1</sup>Universidade do Sagrado Coração
- 17:45 CARBON-FLUORINE FILMS DEPOSITED BY PECVD FROM 1,1,1,2-TETRAFLUORETHANE AND ACETYLENE APPLIED TO THE REDUCTION INORGANIC SCALE FORMATION** **J.P1.45**  
Mauro Meliga Wysard<sup>1</sup>, Sérgio de Souza Camargo Jr.<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 17:45 Influence of the pressure in the corrosion resistance of the SiO<sub>x</sub>C<sub>y</sub>H<sub>z</sub> films deposited by plasma.** **J.P1.46**  
Felipe Oliveira Fernandes<sup>1</sup>, Rita de Cássia Cipriano Rangel<sup>1</sup>, Guilherme Rodrigues Barbazza<sup>1</sup>, Rafael Parra Ribeiro<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Sorocaba
- 17:45 Morphology and mechanical properties of SiO<sub>x</sub>C<sub>y</sub>H<sub>z</sub>[n1] films deposited by PECVD** **J.P1.47**  
Guilherme Rodrigues Barbazza<sup>1</sup>, Felipe Oliveira Fernandes<sup>1</sup>, Rita de Cássia Cipriano Rangel<sup>1</sup>, Rafael Parra Ribeiro<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Sorocaba
- 17:45 Tribological properties of RF-plasma-deposited diamond-like carbon coatings on nitrile rubber.** **J.P1.48**  
Marcelo Evers<sup>1</sup>, Y. T. Xing<sup>1</sup>, Juan Lucas Nachez<sup>1</sup>, D. F. Franceschini<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 17:45 Plasma electrolytic oxidation of Al alloy from a solution containing aluminium sulfate** **J.P1.49**  
Deborah C.R. Santos<sup>1</sup>, Bruna T. M. Souza<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Pindamonhangaba
- 17:45 Calcium Carbonate Scale Formation onto Stainless Steel and Carbon-Based Surfaces** **J.P1.50**  
Lucas Muraro Sassi<sup>1</sup>, Mauro Meliga Wysard<sup>1</sup>, Sérgio de Souza Camargo Jr.<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

- 17:45 Synthesis and characterization of nickel films over aluminum substrates produced through nitrates thermal decomposition followed by H<sub>2</sub> reduction** **J.P1.51**  
Rogério Navarro Correia Siqueira<sup>1</sup>, José Brant Campos<sup>2</sup>, Suzana Bottega Peripolli<sup>2</sup>, Vitor Santos Ramos<sup>2</sup>, Thais Marques<sup>2</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Universidade do Estado do Rio de Janeiro
- 17:45 The study of microstructure and corrosion of the steel 1045 in the presence of guaraná sleeves such as green inhibitor** **J.P1.52**  
Amanda Pires Nogueira de Souza<sup>1</sup>, Antonio Faria Neto<sup>1</sup>, Raimundo Ribeiro Passos<sup>1</sup>, Leandro Aparecido Pocrifka<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 17:45 Evaluation of the variables in the carbon steel corrosion process using guaraná sleeves as green corrosion inhibitor through the Taguchi method** **J.P1.53**  
Antonio Faria Neto<sup>1</sup>, Amanda Pires Nogueira de Souza<sup>1</sup>, Raimundo Ribeiro Passos<sup>1</sup>, Leandro Aparecido Pocrifka<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas
- 17:45 Thin films deposition of Cr-N compounds by reactive plasma immersion ion implantation and deposition (PIII&D)** **J.P1.54**  
Michelle Santos<sup>1</sup>, Carina Barros Mello<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Thin films deposition of Cr-N compounds by reactive plasma immersion ion implantation and deposition (PIII&D)** **J.P1.55**  
Michelle Santos<sup>1</sup>, Carina Barros Mello<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Nacional de pesquisas espaciais
- 17:45 Exfoliation corrosion evaluation of AA 2198-T851 aluminum alloy welded by FSW** **J.P1.56**  
Caruline de Souza Carvalho Machado<sup>1</sup>, Mariana Xavier Milagre<sup>1</sup>, Cassius Olivo Figueiredo Terra Ruchert<sup>2</sup>, Caio Palumbo Abreu<sup>1</sup>, Isolda Costa<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>2</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Hydrogen plasma etching to improve DLC thin films adhesion on steel** **J.P1.57**  
Leonardo Mathias Leidens<sup>1</sup>, Vanessa Piroli<sup>1</sup>, Angela Elisa Crespi<sup>1</sup>, Carla Daniela Boeira<sup>1</sup>, Carlos Alejandro Figueroa<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul
- 17:45 Thermal Plasma Spraying System to Produce Ceramic Coating** **J.P1.58**  
Roberson José da Silva<sup>1</sup>, Tiago Moreira Bastos Campos<sup>1</sup>, Cristian Cley Paterniani Rita<sup>1</sup>, Aleandro Ribeiro Marquesi<sup>1</sup>, Homero Santiago Maciel<sup>1,2</sup>, Gilberto Petraconi Filho<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Universidade do Vale do Paraíba
- 17:45 Silicon-containing interlayers leading to improve DLC films adhesion on steel** **J.P1.59**  
Carla Daniela Boeira<sup>1</sup>, Leonardo Mathias Leidens<sup>1</sup>, Felipe Cemin<sup>2</sup>, Eigor Renato Petry<sup>1</sup>, Alexandre Fassini Michels<sup>1</sup>, Carlos Alejandro Figueroa<sup>1</sup>; <sup>1</sup>Universidade de Caxias do Sul, <sup>2</sup>Université Paris-Sud
- 17:45 Morphology of interference films grown on stainless steel by electrochemical methods using molybdate and vanadate solutions** **J.P1.60**  
Rosa Maria Rabelo Junqueira<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Conversion of SiO<sub>x</sub>C<sub>y</sub>H<sub>z</sub> thin films surfaces into SiO<sub>2</sub>-like by O<sub>2</sub> plasma treatment** **J.P1.61**  
Rafael Parra Ribeiro<sup>1</sup>, Rita de Cássia Cipriano Rangel<sup>1</sup>, Felipe Oliveira Fernandes<sup>1</sup>, Guilherme Rodrigues Barbazza<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Steven Frederick Durrant<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Sorocaba

- 17:45 Deposition of SiO<sub>2</sub> coatings on composites substrates by solution precursor plasma spraying process J.P1.62**  
Felipe Souza Miranda<sup>1</sup>, Felipe Rocha Caliar<sup>2,3</sup>, Alexei Mikhailovich Essiptchouk<sup>1,4</sup>, Gilberto Petraconi Filho<sup>1</sup>, Tiago Moreira Bastos Campos<sup>1</sup>, Gilmar Patrocínio Thim<sup>5</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto Tecnológico da Aeronáutica, <sup>3</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>4</sup>Univ. Estadual Paulista - Campus São José dos Campos, <sup>5</sup>Instituto Tecnológico de Aeronáutica (ITA), Brasil
- 17:45 Low-k porous carbon-doped silicon dioxide (SiCOH) thin film: Structural characterization by X-ray at grazing incidence J.P1.63**  
Rosimara Passos Toledo<sup>1</sup>, Carlos Eduardo Silveira Dias<sup>1</sup>, Danilo Roque Huanca<sup>1</sup>, Sebastião Gomes dos Santos Filho<sup>2</sup>, Patrick Verdonck<sup>3</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Interuniversity Microelectronic Center
- 17:45 Influence of the feeding speed of an Inconel 625 wire deposited as coating through the TIG process over an ASTM A182 F22 steel J.P1.64**  
Arthur Henrique Wiering<sup>1</sup>; <sup>1</sup>Centro Universitário FEI
- 17:45 Modification of anchored TiO<sub>2</sub> nanotubes by silanization and further silicon oil embedding to create a hydrophobic lubricant-infused porous surface J.P1.65**  
Maria de Fátima Brito Sousa<sup>1</sup>, Mara Adlay Andrade<sup>1</sup>, Rodnei Bertazzoli<sup>1</sup>, Celso Aparecido Bertran<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Nanoporous anodic alumina produced with hybrid pulse technique with Short-Time Pulse Anodization J.P1.66**  
Caio Guilherme Pereira dos Santos<sup>1</sup>, Francisco Trivinho-Strixino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba
- 17:45 Synthesis of Nanoporous Anodic Alumina (NAA) films growth on low cost Al substrate J.P1.67**  
Uanderson Mezavila Garcia<sup>1</sup>, Janaina Soares Santos<sup>1</sup>, Francisco Trivinho-Strixino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba
- 17:45 Catalytic activity evaluation of the perovskites La<sub>(1-x)</sub>Ca<sub>x</sub>MnO<sub>3</sub> and Gd<sub>(1-x)</sub>Ca<sub>x</sub>MnO<sub>3</sub> in methane combustion reactions. J.P1.68**  
Mariza Fernandes Fernandes<sup>1</sup>, Eduarda Medeiros de Araújo<sup>1</sup>, Indianara Alves Fernandes<sup>1</sup>, Filipe Martel Magalhães Borges<sup>1</sup>, Juan Alberto Chavez Ruiz<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Centro de Tecnologias do Gás e Energias Renováveis
- 17:45 Preparation of Nb:TiO<sub>2</sub> thin films by sol-gel method: morphology and optical properties J.P1.69**  
Gustavo Henrique de Magalhães Gomes<sup>1</sup>, Marcelo Machado Viana<sup>1</sup>, Nelcy D. S. Mohallem<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Luminescent visualization of latent fingerprints using TiO<sub>2</sub>:Eu<sup>3+</sup> powder J.P1.70**  
Yasmim Rafaella Caixeta Pinto<sup>1</sup>, Alberthmeiry Teixeira de Figueiredo<sup>1</sup>, Ana Carolina Boacina de Freitas<sup>1</sup>, Cristiano Morita Barrado<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 17:45 TiO<sub>2</sub> film on glass for self-cleaning and bactericidal activities J.P1.71**  
Daniel Jacinto Silva<sup>1</sup>, Gabriela Byzynski Soares<sup>2</sup>, Diogo Paschoalini Volanti<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Instituto de Química de Araraquara/UNESP

- 17:45 N:ZnO nanoparticles used as in atrazine photodegradation** **J.P1.72**  
Tania Regina Giraldo<sup>1</sup>, Shena Rafaela Rebouças Padilha<sup>1</sup>, Mariana Fachin Lopes<sup>1</sup>, Jéssica Ariane Oliveira<sup>2</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Layer-by-Layer Assembled TiO<sub>2</sub>-Graphene Oxide Photocatalysts** **J.P1.73**  
Ítalo Azevedo Costa<sup>1</sup>, Leonardo Giordano Paterno<sup>1</sup>, Leonardo Ferreira Paula<sup>2</sup>, Antônio Otávio de Toledo Patrocínio<sup>2</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Universidade Federal de Uberlândia
- 17:45 Study of YVO<sub>4</sub> as photocatalytic catalyst: correlation between synthetic route and ecotoxicity.** **J.P1.74**  
 Carlos Martins Aiube<sup>1</sup>, Ingrid Tavora Weber, Tatiane Martins Lobo<sup>1</sup>, Rhaul Oliveira<sup>1</sup>, Irvin Bryan Machado Ferraz<sup>1</sup>, Diego Sousa Moura<sup>1</sup>, Marly Eiko Osugi<sup>1</sup>, Cesar Grisolia<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 17:45 Sol-gel TiO<sub>2</sub> and TiO<sub>2</sub>/SiO<sub>2</sub> photocatalyst films for dye degradation** **J.P1.75**  
Magnum Augusto Moraes Lopes de Jesus<sup>1</sup>, Nelcy Della Santana Mohallem<sup>1</sup>, Angela de Mello Ferreira<sup>2</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Centro Federal de Educação Tecnológica de Minas Gerais
- 17:45 PMMA-TiO<sub>2</sub> hybrid coatings for corrosion protection of carbon steel** **J.P1.76**  
Samarah Vargas Harb<sup>1</sup>, Andressa Trentin<sup>1</sup>, Sandra Helena Pulcinelli<sup>1</sup>, Celso Valentim Santilli<sup>1</sup>, Peter Hammer<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 The effect of the morphology in the biological and chemical decontamination using TiO<sub>2</sub> films synthesized by Plasma Electrolytic Oxidation** **J.P1.77**  
Mariana de Souza Sikora<sup>1</sup>, Carlise Hannel Ferreira<sup>1</sup>, Amanda Santos de Lima<sup>1</sup>, Sabrina Candido Nunes<sup>1</sup>, Vidiany Aparecida Queiroz Santos<sup>1</sup>, Ernesto Chaves Pereira<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Influence of the peroxide group on the surface of titanium dioxide synthesized by the OPM route** **J.P1.78**  
Estela Melaré Ribeiro dos Santos<sup>1</sup>, Andressa Mayumi Kubo<sup>1</sup>, Luiz Fernando Gorup<sup>1</sup>, Patrícia Francatto<sup>1</sup>, Francisco Nunes de Souza Neto<sup>2</sup>, Edson Roberto Leite<sup>1</sup>, Elson Longo<sup>1</sup>, Emerson Rodrigues Camargo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Synthesis and characterization of titanium dioxide with a surface containing peroxo groups** **J.P1.79**  
Patrícia Alejandra Merino Figueredo<sup>1</sup>, Elson Longo<sup>1</sup>, Andre Esteves Nogueira<sup>1</sup>, Edson Roberto Leite<sup>1</sup>, Luiz Fernando Gorup<sup>1</sup>, Patrícia Francatto<sup>1</sup>, Francisco Nunes de Souza Neto<sup>1</sup>, Estela Melaré Ribeiro dos Santos<sup>2</sup>, Emerson Rodrigues Camargo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Effect of molybdates addition on pitting corrosion in colored AISI 304 stainless steel added by electrochemical deposition** **J.P1.80**  
Francisco Javier Goyo Brito<sup>1</sup>, Adalberto Rosales Mendoza<sup>2</sup>, Rosdely Quiroz<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP, <sup>2</sup>Universidad Simón Bolívar Venezuela
- 17:45 RBS analysis of nanoporous anodic alumina** **J.P1.81**  
Adriana Oliveira Delgado-Silva<sup>1</sup>, Tiago Fiorini da Silva<sup>2</sup>, L. Cantelli<sup>1</sup>, Francisco Trivinho-Strixino<sup>1</sup>, Manfredo Harri Tabacniks<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba, <sup>2</sup>Instituto de Física-USP

- 17:45 Influence of concentration and liquid suspension phase on photocatalytic activity and polymer photodegradation of TiO<sub>2</sub>-coated polypropylene films under UV-vis light** **J.P1.82**  
Rodrigo Marques Tafuri<sup>1</sup>, Elias Paiva Ferreira Neto<sup>2</sup>, Ubirajara Pereira Rodrigues Filho<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos- Universidade de São Paulo, <sup>2</sup>Instituto de Química de São Carlos
- 17:45 Co<sub>3</sub>O<sub>4</sub> Films Deposited by Reactive Magnetron Sputtering in Photocatalysis** **J.P1.83**  
Kleper de Oliveira Rocha<sup>1</sup>, Nilton Francelosi Azevedo Neto<sup>1</sup>, Paulo Noronha Lisboa-Filho<sup>1</sup>, José Humberto Dias da Silva<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru
- 17:45 Development and utilization of ceramics tools Al<sub>2</sub>O<sub>3</sub> - 3y-ZrO<sub>2</sub> inserts for ceramics tools of gray cast iron GG20 class** **J.P1.84**  
Miguel Adriano Inácio<sup>1</sup>, Maria do Carmo de Andrade Nono<sup>2</sup>, José Vitor Souza<sup>3</sup>, Daniel Alessander Nono<sup>2</sup>, Sergio Luiz Mineiro<sup>2</sup>; <sup>1</sup>Instituto Nacional de pesquisas espaciais, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Faculdade de Engenharia de Guaratinguetá
- 17:45 Experimental Study and Characterization of DLC Films on steel, using PECVD-DC pulsed with Additional Cathode** **J.P1.85**  
Marco Antonio Ramírez<sup>1</sup>, Dubrazkha Carolina Lugo<sup>2</sup>, Elver Juan de Dios Mitma Pillaca<sup>1</sup>, Vladimir Jesús Trava-Airoldi<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, Laboratório Associado de Sensores
- 17:45 Synthesis of silica-coated gold nanoparticles: industrial and environmental radiotracers** **J.P1.86**  
Raquel Luiza Mageste Fonseca<sup>1</sup>, Bárbara Aparecida Nogueira Barbosa<sup>1</sup>, Claudilene Ribeiro Chaves<sup>2</sup>, Luiz Orlando Ladeira<sup>2</sup>, Jorge Luis Lopez Aguilar<sup>3</sup>, Rubens Martins Moreira<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Universidade Federal do Acre
- 17:45 Application of pulsed current on anodizing and subsequent electrolytic coloring by direct current**  
Natal Nerímio Regone<sup>1</sup>, André Alves Ferreira<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista-Campus de São João da Boa Vista

## Wednesday, September 28<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION J.OR4 (09:45 - 10:45) - Room Carvalho III*

- 09:45 Surface modification of polymeric materials by non-thermal plasma: from dental to engineering materials** **J.OR4.15\***  
Renata Simão<sup>1</sup>; <sup>1</sup>Nanotechnology Engineering Program, COPPE - Federal University of Rio de Janeiro ? UFRJ, Rio de Janeiro, RJ, Brazil

- 10:15 N- doped SrSnO<sub>3</sub> – influence of the synthesis route** **J.OR4.16**  
Ingrid Tavora Weber<sup>1</sup>, Ronan Lebullenger<sup>2</sup>, Tatiane Martins Lobo<sup>1</sup>, Valerie Bouquet<sup>2</sup>, Maryline Guilloux-Viry<sup>2</sup>, Iêda Maria Garcia Santos<sup>3</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Université de Rennes 1, <sup>3</sup>Universidade Federal da Paraíba
- 10:30 In-situ synthesis :An alternative route to process of ceramic coatings** **J.OR4.17**  
Ana Sofia C. M. D'Oliveira<sup>1</sup>, Edson H. Takano<sup>1</sup>, Sidnei Antonio Pianaro<sup>2</sup>;  
<sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Estadual de Ponta Grossa

**SESSION J.OR5 (11:15 - 12:00) - Room Carvalho III**

- 11:15 Cerium doped siloxane-PMMA hybrid coatings with anticorrosive self-healing properties** **J.OR5.18**  
Andressa Trentin<sup>1</sup>, Samarah Vargas Harb<sup>1</sup>, Fábio Cesar dos Santos<sup>1</sup>, Sandra Helena Pulcinelli<sup>1</sup>, Celso Valentim Santilli<sup>1</sup>, Peter Hammer<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 11:30 Carbon Modified Surfaces for Environmental and Energy Applications** **J.OR5.19**  
Mauro Coelho dos Santos<sup>1,2</sup>; <sup>1</sup>Fundação Universidade Federal do Abc, <sup>2</sup>Universidade Federal do ABC

**Poster presentations**

**SESSION J.P2 (17:45 - 19:30)**

- 17:45 INFLUENCE OF HEAT TREATMENT ON SURFACE QUALITY OF MACHINED WOOD** **J.P2.140**  
 Luciano Rossi Bilesky<sup>1</sup>, Manoel Cleber de Sampaio Alves<sup>2</sup>, Marcel Yuzo Kondo<sup>2</sup>, Cleverson Pinheiro<sup>3</sup>, Demétrio Zacarias<sup>3</sup>; <sup>1</sup>Faculdade de Tecnologia de Ensino Superior, <sup>2</sup>UNIVERSIDADE ESTADUAL PAULISTA "JÚLIO DE MESQUITA FILHO", <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 17:45 Potential sustainable slow release fertilizers obtained by mechanochemical activation of layered double hydroxides and K<sub>2</sub>HPO<sub>4</sub>** **J.P2.90**  
Roger Borges<sup>1</sup>, Fernando Wypych<sup>1</sup>, Vanessa PREVOT<sup>2</sup>, Claude Forano<sup>2</sup>;  
<sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Université Blaise Pascal
- 17:45 Study of the influence of texturing and flame treatment in the paint anchoring** **J.P2.107**  
Thaysa R. M. Ferreira<sup>1,2</sup>, André Luiz dos Santos<sup>2</sup>, Arthur Parente<sup>2</sup>, Aline Bruna da Silva<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica de Minas Gerais, <sup>2</sup>Fiat Chrysler Automobiles
- 17:45 Fabrication and optical characterization of Bragg mirror formed by porous silicon under electrochemical etching** **J.P2.135**  
Ellen Christine de Souza Galvão<sup>1</sup>, Luiz Angelo Berni<sup>2</sup>, Antonio Fernando Beloto<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Effect of thermal treatment of carbon felt used as substrate to polyaniline electrosynthesis** **J.P2.94**  
 Anne Karoline dos Santos Poli<sup>1</sup>, Gustavo Machado Domingues Caetano<sup>2,3</sup>, Adriana Medeiros Gama<sup>2</sup>, Mauricio Ribeiro Baldan<sup>4</sup>, Emerson Sarmiento Gonçalves<sup>1,2</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço, <sup>3</sup>ETEP Faculdades, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais

- 17:45 Modification of the wettability of the cellulose surface by ablation and deposition plasma processes** **J.P2.153**  
Janine Sanches Gonzaga de Camargo<sup>1</sup>, Aparecido Junior de Menezes<sup>1</sup>, Elidiane Cipriano Rangel<sup>2</sup>, Nilson Cristino Cruz<sup>2</sup>, Adriana Oliveira Delgado-Silva<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Study and characterization of the variation of concentration of HNO<sub>3</sub> in wet tissues degradation process of carbon fiber.** **J.P2.93**  
Marcelo Capella Campos<sup>1</sup>, Carlos Alberto Soufen<sup>2</sup>, Mario Galhiane<sup>2</sup>, Nelson Betolucci<sup>1</sup>, Graciete Solange Capella<sup>3</sup>, Danilo Scapin<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Ensino Superior, <sup>2</sup>UNESP, <sup>3</sup>Faculdade de Agudos
- 17:45 Study of mechanical properties of hybrid tissues of kevlar and carbon fiber composite polymeric materials degraded by wet degradation process.** **J.P2.154**  
Marcelo Capella Campos<sup>1</sup>, Vinícius Faulin<sup>1</sup>, Carlos Alberto Soufen<sup>2</sup>, Eduardo Marques<sup>1</sup>, Leonardo Terrabuio<sup>1</sup>, Heitor Morales<sup>1</sup>, Luis Almeida<sup>3</sup>; <sup>1</sup>Faculdade de Tecnologia de Ensino Superior, <sup>2</sup>UNESP, <sup>3</sup>Faculdade de Agudos
- 17:45 Study on porosity of plasma-treated cellulose acetate membrane** **J.P2.89**  
Paola Egert Ortiz<sup>1</sup>, Heloisa Regina Turatti Silva<sup>1</sup>, Rachel Faverzani Magnago<sup>1</sup>, Deise Rebelo Consoni<sup>2</sup>, Vinicius Ferrari<sup>1</sup>, Gabrielle Melo Burigo<sup>1</sup>;  
<sup>1</sup>Universidade do Sul de Santa Catarina, <sup>2</sup>Universidade Federal de Santa Catarina
- 17:45 Synthesis and characterization of a new cocrystal of hydrochlorothiazide** **J.P2.159**  
Marcus Lima Sousa<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Paulo Roberto da Silva Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 17:45 A new cocrystal of Gliclazide with Tromethamine: preparation and characterization** **J.P2.158**  
Marcus Lima Sousa<sup>1</sup>, Francisca Célia da Silva<sup>1</sup>, Silvério Ferreira da Silva Filho<sup>1</sup>, Andreia Cardoso Pereira<sup>1</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Paulo Roberto da Silva Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão
- 17:45 Preparation and characterization of a new hybrid material formed by reaction of cobalt (II) nitroprusside and octa(aminopropyl)silsesquioxane** **J.P2.155**  
Mariana de Souza Magossi<sup>1</sup>, Devaney Ribeiro do Carmo<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS
- 17:45 Synthesis and characterization of MCM-41 inorganofunctionalized with Ti(IV) modified with eosin-methylene blue** **J.P2.113**  
Maiara de Souza Magossi<sup>1</sup>, Devaney Ribeiro do Carmo<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS
- 17:45 Layered zinc glycerolate produced "in-situ" into pores of mesoporous silica as catalyst for transesterification reactions** **J.P2.88**  
Luis Ricardo S. Kanda<sup>1</sup>, Marcos Lúcio Corazza<sup>1</sup>, Fernando Wypych<sup>1</sup>;  
<sup>1</sup>Universidade Federal do Paraná
- 17:45 Study of controlled release of urea using natural oil-based poly(urethane) coatings: the kinetic aspects of urea release** **J.P2.151**  
Ricardo Bortoletto-Santos<sup>1</sup>, Cauê Ribeiro Oliveira<sup>1</sup>, Wagner Luiz Polito<sup>2</sup>;  
<sup>1</sup>Empresa Brasileira de Pesquisa Agropecuária, <sup>2</sup>Instituto de Química de São Carlos
- 17:45 Electrodeposition and Characterization of Poly (5-Amino 1-Naphthol) in presence of organic and inorganic acids** **J.P2.138**  
Wellington de Souza Lima<sup>1</sup>, Roy Victor Escobar<sup>1</sup>, Alvaro Roberto Martins<sup>1</sup>, Elaine Pavini Cintra<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo

- 17:45 Controlled release of phosphate fertilizer using castor oil-based polyurethane coating: A phosphorus release study** **J.P2.100**  
Diego Fernandes Da Cruz<sup>1</sup>, Ricardo Bortoletto-Santos<sup>1</sup>, Wagner Luiz Polito<sup>2</sup>, Cauê Ribeiro Oliveira<sup>1</sup>; <sup>1</sup>Empresa Brasileira de Pesquisa Agropecuária, <sup>2</sup>Instituto de Química de São Carlos
- 17:45 Observation of ferroelectric domains with photoemission electron microscopy (PEEM)** **J.P2.95**  
Caroline Lydie Mouls<sup>1,2</sup>, Felipe Ferraz Morgado de Oliveira<sup>3,2</sup>, Thiago José de Almeida Mori<sup>2</sup>, Pedro Schio de Noronha Muniz<sup>2</sup>, Julio Criginski Cezar<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Thermal corrosion of monolithic vitreous carbon to obtain carbon microstructures** **J.P2.103**  
Júlia Cassiano Ariseto<sup>1,2</sup>, Fábio Dondeo Origo<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto de Estudos Avançados
- 17:45 Evaluation of nonionic surfactants in the treatment of oily water** **J.P2.108**  
Aline Vaz de Souza<sup>1</sup>, Natielly Andressa da Silva Souza<sup>1</sup>, Josane Assis Costa<sup>1</sup>, Claudia Regina Elias Mansur<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 17:45 Synthesis and characterization of new silsesquioxane used in thin films for application on electrochemical response of nitrite** **J.P2.129**  
Ariane Caroline Ribicki<sup>1</sup>, João Paulo Winiarski<sup>1</sup>, Bianca Gurski Chemin<sup>1</sup>, Viviane Jandira Van Haandel<sup>1</sup>, Sérgio Toshio Fujiwara<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Research on new silsesquioxane organofunctionalized with imidazole by the sol gel process** **J.P2.91**  
Viviane Jandira Van Haandel<sup>1</sup>, Ariane Caroline Ribicki<sup>1</sup>, João Paulo Winiarski<sup>1</sup>, Sérgio Toshio Fujiwara<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Study of the machinability of wood plastic composite through the milling process** **J.P2.121**  
Carolina Franco Cunha<sup>1</sup>, Sarah David Müzel<sup>2</sup>, Manoel Cleber de Sampaio Alves<sup>2</sup>, Brunna Maria Cunha Pereira<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá, <sup>2</sup>UNIVERSIDADE ESTADUAL PAULISTA "JÚLIO DE MESQUITA FILHO"
- 17:45 Detection of IgM biomarker by Surface-Enhanced Fluorescence (SEF)** **J.P2.144**  
Sabrina Aléssio Camacho<sup>1</sup>, Regivaldo Sobral Filho<sup>2</sup>, Pedro Henrique Benites Aoki<sup>3</sup>, Carlos José Leopoldo Constantino<sup>1</sup>, Alexandre Guimarães Brolo<sup>2</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>University of Victoria British Columbia, <sup>3</sup>Faculdade de Ciências e Letras, UNESP, Assis
- 17:45 Removal of direct yellow 12 from aqueous solutions by CTAB-coated magnetic nanoparticles** **J.P2.145**  
Paulo Henrique Michels Brito<sup>1</sup>, Renata Aquino<sup>1</sup>, Jérôme Depeyrot<sup>1</sup>, Alex Fabiano Cortez Campos<sup>1</sup>; <sup>1</sup>Universidade de Brasília
- 17:45 Protection against corrosion of AA6063 alloy by polyaniline coatings and bimetallic nanoparticles** **J.P2.157**  
Marília Evelyn Rodrigues Oliveira<sup>1,2</sup>, Artur de Jesus Motheo<sup>1,2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Química de São Carlos

- 17:45 Biopolymer-based layer-by-layer films: Effects of chitosan characteristics on film architecture and properties** **J.P2.168**  
Jorge Augusto de Moura Delezuk<sup>1</sup>, Adriana Pavinatto<sup>2</sup>, Flávio Makoto Shimizu<sup>1</sup>, Valquiria Cruz Rodrigues<sup>1</sup>, Marli Leite de Moraes<sup>3</sup>, Sérgio Paulo Campana Filho<sup>4</sup>, Sidney J.L. Ribeiro<sup>5</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>São Carlos Institute of Physics, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária, <sup>3</sup>Universidade Federal de São Paulo, <sup>4</sup>Instituto de Química de São Carlos, <sup>5</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Surface Properties of Polyethylene / Montmorillonite / Carvacrol Nanocomposites** **J.P2.143**  
Larissa Nunes da Silva<sup>1</sup>, Paulo Henrique Camani<sup>2</sup>, Rondes Ferreira da Silva Torin<sup>3,1</sup>, Derval dos Santos Rosa<sup>3</sup>; <sup>1</sup>FACULDADE DE TECNOLOGIA, <sup>2</sup>FACULDADE DE TECNOLOGIA DE MAUÁ, <sup>3</sup>Universidade Federal do ABC
- 17:45 Prometryn herbicide detection via surface-enhanced Raman scattering (SERS): the effect of pH** **J.P2.126**  
rafael Jesus goncalves Rubira<sup>1</sup>, Carlos José Leopoldo Constantino<sup>1</sup>, Santiago Sánchez-Cortés<sup>2</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Consejo Superior de Investigaciones Científicas
- 17:45 Vermiculite incorporation of expanded effect on the physical properties of clay blocks** **J.P2.141**  
Rivaldo Lins Rocha Filho<sup>1</sup>, Giovanni Da Vinci Oliveira<sup>1</sup>, Ricardo Peixoto Suassuna Dutra<sup>2</sup>, Rubens Maribondo do Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte, <sup>2</sup>Universidade Federal da Paraíba
- 17:45 Development of nanostructured electrochemical bio(sensors) for the detection of 17 $\alpha$  ethinylestradiol** **J.P2.130**  
Adriana Pavinatto<sup>1</sup>, Luiza Amim Mercante<sup>1</sup>, Rafaela Cristina Sanfelice<sup>1</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>, Daniel Souza Corrêa<sup>1</sup>; <sup>1</sup>Empresa Brasileira de Pesquisa Agropecuária - Embrapa Instrumentação São Carlos
- 17:45 Physical-chemical properties of composite nanofibers based on polythiophene derivative coated with gold nanoparticles** **J.P2.137**  
Rafaela Cristina Sanfelice<sup>1</sup>, Luiza Amim Mercante<sup>2</sup>, Adriana Pavinatto<sup>2</sup>, Nathália B. Tomázio<sup>3</sup>, Cleber R. Mendonça<sup>3</sup>, Sidney J.L. Ribeiro<sup>4</sup>, Luiz Henrique Capparelli Mattoso<sup>2</sup>, Daniel Souza Corrêa<sup>2</sup>; <sup>1</sup>Empresa Brasileira de Pesquisa Agropecuária, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária - Embrapa Instrumentação São Carlos, <sup>3</sup>Instituto de Física de São Carlos, <sup>4</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Electrospun nanofibers based on polyamide 6/chitosan modified with metal nanoparticles for application in a chemical sensor** **J.P2.136**  
Fernanda Lanzoni Migliorini<sup>1</sup>, Rafaela Cristina Sanfelice<sup>1</sup>, Adriana Pavinatto<sup>1</sup>, Juliana Steffens<sup>2</sup>, Clarice Steffens<sup>2</sup>, Daniel Souza Corrêa<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação, <sup>2</sup>Universidade Regional Integrada do Alto Uruguai E das Missões
- 17:45 Selective Fragmentation of MAPDST films by Synchrotron Radiation: a Combined XPS, NEXAFS and Theoretical Study** **J.P2.160**  
Cleverson Alves Silva Moura<sup>1</sup>, Guilherme Kretzmann Belmonte<sup>1</sup>, Kenneth E. Gonsalves<sup>2</sup>, Maximiliano Segala<sup>1</sup>, Daniel Eduardo Weibel<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Indian Institute of Technology Mandi

- 17:45 Electrospun polystyrene-(emeraldine base) mats as high performance materials for Congo red removal from aqueous solutions** **J.P2.115**  
Filipe Dione Souza Gorza<sup>1</sup>, Graciela da Costa Pedro<sup>1</sup>, Romario justino da silva<sup>1</sup>, Juan Carlos Medina Llamas<sup>1</sup>, José Jarib Alcaraz Espinoza<sup>1</sup>, Alicia Elizabeth Chávez Guajardo<sup>1</sup>, Celso Pinto de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 17:45 Magnetic nanoparticles as support for immobilization of lipases** **J.P2.101**  
Caroline Oliveira Rocha<sup>1</sup>, Miguel Jafelicci Júnior<sup>1</sup>, Ariela Veloso de Paula<sup>2</sup>, Rodrigo Fernando Costa Marques<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Faculdade de Ciências Farmacêuticas de Araraquara/UNESP
- 17:45 Shear strength in the gluing line of Pine wood surfaces planed in milling operation** **J.P2.111**  
João Carlos Biazzon<sup>1</sup>, Marcos Tadeu Tibúrcio Gonçalves<sup>2</sup>, Paulo Roberto Gomes Alves<sup>2</sup>,IVALDO DE DOMENICO VALARELLI<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Bauru, <sup>2</sup>Universidade Estadual Paulista - Campus Itapeva
- 17:45 Nanoporous anodic alumina (NAA) prepared under galvanostatic control and the influence on its optical properties** **J.P2.112**  
Janaina Soares Santos<sup>1</sup>, L. Cantelli<sup>1</sup>, L. M. M. Ferro<sup>1</sup>, P. M. Franci<sup>1</sup>, Adriana Oliveira Delgado-Silva<sup>1</sup>, F. H. Cristovan<sup>2</sup>, Francisco Trivinho-Strixino<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Control of LIPPS formation in GaAs using femtosecond laser pulses** **J.P2.110**  
Paulo Henrique Dias Ferreira<sup>1</sup>, Kevin De Mello Santamaría<sup>1</sup>, Vanessa Orsi Gordo<sup>1</sup>, Mohamed Henini<sup>2</sup>, Yara Galvão Gobato<sup>1</sup>, Cleber R. Mendonça<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>University of Nottingham, <sup>3</sup>Instituto de Física de São Carlos - USP
- 17:45 Preparation and Characterization of a Novel Composite Obtained Through Zr(IV) Isopropoxide and Phosphoric Acid for L-Glutathione Detection** **J.P2.164**  
Daniela Silvestrini Fernandes<sup>1</sup>, Tayla Fernanda Serantoni da Silveira<sup>1</sup>, Devaney Ribeiro do Carmo<sup>1</sup>; <sup>1</sup>Campus de Ilha Solteira
- 17:45 Study of the interaction nanoparticle/polymer in polyurethane** **J.P2.128**  
Everton Willian Rodrigues da Silva Oliveira<sup>1</sup>, Bruno Henrique Ramos Lima<sup>1</sup>, Edson Roberto Leite<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 17:45 Polyaniline electrossynthesis on composite surface carbon fiber-epoxy Aeronautic application** **J.P2.132**  
Richelmy Magi Sanches<sup>1,2</sup>, Aline Fontana Batista<sup>1</sup>, Sandro Fonseca Quirino<sup>3,2</sup>, Adriana Medeiros Gama<sup>1</sup>, Maurício Ribeiro Baldan<sup>3</sup>, Emerson Sarmiento Gonçalves<sup>1,4</sup>; <sup>1</sup>Instituto de Aeronáutica e Espaço, Laboratório de Caracterização Físico-Química, Divisão de Materiais, <sup>2</sup>ETEP Faculdades, <sup>3</sup>Instituto Nacional de pesquisas espaciais, <sup>4</sup>Instituto Tecnológico da Aeronáutica
- 17:45 Electrolytic plasma technology produces alumina coating from borate electrolyte** **J.P2.147**  
Deborah C.R. Santos<sup>1</sup>, Gabriel S. Reis<sup>1</sup>, Wesley V.S. Ramos<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Pindamonhangaba
- 17:45 Non-destructive evaluation of protective coatings on AA2024-T3 aluminum alloy used in aeronautic parts by Electrochemical Impedance Spectroscopy** **J.P2.125**  
Alain Robin<sup>1</sup>, Luis Gustavo Pacheco<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Optical characterization of ITO films prepared in different atmospheres using Spectroscopic Ellipsometry** **J.P2.104**  
Jean-Paul Gaston<sup>1</sup>, Celine Eypert<sup>1</sup>, Igor Carvalho<sup>1</sup>, Joao Lucas Rangel<sup>1</sup>; <sup>1</sup>Horiba Jobin Yvon

- 17:45 Evaluation of the formation of oil microemulsion in water based on petroleum solvents and nonylphenol ethoxylate surfactants.** **J.P2.96**  
Juliana Verdan Silva<sup>1</sup>, Josane Assis Costa<sup>1</sup>, Claudia Regina Elias Mansur<sup>1</sup>;  
<sup>1</sup>Instituto de Macromoléculas Eloisa Mano/ Universidade Federal do Rio de Janeiro
- 17:45 Deposition of waste Kaolin in aluminum alloy by electrolytic plasma technique** **J.P2.99**  
Fabiola Bergamasco da Silva Marcondes Palinkas<sup>1</sup>, Maria Lucia Pereira Antunes<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>, José Antonio da Silva Souza<sup>2</sup>; <sup>1</sup>UNESP - Campus Sorocaba, <sup>2</sup>Universidade Federal do Pará
- 17:45 Preparation and characterization of polymeric membranes of PCL and PLA containing different amounts of zeolite ZSM-5** **J.P2.105**  
Ana Paula Nogueira Alves<sup>1</sup>, Lilian Siqueira<sup>2</sup>, Fabio Roberto Passador<sup>2</sup>, Eliandra de Sousa Trichês<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Study of variations molar ratio in phenolic resins synthesized with acid catalyst** **J.P2.87**  
Carmen Greice Renda<sup>1</sup>, Eduardo Nicollas Miranda Mendes<sup>2</sup>, Ana Carolina Figueiredo Prado<sup>1</sup>, Alessandra de Almeida Lucas<sup>1</sup>, Roberto Bertholdo<sup>2</sup>;  
<sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal de Alfenas
- 17:45 PLASMA SURFACE TREATMENT OF COTTON-BASED TEXTILE MATERIALS** **J.P2.98**  
João Batista Giordano<sup>1</sup>, Gabriela Furlan Giordano<sup>2</sup>; <sup>1</sup>Faculdade de Tecnologia de Americana, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 17:45 Evaluation of the photocatalytic activity of TiO<sub>2</sub> films grown by mocvd technique** **J.P2.97**  
Bianca Alves Marcello<sup>1</sup>, Guilherme Altomari Geríbola<sup>1</sup>, Edval Gonçalves Araújo<sup>2</sup>, Marina Fuser Pillis<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>2</sup>Universidade Federal de Pernambuco
- 17:45 Photoluminescence properties of perovskite multilayer thin films** **J.P2.122**  
Leilane Roberta Macario<sup>1</sup>, Tatiana Martelli Mazzo<sup>2</sup>, Valérie Bouquet<sup>3</sup>, Stéphanie Députier<sup>3</sup>, Sophie Ollivier<sup>3</sup>, Maryline Guilloux-Viry<sup>3</sup>, Elson Longo<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>UNIVERSIDADE FEDERAL DE SÃO PAULO - Campus Baixada Santista, <sup>3</sup>Université de Rennes 1
- 17:45 Studies on the Langmuir–Blodgett film and luminescent properties of Europium(III) Schiff base complex** **J.P2.120**  
Letícia Pereira Dote<sup>1</sup>, Luciano Caseli<sup>1</sup>, Lucinéia Ferreira Ceridório<sup>1</sup>, Ana Paula de Azevedo Marques<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema, <sup>2</sup>Universidade Federal de São Paulo
- 17:45 Magnetic nanoadsorbents for wastewater treatment process** **J.P2.114**  
Helton Pereira Nogueira<sup>1</sup>, Alceu Totti Silveira Junior<sup>1</sup>, Sergio Hiroshi Toma<sup>1</sup>, Henrique Eisi Toma<sup>1</sup>, Koiti Araki<sup>1</sup>; <sup>1</sup>Instituto de Química - USP
- 17:45 Influence of Zr<sup>4+</sup> on the photocatalytic properties of the SrSn<sub>1-x</sub>Zr<sub>x</sub>O<sub>3</sub> system** **J.P2.127**  
Gislayne Sabrina de Lira Paes<sup>1</sup>, Katiane Judy Batista Da Costa<sup>2</sup>, Emanuela Coutinho Luna<sup>1</sup>, Joandson Aníbal de Sousa<sup>1</sup>, Simone da Silva Simões<sup>1</sup>, Márcia Rejane Santos da Silva<sup>2</sup>, Valderi Duarte Leite<sup>1</sup>, Antônio Gouveia de Souza<sup>2</sup>, Iêda Maria Garcia Santos<sup>2</sup>, Mary Cristina F Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual da Paraíba, <sup>2</sup>Universidade Federal da Paraíba

- 17:45 Composites Based on Chitosan and Oils: Synthesis, Characterization and Application as Adsorbent** **J.P2.116**  
 Clayane Carvalho Santos<sup>1</sup>, Suringo Sousa Falcão<sup>2</sup>, Elson Longo<sup>3</sup>, Paula Fabiana Santos Pereira<sup>4</sup>, Cicero W. B. Bezerra<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal do Maranhão, <sup>3</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>4</sup>UNESP-Araraquara
- 17:45 Chamotte clay a potential low cost adsorbent to be used in biodiesel purification** **J.P2.161**  
Flávia Danielle Santos<sup>1</sup>, Leyvison Rafael Vieira da Conceição<sup>1</sup>, Maria Eleonora Andrade de Carvalho<sup>1</sup>, Heizir Ferreira de Castro<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Influence of surface preparation on hull repairs of FPSO's using composite adhesive patch** **J.P2.118**  
Ivan Lima<sup>1</sup>, Livia Pacheco<sup>1</sup>, Silvio de Barros<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica
- 17:45 Textural characterization and adsorption capacity studies of membrane components** **J.P2.124**  
Sunday Joseph Olusegun<sup>1</sup>, Luiz Fernando de Sousa Lima<sup>1</sup>, Nelcy Della Santana Mohallem<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Study of controlled release of phosphorus using zein coatings: the kinetic aspects of phosphorus release** **J.P2.102**  
Vanderlei Roncato<sup>1</sup>, Ricardo Bortoletto-Santos<sup>2</sup>, Wagner Luiz Polito<sup>3</sup>, Cauê Ribeiro Oliveira<sup>1</sup>; <sup>1</sup>Empresa Brasileira de Pesquisa Agropecuária - Embrapa Instrumentação São Carlos, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária, <sup>3</sup>Instituto de Química de São Carlos
- 17:45 W-doped TiO<sub>2</sub> photocatalyst** **J.P2.119**  
Marcelo Vianna Nogueira<sup>1</sup>, Vinícius Teodoro<sup>1</sup>, Maria Ap. Zaghet<sup>1</sup>, Elias Monteiro Souza<sup>1</sup>, José A. Varela<sup>1</sup>, Leinig Antonio Perazolli<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 CaZr<sub>x</sub>Sn<sub>1-x</sub>O<sub>3</sub> system applied in the photocatalytic of remazol golden yellow dye** **J.P2.162**  
Cynthia Ribeiro Guimarães<sup>1</sup>, Erica Silva dos Santos Alves<sup>1</sup>, Mary Cristina F Alves<sup>1,2</sup>, Márcia Rejane Santos da Silva<sup>2</sup>, Iêda Maria Garcia Santos<sup>2</sup>, Antônio Gouveia de Souza<sup>2</sup>, Valderi Duarte Leite<sup>1</sup>, Simone da Silva Simões<sup>1</sup>; <sup>1</sup>Universidade Estadual da Paraíba, <sup>2</sup>Universidade Federal da Paraíba
- 17:45 Ablation Properties of C/C Composite Tested In a Supersonic Plasma Wind Tunnel** **J.P2.163**  
Cristian Cley Paterniani Rita<sup>1,2</sup>, Humberto Araujo Machado<sup>3</sup>, Gilberto Petraconi Filho<sup>1</sup>, Roberson José da Silva<sup>1</sup>, Alexei Mikhailovich Essiptchouk<sup>4</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Faculdade de Tecnologia de Pindamonhangaba, <sup>3</sup>Instituto de Aeronáutica e Espaço, <sup>4</sup>Universidade Estadual Paulista - Campus São José dos Campos
- 17:45 A Paramagnetic Ground State in Superconducting Spin Valves** **J.P2.139**  
Ury Denver Chacón Hernandez<sup>1</sup>, Marcos Antonio de Sousa<sup>1</sup>, Magda Bittencourt Fontes<sup>1</sup>, E. B. Saitovitch<sup>1</sup>, Carsten Enderlein<sup>1</sup>; <sup>1</sup>Centro Brasileiro de Pesquisas Físicas

- 17:45 Effects of thermal annealing on the optical and electrical properties on conductor transparent films based on silver nanowire networks** **J.P2.123**  
Sandro Fernandes Firmino<sup>1</sup>, Cristiano Jaeger Stradolini<sup>1</sup>, Gabriela Pasa Panesso<sup>1</sup>, Jorge Pimentel<sup>2</sup>, Ricardo Meurer Papaléo<sup>1</sup>, Fabiano Mesquita<sup>3</sup>, Raquel Silva Thomaz<sup>1</sup>, Renato V. Gonçalves<sup>4</sup>, Pedro Migowski<sup>1</sup>, Adriano F. Feil<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul, <sup>2</sup>Universidade Federal do Rio Grande, <sup>3</sup>Universidade Federal do Rio Grande do Sul, <sup>4</sup>Instituto de Física de São Carlos - USP
- 17:45 Influence of synthesis conditions on the anticorrosive properties of PMMA-Silica hybrid coatings** **J.P2.142**  
Mayara Carla Uvida<sup>1</sup>, Fábio Cesar dos Santos<sup>1</sup>, Sandra Helena Pulcinelli<sup>1</sup>, Celso Valentim Santilli<sup>1</sup>, Peter Hammer<sup>1</sup>; <sup>1</sup>Instituto de Química, UNESP - Universidade Estadual Paulista, Araraquara-SP
- 17:45 Thermoplastic Starch as Raw Material to Paint Industry** **J.P2.109**  
Sérgio Carvalho de Araújo<sup>1</sup>, Mariane Alves de Andrade e Silva<sup>1</sup>, Adilson Beatriz<sup>1</sup>, Luiza Paula da Conceição Lopes<sup>2</sup>, Hélio Merá de Assis<sup>2</sup>; <sup>1</sup>Universidade Federal de Mato Grosso do Sul, <sup>2</sup>SENAI Mato Grosso do Sul
- 17:45 Plasma anodizing on aluminium alloy in alkaline solution containing sodium phosphate** **J.P2.146**  
Rafael Resende Lucas<sup>1</sup>, Deborah C.R. Santos<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Pindamonhangaba
- 17:45 Thermal and structural characterization of sepiolite modified with two organic modifiers** **J.P2.148**  
Walter Ruggeri Waldman<sup>1</sup>, Lays Batista Fitaroni<sup>2</sup>, Sandra Andrea Cruz<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba, <sup>2</sup>Universidade Federal do ABC, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Effect of tungsten composition on the formation, crystallinity and photocatalytic properties of nanotubular oxide layer grown on TiW alloy** **J.P2.92**  
Verena Mandorino Kaminagakura<sup>1</sup>, Marizilda Escudeiro Oliveira<sup>2</sup>, Christiane de Arruda Rodrigues<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Federal University of São Paulo
- 17:45 Synthesis and Characterization of Europium Doped Silver Orthophosphate** **J.P2.167**  
Clayane Carvalho Santos<sup>1</sup>, Wyllamanny da Silva Pereira<sup>1</sup>, Gleice Botelho<sup>1</sup>, Ivo Mateus Pinatti<sup>1</sup>, Paula Fabiana Santos Pereira<sup>1</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Hydroxyapatite deposition by airbrush** **J.P2.149**  
Raquel Rubia Bueno<sup>1,2</sup>, Walter Miyakawa<sup>1</sup>, José Guilherme Simões<sup>1</sup>, Priscila M.S.C. Leite<sup>1</sup>, Rudimar Riva<sup>1</sup>; <sup>1</sup>Instituto de Estudos Avançados, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Adjusting the polyol reaction conditions to obtain a quasi-monodisperse silver nanowires solution** **J.P2.150**  
Gabriela Pasa Panesso<sup>1</sup>, Cristiano Jaeger Stradolini<sup>1</sup>, Raquel Silva Thomaz<sup>1</sup>, Pedro Migowski<sup>1</sup>, Adriano F. Feil<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul
- 17:45 Evaluation of Penicillium candidum influenced biocorrosion of 304 steel textured by laser** **J.P2.169**  
Maria Fernanda Romeu Lino de Souza<sup>1,2</sup>, José Guilherme Simões<sup>1</sup>, Anelise C.O.C. Doria<sup>3</sup>, Priscila M.S.C. Leite<sup>3</sup>, Rudimar Riva<sup>1</sup>, Walter Miyakawa<sup>1</sup>; <sup>1</sup>Instituto de Estudos Avançados, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>3</sup>Universidade do Vale do Paraíba

- 17:45 Preparation of redispersible polymer latex by emulsion copolymerization of N,N-diethylaminoethyl methacrylate (DEAEMA) with styrene (STy) and n-butyl acrylate (BA)** **J.P2.131**  
 Erick Gabriel Ribeiro dos Anjos<sup>1</sup>, Andreia Ferreira Cobianchi<sup>2</sup>, Maurício Pinheiro de Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Universidade Federal de São Paulo
- 17:45 Evaluation of the Degradation Process in Pure Concrete and with 5 and 10% of Eggshell Additive and Analysis via Scanning Electron Microscopy** **J.P2.166**  
Ana Carolina Rodrigues Ribeiro<sup>1</sup>, Rosinei Batista Ribeiro<sup>1</sup>, Gilbert Silva<sup>2</sup>, Pâmela Sabrina Bento<sup>1</sup>, José Wilson de Jesus Silva<sup>1</sup>, Felipe Pinheiro Souza<sup>3</sup>; <sup>1</sup>Faculdades Integradas Teresa D'ávila, <sup>2</sup>Universidade Federal de Itajubá, <sup>3</sup>centro universitário salesiano
- 17:45 XRD2 beamline of LNLS: a versatile tool for structural analysis of advanced materials** **J.P2.134**  
Márcio Medeiros Soares<sup>1</sup>, Douglas Roca Santo<sup>1</sup>, Antonio Augusto Malfatti Gasperini<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 17:45 Synthesis employed sol-gel process and heterogeneous photocatalysis applications of TiO<sub>2</sub> precursor silver-doped** **J.P2.156**  
Amanda Santos de Lima<sup>1</sup>, Cíntia Andreia Alves Pereira<sup>1</sup>, Mariana Riboli Nava<sup>1</sup>, Rubiane Ganascim Marques<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Corrosion Behavior of Zn-Al Layered Double Hydroxide Superhydrophobic Films Directly Grown on Aluminum** **J.P2.171**  
 João Luís da Silva Júnior<sup>1</sup>, Hugo Freitas Pimentel<sup>1</sup>, Oscar Olimpico Araujo Filho<sup>1</sup>, Marina Fuser Pillis<sup>2</sup>, Edval Gonçalves Araújo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Incorporation of carbon nanotubes in polymeric fibers** **J.P2.170**  
Andressa Giombelli Rosenberger<sup>1</sup>, Franciele Fernanda Da Silva<sup>1</sup>, Janice Caroline Hardt<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>, Josiane Caetano<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 17:45 Microstructure and Wettability of Polyamide coated with organosilicon films** **J.P2.172**  
Caíque Vendemiatti Vendemiatti<sup>1</sup>, Ricardo Shindi Hosokawa<sup>1</sup>, José R. Ribeiro Bortoleto<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Elidiane Cipriano Rangel<sup>1</sup>; <sup>1</sup>UNESP - Campus Sorocaba
- 17:45 Synthesis of Metal-Organic Frameworks for adsorption of Polycyclic Aromatic Hydrocarbons** **J.P2.165**  
Thaianne Esquierdo Silva<sup>1</sup>, Geise Ribeiro<sup>1</sup>, Denise de Oliveira Silva<sup>2</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Instituto de Química - USP
- 17:45 Tuning photodegradation pathway of rhodamine B by trapping SnO<sub>2</sub> nanoparticles in polystyrene foams** **J.P2.152**  
Geovânia Cordeiro de Assis<sup>1</sup>, Euzebio Skovroinski<sup>2</sup>, Marcelo de Oliveira Rodrigues<sup>3</sup>, Valderi Duarte Leite<sup>1</sup>, Mary Cristina F Alves<sup>1</sup>, Rodrigo José de Oliveira<sup>1</sup>; <sup>1</sup>Universidade Estadual da Paraíba, <sup>2</sup>Universidade Federal de Pernambuco, <sup>3</sup>Universidade de Brasília
- 17:45 CO<sub>2</sub> laser beam covering with WC and graphite on 4340 steel** **J.P2.133**  
Getúlio Vasconcelos<sup>1</sup>, Silvelene Alessandra Silva<sup>1</sup>, Leticia Sabioni Yamin<sup>1</sup>, Vitor Ribeiro<sup>1</sup>; <sup>1</sup>Instituto de Estudos Avançados

**17:45 ANALYSIS OF MECHANICAL INSTABILITY WITH THE INFLUENCE OF MOISTURE ABSORPTION OF GFR COMPOSITE**  
Ricardo Alex Dantas Cunha<sup>1</sup>, Rayane Dantas da Cunha<sup>2</sup>, Talita Galvão Targino<sup>2</sup>, jose ubiragi lima mendes<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará, <sup>2</sup>Universidade Federal do Rio Grande do Norte

**J.P2.117**



# **SYMPOSIUM K - Structure-properties Relationship of Advanced Metallic Materials**

**Symposium organizers:**

Leonardo Barbosa Godefroid (*UFOP*)

Waldek Wladimir Bose Filho (*USP*)

Luiz Carlos Rolim Lopes (*UFF*)



# Tuesday, September 27<sup>th</sup>

## Poster presentations

### *SESSION K.P1 (17:45 - 19:30)*

- 17:45 An Experimental Study of the Influence of Solidification Thermal Variables upon Microstructure of Al-Si-Cu Alloys** **K.P1.1**  
Maurício Silva Nascimento<sup>1</sup>, Antonio Tadeu Rogerio Franco<sup>1</sup>, Francisco Yastami Nakamoto<sup>1</sup>, Carlos Frajuca<sup>1</sup>, Givanildo Alves dos Santos<sup>1</sup>, Antonio Augusto Couto<sup>2,3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Presbiteriana Mackenzie, <sup>3</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Investigation on sintering temperature of Aluminum Bronze alloy obtained by powder metallurgy with addition of niobium carbide** **K.P1.2**  
Alexandre Nogueira Ottoboni Dias<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Leonardo Albergaria Oliveira<sup>1</sup>, Geovani Rodrigues<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Study of high energy milling time of the Aluminum Bronze alloy obtained by powder metallurgy with niobium carbide addition** **K.P1.3**  
Alexandre Nogueira Ottoboni Dias<sup>1</sup>, Aline da Silva<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Geovani Rodrigues<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Comparative study of application of lubrication in the machining gives nickel base superalloy (Inconel 718)** **K.P1.4**  
micael maximo almeida<sup>1</sup>, Renann Pereira Gama<sup>2</sup>, Renato Araújo Barros<sup>3</sup>, Renan Pereira Gama<sup>4</sup>; <sup>1</sup>Universidade salesiana de são paulo, <sup>2</sup>FEG, <sup>3</sup>UNESP, <sup>4</sup>centro universitário salesiano
- 17:45 Gamma prime evolution during heat treatments of MAR-M246 superalloy** **K.P1.5**  
Renato Baldan<sup>1</sup>, Antonio Augusto Araujo Pinto Silva<sup>2</sup>, Carlos Angelo Nunes<sup>3</sup>, Antonio Augusto Couto<sup>4</sup>, Sinara Borborema Gabriel<sup>5</sup>, Luciano Alkmin<sup>6</sup>; <sup>1</sup>UNESP-Câmpus de Itapeva, <sup>2</sup>Universidade Federal de Itajubá, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>5</sup>Universidade do Estado do Rio de Janeiro, <sup>6</sup>Campus Angra dos Reis, CEFET-RJ - Centro Federal de Educação Tecnológica Celso Suckow da Fonseca
- 17:45 Texture evolution in Deformed Zinc Alloys by Necae Method** **K.P1.6**  
Priscila Rodrigues Verneck<sup>1</sup>, Raúl Eduardo Bolmaro<sup>2</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Universidad Nacional de Rosario
- 17:45 Parametrization of hot plastic deformation curves of AISI 316L austenitic stainless steel** **K.P1.7**  
RAFAEL FERREIRA FERREIRA<sup>1</sup>, Gedeon Silva Reis<sup>1</sup>, Carmem Célia Francisco do Nascimento<sup>1</sup>, Eden Santos Silva<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Unidade de Ensino Superior Dom Bosco
- 17:45 Creep evaluation of Ti-6Al-4V alloy with SiC thin film at 650 °C** **K.P1.8**  
Tarcila Sugahara<sup>1</sup>, Gislene Valdete Martins<sup>2</sup>, Fabiano Emmanuel Montoro<sup>3</sup>, Marcos Massi<sup>1</sup>, Danieli Aparecida Pereira Reis<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Tecnológico de Aeronáutica, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais

- 17:45 ANALYSIS OF MACHINABILITY CORRELATED WITH AS-CAST STRUCTURE OF AN Al-1.2wt%Pb ALLOY SOLIDIFIED IN A HORIZONTAL DEVICE** **K.P1.9**  
Camila Negrão Konno<sup>1</sup>, Brena Raiara Correa Barradas<sup>2</sup>, Maria Adrina Paixão de Sousa da Silva<sup>2</sup>, Cibele Vieira Arão da Silva<sup>2</sup>, Paulo Lourenço Monteiro Junior<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do Pará
- 17:45 Microstructure and microhardness dependence on solidification thermal parameters of a wear resistant alloy from Al-Bi-Mg ternary system** **K.P1.10**  
Mariana Mazetto Gazola<sup>1</sup>, Thiago Antônio Paixão de Souza Costa<sup>1</sup>, Thiago Soares Lima<sup>1</sup>, Crystopher Cardoso de Brito<sup>2</sup>, Noé Cheung<sup>1</sup>, Amauri Garcia<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de São Paulo
- 17:45 MICROSTRUCTURE AND HARDNESS OF HOT ROLLED SINTERED NITINOL** **K.P1.11**  
Marcus Nathan Silvestre<sup>1</sup>, Peterson Ferrandini<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 The Influence of Temperature of Work and Strain Rates upon Grain Size of the ASTM F138 alloy** **K.P1.12**  
Ylich Peter Schmitt<sup>1</sup>, Wagner Figueiredo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 17:45 Microstructural analysis of a tool steel AISI A2 submitted to different thermal routes, with and without plastic deformation.** **K.P1.13**  
Eduarda Peinado Moraes<sup>1</sup>, Rodrigo Velasco Christovam<sup>1</sup>, Peterson Ferrandini<sup>1</sup>, Rodrigo Yokoyama Xavier<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá
- 17:45 Comparison of carbon and stainless steel as filler metal in the welding of AISI 304 stainless steel and SAE 1020 carbon steel** **K.P1.14**  
Luis Gustavo Costa e Silva<sup>1</sup>, Sandro Silva<sup>1</sup>, Marcus Nathan Silvestre<sup>1</sup>, Peterson Ferrandini<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá
- 17:45 Sintering characteristics and properties of Carbide WC-AISI316L (stainless steel) with carbon addition** **K.P1.15**  
Daniel Assis Amâncio<sup>1</sup>, José Veríssimo Ribeiro de Toledo<sup>1</sup>, Edmilson Otoni Correa<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Use of Diffraction Electron backscatter technique in Microstructural Characterization of Materials** **K.P1.16**  
Daniel Assis Amâncio<sup>1</sup>, José Veríssimo Ribeiro de Toledo<sup>1</sup>, Edmilson Otoni Correa<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 WELDING FOR FSW (FRICTION STIR WELDING) OF THE ALUMINUM ALLOY 6063T6 USING A TOOL CIRCULAR** **K.P1.17**  
 WEBER DE MELO MESQUITA<sup>1</sup>, KLEBER RIBEIRO DA SILVA<sup>1</sup>, CARLOS ALBERTO CARVALHO CASTRO<sup>2</sup>, José Veríssimo Ribeiro de Toledo<sup>3</sup>, Daniel Assis Amâncio<sup>3</sup>, Paulo Henrique Paulista<sup>4</sup>; <sup>1</sup>Fundação de Ensino e Pesquisa de Itajubá, <sup>2</sup>Centro Federal de Educação Tecnológica, <sup>3</sup>Universidade Federal de Itajubá, <sup>4</sup>FEPI - Centro Universitário de Itajubá
- 17:45 WELDING FOR FSW (FRICTION STIR WELDING) OF THE ALUMINUM ALLOY USING A CONICAL TOOL** **K.P1.18**  
 WEBER DE MELO MESQUITA<sup>1</sup>, KLEBER RIBEIRO DA SILVA<sup>1</sup>, CARLOS ALBERTO CARVALHO CASTRO<sup>2</sup>, José Veríssimo Ribeiro de Toledo<sup>3</sup>, Daniel Assis Amâncio<sup>3</sup>, Paulo Henrique Paulista<sup>4</sup>; <sup>1</sup>Fundação de Ensino e Pesquisa de Itajubá, <sup>2</sup>Centro Federal de Educação Tecnológica, <sup>3</sup>Universidade Federal de Itajubá, <sup>4</sup>FEPI - Centro Universitário de Itajubá

- 17:45 Synthesis and Characterization of Bimetallic Nanoparticles** **K.P1.19**  
Lina Dayse Rodrigues Moreira<sup>1</sup>, Dayane Batista Tada<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 Horizontal transient solidification of Al-11wt.% Si alloy: correlation between columnar-to-equiaxed transition and thermal parameters** **K.P1.20**  
Gianfranco de Mello Stieven<sup>1</sup>, Daniele dos Reis Soares<sup>1</sup>, José Augusto França Rodrigues<sup>1</sup>, Otávio Fernandes Lima da Rocha<sup>2</sup>, Maria Adrina Paixão de Sousa da Silva, Antonio Luciano Seabra Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Propagation behavior of adhesive joints under mode II fatigue loading using energy-balance approach** **K.P1.21**  
Paulo Pedro Kenedi<sup>1</sup>, Jonnas Santos Alves<sup>1</sup>, Silvio de Barros<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca
- 17:45 Creep behavior of the Ti-6Al-4V alloy with martensitic structure** **K.P1.22**  
Ingrid Regina dos Santos Lacerda<sup>1</sup>, Fabrícia Assis Resende<sup>1</sup>, Danieli Aparecida Pereira Reis<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 The study of fatigue in bolts manufactured by different thermal treatments in Inconel 718** **K.P1.23**  
Tales Martins Silva<sup>1</sup>, Renato Chaves Souza<sup>1</sup>, Givanildo Alves dos Santos<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 17:45 The invar effect studied by time resolved x-ray diffraction** **K.P1.24**  
Carlos William Galdino<sup>1</sup>, Carlos Giles<sup>1</sup>, George Nicolas Kontogiorgos<sup>1</sup>, Letícia Nunes Coelho<sup>2</sup>, Kelin Regina Tasca<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>2</sup>Universidade de Brasília
- 17:45 Metal characterization of drive shaft of a Starter-generator applied on helicopters** **K.P1.25**  
Daniel Rodrigues Oliveira<sup>1</sup>, Ivênio Teixeira de Souza<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Universidade Federal Fluminense
- 17:45 The effect silicon element on the formation of the macrostructure of horizontally solidified multicomponent Al-Cu-Si alloys** **K.P1.26**  
Marlo Costa Oliveira<sup>1</sup>, Igor Alexsander Barbosa Magno<sup>2</sup>, Fabricio Vinicius Andrade de Souza<sup>1</sup>, Jacson Malcher Nascimento<sup>2</sup>, Otávio Fernandes Lima da Rocha<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará, <sup>2</sup>Universidade Federal do Pará
- 17:45 Comparative analysis of relationship between microstructure and mechanical properties of austempered ductile cast iron.** **K.P1.27**  
Luciano Lobo de Almeida Baracho<sup>1</sup>, Luiz Carlos Rolim Lopes, Fabiane Roberta Freitas Da Silva<sup>1</sup>, Vinicius Cardilo Alves<sup>1</sup>, Gláucio Soares da Fonseca<sup>1</sup>, Ricardo Henriques Leal<sup>1</sup>, Pedro Akiana Couto Borges<sup>1</sup>, Eder dos Reis Silva; <sup>1</sup>Universidade Federal Fluminense
- 17:45 Microstructural evolution and microhardness evaluation of Al-3.2wt.%Bi-3wt.%Ni ternary alloy and their correlation with solidification thermal parameters** **K.P1.28**  
Priscylla Ferreira Santos<sup>1</sup>, Thiago Antônio Paixão de Souza Costa<sup>2</sup>, José Marcelino da Silva Dias Filho<sup>2</sup>, Sandro Griza<sup>1</sup>, Noé Cheung<sup>2</sup>, Amauri Garcia<sup>2</sup>; <sup>1</sup>Universidade Federal de Sergipe, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Microstructure Evolution and Mechanical Properties of a Sn-Cu Lead Free Solder Alloy Solidified Under Transient Conditions** **K.P1.29**  
Thiago Soares Lima<sup>1</sup>, Rafael Kakitani<sup>1</sup>, José Marcelino da Silva Dias Filho<sup>1</sup>, Clarissa Barros da Cruz<sup>1</sup>, Amauri Garcia<sup>1</sup>, Noé Cheung<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

- 17:45 EXPERIMENTAL APPLICATION USING SHADOW MOIRÉ TECHNIQUE IN TENSILE TEST K.P1.30**  
Isac Kiyoshi Fujita<sup>1</sup>, Inacio Maria dall Fabbro<sup>2</sup>, Jonathan Gazzola<sup>3</sup>, Gabriela Kurokawa E Silva<sup>2</sup>, Givanildo Alves dos Santos<sup>1</sup>, Francisco Yastami Nakamoto<sup>1</sup>, Antonio Augusto Couto<sup>4</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal de São Carlos - campus Lagoa do Sino, <sup>4</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 17:45 PROPOSAL OF MINIMUM CUTTING SPEED BY TEMPERATURE ANALYSIS FOR AN Al-3 wt% Si ALLOY K.P1.31**  
Jivago Vieira Muniz da Silva<sup>1</sup>, Herivaldo Pascoal da Silva Filho<sup>1</sup>, Samuel de Castro Silva<sup>1</sup>, Domingos Sávio Tavares Mendes Júnior<sup>1</sup>, Maria Adrina Paixão de Sousa da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 17:45 ANALYSIS OF CUTTING TEMPERATURE IN FUNCTION OF CUTTING SPEED IN NECKING TEST OF AN Al-3.0wt%Si ALLOY K.P1.32**  
Jivago Vieira Muniz da Silva<sup>1</sup>, Tamires Isabela Botelho<sup>2</sup>, Waldolirio Batista Sena<sup>3</sup>, Waldney João Paiva Sena<sup>4</sup>, Maria Adrina Paixão de Sousa da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará, <sup>3</sup>Base Naval de Val de Cães, <sup>4</sup>Instituto de Estudos Superiores da Amazônia
- 17:45 Behavior of ASTM A588 Grade B rolled steel after conventional heat treatments: microstructure and microhardness K.P1.33**  
Daniele dos Reis Soares<sup>1</sup>, Gianfranco de Mello Stieven<sup>1</sup>, Jorge Teófilo Barros Lopes<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 17:45 Influence of microstructure on the mechanical behavior of a ternary Al-Cu-Ni alloy K.P1.34**  
Adilson Vitor Rodrigues<sup>1,2</sup>, Washington Luis Santos<sup>2</sup>, Crystopher Cardoso Brito<sup>3</sup>, Pedro Roberto Goulart<sup>1</sup>, Amauri Garcia<sup>2</sup>, Noé Cheung<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal de São Paulo
- 17:45 Corrosiveness of natural waters in industrial pipes in the South of Brazil K.P1.35**  
Steffany Rincon Peters<sup>1</sup>, Sabrina Neves da Silva<sup>1</sup>, Luciana Machado Rodrigues<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Pampa
- 17:45 The effect of Na<sub>2</sub>B<sub>4</sub>O<sub>7</sub>·10H<sub>2</sub>O (Borax) in the formation of vanadium carbide (VC) layer on tool steels. K.P1.36**  
Djoille Denner Damm<sup>1</sup>, Andre Contin<sup>2</sup>, Kalil Almeida Figueiredo<sup>3</sup>, Ariel Estole Nunes de Andrade<sup>4</sup>, Raonei Alves Campos<sup>5</sup>, Vladimir Jesús Trava-Airoldi<sup>2</sup>, Danilo Maciel Barquete<sup>3</sup>, Evaldo José Corat<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Nacional de pesquisas espaciais, <sup>3</sup>Universidade Estadual de Santa Cruz, <sup>4</sup>Faculdade de Tecnologia Cetep, <sup>5</sup>Universidade Federal do Sul e Sudeste do Pará
- 17:45 Influence of plastic deformation degree on aging time and mechanical properties of aluminium alloy AA2024 K.P1.37**  
MARCELO LUIS SIQUEIRA<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Investigation on sintering temperature of 7075 T6 Aluminum alloy Obtained by powder metallurgy with addition of vanadium carbide K.P1.38**  
Leonardo Albergaria Oliveira<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Alexandre Nogueira Ottoboni Dias<sup>1</sup>, Gilbert Silva<sup>1</sup>, Edmilson Otoni Corrêa<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá

- 17:45 Influence of a reactive Ni substrate on thermal parameters, microstructure and microhardness during directional solidification of the Sn-5.5wt.%Sb solder alloy** **K.P1.39**  
Joanisa Possato Curtulo<sup>1</sup>, Clarissa Barros da Cruz<sup>1</sup>, José Marcelino da Silva Dias Filho<sup>1</sup>, Thiago Antônio Paixão de Souza Costa<sup>1</sup>, Thiago Soares<sup>1</sup>, Rafael Kakitani<sup>1</sup>, Noé Cheung<sup>1</sup>, Amauri Garcia<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Formation of pits in martensitic stainless steels at different tempering temperatures** **K.P1.40**  
Neide Aparecida Mariano<sup>1</sup>, Ana Laura Rueda<sup>1</sup>, Carolina Del Roveri<sup>1</sup>, Lucíola Lucena de Sousa<sup>1</sup>, Mérlin Cristina dos Santos Fernandes<sup>1</sup>, Stephania Capellari De Rezende<sup>1</sup>, Guilherme Vilela Ferreira<sup>1</sup>, Sandra Nakamatsu<sup>2</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Federal de Itajubá
- 17:45 Investigation nickel-phosphorous black coating for solar absorber** **K.P1.41**  
Franciele Carlesso<sup>1</sup>, Luiz Angelo Berni<sup>1</sup>, Luis Eduardo Antunes Vieira<sup>1</sup>, Graziela da Silva Savonov<sup>1</sup>, Edson Luiz de Miranda<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 MACHINABILITY ANALYSIS OF THE COLUMNAR ZONE OF AN Al-7.0wt.%Si ALLOY SOLIDIFIED IN A HORIZONTAL DIRECTIONAL DEVICE** **K.P1.42**  
Paulo Lourenço Monteiro Junior<sup>1</sup>, Maria Adrina Paixão de Sousa da Silva<sup>1</sup>, Igor Ricardo Prado da Silva<sup>1</sup>, Cássio Augusto Pinto da Silva<sup>2</sup>, Iago Ricardo Machado Leal<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Evaluation of the influence of cementation Solid and heat treatments on the hardness of the carbon steel** **K.P1.43**  
Igor Alexsander Barbosa Magno<sup>1</sup>, André Santos Barros<sup>1</sup>, Fabricio Vinicius Andrade de Souza<sup>2</sup>, Marlo Costa Oliveira<sup>2</sup>, José Maria do Vale Quaresma<sup>1</sup>, Jacson Malcher Nascimento<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal do Pará
- 17:45 Evaluation of the thickness effect on the microstructure and microhardness of the aerospace application alloy Ti-6Al-4V after different thermal treatments.** **K.P1.44**  
Marcio Sangali Cristino da Silva<sup>1</sup>, Leandro Campos Vargas<sup>1</sup>, Renato Chaves Souza<sup>1</sup>, Roberto Nunes Duarte<sup>1</sup>, Sandra Nakamatsu<sup>2</sup>, Neide Aparecida Mariano<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Mg
- 17:45 Analysis of distortion and corrosion in welded structural profile steel** **K.P1.45**  
Josemairon Prado Pereira<sup>1,2</sup>, Gilberto Magalhães Bento Gonçalves<sup>1,2</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>2</sup>Faculdade de Engenharia - Campus de Bauru
- 17:45 Correlation between Microstructure and Mechanical Properties of Al-Si-Cu Alloys Casting** **K.P1.46**  
Maurício Silva Nascimento<sup>1</sup>, Antonio Tadeu Rogerio Franco<sup>1</sup>, Francisco Yastami Nakamoto<sup>1</sup>, Carlos Frajuca<sup>1</sup>, Givanildo Alves dos Santos<sup>1</sup>, Antonio Augusto Couto<sup>2,3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Presbiteriana Mackenzie, <sup>3</sup>Instituto de Pesquisas Energéticas e Nucleares

- 17:45 The influence of the microstructure upon corrosion resistance of an Al-10wt% Si-5wt%Cu alloy** **K.P1.47**  
Alexandre Neves Ribeiro<sup>1</sup>, Givanildo Alves dos Santos<sup>1</sup>, Francisco Yastami Nakamoto<sup>1</sup>, Claudete Kallas<sup>1</sup>, Antonio Augusto Couto<sup>2,3</sup>, Hercílio Gomes de Melo<sup>4</sup>, Rocío Del Pilar Bendezú Hernandez<sup>4</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Presbiteriana Mackenzie, <sup>3</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES, <sup>4</sup>Universidade de São Paulo
- 17:45 The effect of the microstructure upon corrosion resistance of an Al-10wt% Si-2wt%Cu alloy** **K.P1.48**  
Alexandre Neves Ribeiro<sup>1</sup>, Claudete Kallas<sup>1</sup>, Givanildo Alves dos Santos<sup>1</sup>, Francisco Yastami Nakamoto<sup>1</sup>, João Roberto Moro<sup>1</sup>, Antonio Augusto Couto<sup>2,3</sup>, Hercílio Gomes de Melo<sup>4</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Presbiteriana Mackenzie, <sup>3</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES, <sup>4</sup>Universidade de São Paulo
- 17:45 Optimization of Heat Treatment of Aluminum Alloys using techniques of Artificial Neural Networks (ANN)** **K.P1.49**  
Paulo Junho Oliveira<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Renato Sergio Mello Silva<sup>2</sup>, Carlos Cleverton Oliveira Santos<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Fundação de Ensino e Pesquisa de Itajubá
- 17:45 Study of mechanical properties and microstructure of a steel stainless duplex aged.** **K.P1.50**  
Gustavo de Souza Machado<sup>1</sup>, Rodrigo Henrique da Silva Rocha<sup>1</sup>, Felipe Souza Eloy<sup>1</sup>, Carlos Alberto Rodrigues<sup>1</sup>, Aureliano Rodrigues Barborati Ribeiro<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Validation of the relationship Hall-Petch for aluminum alloy 7075** **K.P1.51**  
Edwin Gilberto Medina<sup>1</sup>, Aline da Silva<sup>1</sup>, Yina Faizully Quintero<sup>1,2</sup>, Antonio Augusto Araujo Pinto Silva<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidad Federal Itajuba
- 17:45 Laser thermal treatment of DP600 and TRIP750 automotive multiphase steels** **K.P1.52**  
Paula Cardoso Lauer<sup>1,2</sup>, Davi Neves<sup>1</sup>, Milton Sergio Fernandes de Lima<sup>1</sup>, Rudimar Riva<sup>1</sup>, Walter Miyakawa<sup>1</sup>; <sup>1</sup>Instituto de Estudos Avançados, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Structural analysis of the rotor of a high speed turbogenerator** **K.P1.53**  
Rodrigo Teixeira Bento<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia Termomecânica
- 17:45 Study of microstructural evolution of the alloy 2024 during homogenization** **K.P1.54**  
Aline da Silva<sup>1</sup>, Carlos Alberto Rodrigues<sup>1</sup>, Edwin Gilberto Medina<sup>1</sup>, José Maurício Pereira dos Santos<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Effect of aging time at 475oC on the mechanical properties of a UNS S32304 Duplex Stainless Steel** **K.P1.55**  
Leonardo Barbosa Godefroid<sup>1</sup>, Eliza Wilk Reis Almeida<sup>1</sup>, Thompson Júnior Ávila Reis<sup>2</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>SENAI Centro de Inovação e Tecnologia

- 17:45 METAL ACTIVE GAS WELDING OF A HIGH-STRENGTH LOW-CARBON ALLOY (HSLA) 900 MPA: STUDY OF THE CORRELATION BETWEEN HEAT INPUT, MICROHARDNESS AND MICROSTRUCTURE** **K.P1.56**  
Mainã Portella Garcia<sup>1</sup>, Gerson Luiz Mantovani<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>;  
<sup>1</sup>Universidade Federal do ABC
- 17:45 Tool wear analysis in finish milling of steel AISI 1045 using wiper geometry insert** **K.P1.57**  
 José Veríssimo Ribeiro de Toledo<sup>1</sup>, Carlos Alberto Rodrigues<sup>1</sup>, Adriano Cássio Baldim<sup>1</sup>, Marcos Cirilo dos Santos<sup>1</sup>, Daniel Assis Amâncio<sup>1</sup>, Sebastião Carlos da Costa<sup>1</sup>, João Roberto Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Analysis of surface finish after turning process of the steel AISI 52100 hardened** **K.P1.58**  
 José Edmilson Martins Gomes<sup>1</sup>, José Veríssimo Ribeiro de Toledo<sup>1</sup>, Marcos Cirilo dos Santos<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, João Roberto Ferreira<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Preparation of nano WC particles with addition of 316 L stainless steel by high energy milling** **K.P1.59**  
Daniel Assis Amâncio<sup>1</sup>, José Veríssimo Ribeiro de Toledo<sup>1</sup>, Ana Maria Rocha Senos<sup>2</sup>, Cristina Maria Fernandes<sup>2</sup>, Edmilson Otoni Corrêa<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade de Aveiro
- 17:45 Reuse of solid waste of rectifies of the piston rings by powder metallurgy**  
José Maurício Pereira dos Santos<sup>1</sup>, Aline da Silva<sup>1</sup>, Gilbert Silva<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá

## Wednesday, September 28<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION K.OR1 (09:45 - 10:45) - Room Amoreiras III*

- 09:45 Multiscale Modeling of Fracture and the Use of Subsize Specimens in Cleavage Fracture Assessments** **K.OR1.1\***  
Claudio Ruggieri<sup>1</sup>; <sup>1</sup>University of São Paulo, São Paulo, Brazil
- 10:15 Fracture toughness assessment of two X80-5L-API steels with different microstructural features** **K.OR1.2**  
Fábio Faria Conde<sup>1,2</sup>, Julian Arnaldo Avila Diaz<sup>1,2</sup>, Johnnatan Rodríguez<sup>2</sup>, Fernando Franco<sup>3</sup>, Haroldo Cavalcanti Pinto<sup>1</sup>, Antonio J. Ramirez<sup>4</sup>;  
<sup>1</sup>Universidade de São Paulo, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>3</sup>Universidad del Valle, <sup>4</sup>Ohio State University

**SESSION K.OR2 (11:15 - 12:00) - Room Amoreiras III**

- 11:15 Study on the applicability of Friction Stir Spot Welding of AA6060-T5 using the Taguchi method** **K.OR2.4**  
Carlos Gracioli Aita<sup>1</sup>, Tonilson de Souza Rosendo<sup>1</sup>, Aldoni Gabriel Wiedenhof<sup>1</sup>, Isadora Góss<sup>1</sup>, Marco Durlo Tier<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Pampa
- 11:30 Accessing the endurance limit by a thermography method** **K.OR2.5**  
carlos Filipe Cardoso Bandeira<sup>1</sup>, Paulo Pedro Kenedi<sup>1</sup>, Jaime Tupiassú Pinho de Castro<sup>2</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, <sup>2</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 11:45 Influence of Cubic Boron Nitride (CBN) content on the wear and tool life in PCBN tools for hardened steels machining applications.** **K.OR2.6**  
Marcos de Aguiar Guimarães<sup>1</sup>, Givanildo Alves dos Santos<sup>1</sup>, Francisco Yastami Nakamoto<sup>1</sup>, Antonio Augusto Couto<sup>2,3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Presbiteriana Mackenzie, <sup>3</sup>Instituto de Perquisas Energéticas e Nucleares

**SESSION K.OR3 (14:00 - 16:15) - Room Amoreiras III**

- 14:00 Effects of the Hexagonal Martensite Decomposition and Phase Precipitation on Mechanical Properties near-eutectoid Ti-Cu Alloy** **K.OR3.7**  
Rodrigo José Contieri<sup>1</sup>, Alessandra Cremasco<sup>1</sup>, Eder Lopes<sup>1</sup>, Raj Banerjee<sup>2</sup>, Deep Choudhuri<sup>2</sup>, Rubens Caram<sup>1</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>University of North Texas
- 14:15 Influence of martensitic transformation and dislocation density on the hydrogen embrittlement in duplex stainless steel 2205** **K.OR3.8**  
John Jairo Hoyos<sup>1</sup>, Johnnatan Rodríguez<sup>1</sup>, Pedro da Silva Craidy<sup>2</sup>, Marcelo T.P. Paes<sup>2</sup>, André Paulo Tschiptschin<sup>1</sup>, Antonio J. Ramirez<sup>3</sup>; <sup>1</sup>Brazilian Nanotechnology National Laboratory, <sup>2</sup>PETROBRAS, <sup>3</sup>Department of Materials Science and Engineering, Ohio State University
- 14:30 Corrosion resistance of duplex stainless steel friction stir welds by potentiodynamic measurements and immersion tests.** **K.OR3.9**  
Tiago F.A. Santos<sup>1</sup>, Larissa A.S.C. Oliveira<sup>1</sup>, Diogo L. A. Silva<sup>1</sup>, Severino L. Urtiga Filho<sup>1</sup>, Antonio J. Ramirez<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Ohio State University
- 14:45 EFFECT OF TITANIUM NITRIDE ON PITTING CORROSION IN A SUPERMARTENSITIC STAINLESS STEEL** **K.OR3.10**  
César Augusto Duarte Rodrigues<sup>1</sup>, Bárbara Branquinho Duarte<sup>2</sup>, RAFAEL MARINHO BANDEIRA<sup>2</sup>, Germano Tremiliosi-Filho<sup>2</sup>, Alberto Moreira Jorge Junior<sup>3</sup>; <sup>1</sup>Hidrofex LTDA, <sup>2</sup>Instituto de Química de São Carlos, <sup>3</sup>Universidade Federal de São Carlos
- 15:00 Influence of Nb addition in  $\gamma/\gamma'$  structure Co base superalloys** **K.OR3.11**  
alex matos da silva costa<sup>1</sup>, Antonio J. Ramirez, Carlos Angelo Nunes, Eder Lopes, Marcus Vinicius Salgado, André Paulo Tschiptschin; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 15:15 Effect of Sb addition on the microstructure of Al-11wt.%Si alloy solidified under transient conditions** **K.OR3.12**  
Rafael Kakitani<sup>1</sup>, Thomas Jun Obara<sup>1</sup>, Lucas Ribeiro Ramos<sup>1</sup>, Amauri Garcia<sup>1</sup>, Noé Cheung<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas

- 15:30 Characterization of dendritic microstructure and hardness of directionally solidified Al-Si-Ni eutectic alloy** **K.OR3.13**  
Rafael Kakitani<sup>1</sup>, Thiago Antônio Paixão de Souza Costa<sup>1</sup>, Crystopher Cardoso Brito<sup>2</sup>, Amauri Garcia<sup>1</sup>, Noé Cheung<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de São Paulo
- 15:45 Microstructural characterization of the Sn-Al eutectic solder alloy unidirectionally solidified on AISI 1020 and nickel substrates.** **K.OR3.14**  
RICARDO Miranda de OLIVEIRA JUNIOR<sup>1</sup>, José Marcelino da Silva Dias Filho<sup>1</sup>, Clarissa Barros da Cruz<sup>1</sup>, Thiago Antônio Paixão de Souza Costa<sup>1</sup>, Thiago Soares Lima<sup>1</sup>, Amauri Garcia<sup>1</sup>, Noé Cheung<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 16:00 Decarburization process in a SAE 9254 Spring Steel: influence of heat treatment parameters** **K.OR3.15**  
Jéssica Cristina Costa de Castro<sup>1</sup>, Sydney Ferreira Santos<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

## Poster presentations

### SESSION K.P2 (17:45 - 19:30)

- 17:45 Development of Annealing Parameter Process for Stress Relieving and Gas Nitriding for AISI 420 Steel Piston Rings** **K.P2.60**  
Marcela Silva Lamoglia<sup>1</sup>, Marcos Rolando Piccilli<sup>1</sup>, Gilbert Silva<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Itajubá
- 17:45 Effect of Heat Treatment on Microstructure and Mechanical Properties of a Steel used in Cutlery** **K.P2.61**  
Leonardo Barbosa Godefroid<sup>1</sup>, Geraldo Lúcio Faria<sup>1</sup>, Lorena Luiza Teixeira Oliveira<sup>1</sup>, Valdeci Paula Alvarenga<sup>2</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>APERAM South America
- 17:45 INFLUENCE OF AGING HEAT TREATMENT IN SIGMA PHASE FORMATION IN SUPERDUPLEX STAINLESS STEEL** **K.P2.62**  
Wandercleiton da Silva Cardoso<sup>1</sup>, Rivânia Hermógenes Paulino Romero<sup>1</sup>, Danyelle Santos Ribeiro<sup>1</sup>, Vitor Toniato Campana<sup>1</sup>; <sup>1</sup>MULTIVIX VITORIA
- 17:45 Structural and Magnetic Properties of MnFe<sub>2</sub>O<sub>4</sub> Nanoparticles by the Co-precipitation Method under Different Conditions.** **K.P2.63**  
WALMIR ENO POTTKER<sup>1</sup>, Patricia de la Presa<sup>2</sup>, Rodrigo Ono<sup>1</sup>, Felipe Almeida La Porta<sup>1</sup>, Antonio Hernando<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidad Complutense de Madrid
- 17:45 INFLUENCE ON HIGH ENERGY MILLING PROCESS ON THE MICROSTRUCTURE AND MECHANICAL PROPERTIES OF A AISI 4340 ALLOY STEEL WITH NIOBIUM CARBIDE ADDITION** **K.P2.64**  
Guilherme Botton Santos<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Aline Silva<sup>1</sup>, Alexandre Nogueira Ottoboni Dias<sup>1</sup>, Vander Alkmin Ribeiro Santos<sup>2</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Fundação de Ensino e Pesquisa de Itajubá

- 17:45 STUDY OF MAGNETIC PROPERTIES AND MICROSTRUCTURAL ANALYSIS OF INOX OBTAINED BY HIGH ENERGY MILLING** **K.P2.65**  
Guilherme Botton Santos<sup>1</sup>, Manoel Ribeiro da Silva<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Leonardo Albergaria Oliveira<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Structural and Morphological Properties of NiFe<sub>2</sub>O<sub>4</sub> Nanoparticles Synthesized by Co-precipitation and Sol-Gel Method.** **K.P2.66**  
Rodrigo Ono<sup>1</sup>, WALMIR ENO POTTKER<sup>1</sup>, Patricia de la Presa<sup>2</sup>, Antonio Hernando<sup>2</sup>, Felipe Almeida La Porta<sup>1</sup>, Gabriel Ferreira Baptistone<sup>1</sup>, Miguel Angel Cobos<sup>2</sup>, György József Jaics<sup>3</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Universidad Complutense de Madrid, <sup>3</sup>University of Szeged
- 17:45 ELECTRICAL CONDUCTIVITY AND MICROSTRUCTURAL ANALYSIS OF COMPOSITE Cu-Ag-Cr-Al<sub>2</sub>O<sub>3</sub> AFTER SINTERING ON POWDER METALLURGY PROCESSING** **K.P2.67**  
Daniela Passarelo Moura da Fonseca<sup>1</sup>, Waldemar Alfredo Monteiro<sup>1</sup>; <sup>1</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 17:45 ROTARY FRICTION WELDING OF DISSIMILAR JOINTS AND BONDING INTERFACE CHARACTERIZATION BY EDX AND XPS** **K.P2.68**  
Eder Paduan Alves<sup>1</sup>, Christian Ávila Dollinger<sup>1</sup>, Jossano Saldanha Marcuzzo<sup>2</sup>, Mauricio Ribeiro Baldan<sup>3</sup>, Rafael Cardoso Toledo<sup>3</sup>, Francisco Piorino Neto<sup>1</sup>, Chen Ying An<sup>3</sup>; <sup>1</sup>Instituto de Aeronáutica e Espaço, <sup>2</sup>Instituto Nacional de pesquisas espaciais, <sup>3</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Real time analysis of anisotropic AuNps synthesis by Turkevich methods** **K.P2.69**  
Maria Luiza de Oliveira Pereira<sup>1</sup>, Daniel Grassescchi<sup>2</sup>, Jorge da Silva Shinohara<sup>1</sup>, Henrique Eisi Toma<sup>3</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Presbiteriana Mackenzie, <sup>3</sup>Instituto de Química da Universidade de São Paulo
- 17:45 Magnetic properties of a duplex stainless steel and its relation to the formation of sigma phase.** **K.P2.70**  
Pedro de Souza Ciacco<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Manoel Ribeiro da Silva<sup>1</sup>, Heitor Conde Figueiredo<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Formation of Disordered Solid Solutions in High Entropy Alloys** **K.P2.71**  
Carlos Rios Rios<sup>1</sup>, Bianca Campos Gregorio<sup>2</sup>, William de Paula Santos<sup>2</sup>; <sup>1</sup>Fundação Universidade Federal do Abc, <sup>2</sup>Universidade Federal do ABC
- 17:45 COMPARISON OF THE PARTICLES SIZE OF X22 GRADE SUPERALLOY SCRAPS AFTER 60 HOURS OF MILLING WITH AND WITHOUT VANADIUM CARBIDE ADDITION** **K.P2.72**  
Roberta Alves Gomes Matos<sup>1</sup>, Carlos Alberto Rodrigues, Jonas Mendes, Bruna Horta Bastos Kuffner, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Gilbert Silva; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Thermal variables and primary dendrite arm spacing of al 10 wt% sn alloy directionally solidified** **K.P2.73**  
Jacson Malcher Nascimento<sup>1</sup>, Angela de Jesus Vasconcelos<sup>1</sup>, Igor Alexsander Barbosa Magno<sup>1</sup>, Marlo Costa Oliveira<sup>2</sup>, Fabricio Vinicius Andrade de Souza<sup>2</sup>, Otávio Fernandes Lima da Rocha<sup>2</sup>, Maria Adrina Paixão de Souza da Silva<sup>1</sup>, André Santos Barros<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>INSTITUTO FEDERAL DO PARÁ

- 17:45 EVOLUTION OF PARTICLE MORPHOLOGY OF CHIP SERIES ALLOY X22 AFTER HIGH ENERGY MILLING** **K.P2.74**  
Roberta Alves Gomes Matos<sup>1</sup>, Carlos Alberto Rodrigues, Jonas Mendes, Bruna Horta Bastos Kuffner, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Gilbert Silva;  
<sup>1</sup>Universidade Federal de Itajubá
- 17:45 Comparative study of steel and polypropylene fibers reinforced concrete toughness factor in normal and aggressive environments** **K.P2.75**  
Raimundo Expedito Vasconcelos<sup>1</sup>, Kleber Roberto Matos da Silva<sup>1</sup>, José Maria Braga Pinto<sup>1</sup>, Syme Regina Souza Queiroz<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Correlation between the anisotropy properties (R and ΔR) and crystallographic texture of a microalloyed high-strength titanium steel, varying the annealing temperatures.** **K.P2.76**  
Pablo Bruno Paiva Leão<sup>1</sup>, Hamilton Ferreira Gomes de Abreu<sup>1</sup>, Marcelo José Gomes da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 17:45 Influence of using the technique of minimal quantity of fluid (MQF) during the milling process, in the microhardness of the hardened steel SAE 4340** **K.P2.77**  
Larissa Ribas de Lima Soares<sup>1</sup>, Manoel Cleber de Sampaio Alves<sup>1</sup>, Sarah David Müzel<sup>2</sup>, Emanuele Schneider Callisaya<sup>1</sup>, Carlino Carvalho de Almeida<sup>3</sup>, Giovanni Faus Salussolia<sup>1</sup>, Marcel Yuzo Kondo<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>3</sup>UNESP-Câmpus de Itapeva
- 17:45 DILATOMETRIC STUDY OF PHASE TRANSFORMATIONS IN SAE 9254 SPRING STEEL DURING HEAT TREATMENT** **K.P2.78**  
Silvano Leal Santos<sup>1</sup>, Sydney Ferreira Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Influence of iron contents on the tixoability of AA 356** **K.P2.80**  
Claudomiro Alves<sup>1</sup>, Bruna Vilas Boas<sup>2</sup>, Rudimylla da Silva Septimio<sup>1</sup>, Fabio Gatamorta<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Paulista
- 17:45 Study of the milling process efficiency of the chips of duplex stainless steel UNS S31803 using vanadium carbide by high energy milling** **K.P2.81**  
Claudiney de Sales Pereira Mendonça<sup>1</sup>, Guilherme Botton Santos<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Vander Alkmin dos Santos Ribeiro<sup>2</sup>, Valesca Donizeti de Oliveira<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Fundação de Ensino e Pesquisa de Itajubá
- 17:45 Effect of solidification parameters on the microstructure of a Bi-Zn lead-free solder alloy** **K.P2.82**  
Rudimylla da Silva Septimio<sup>1</sup>, Príscylla Ferreira Santos<sup>2</sup>, Thiago Antônio Paixão de Souza Costa<sup>1</sup>, Talita Almeida Vida de Brito<sup>1</sup>, Amauri Garcia<sup>1</sup>, Noé Cheung<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de Sergipe
- 17:45 REUSE OF CHIPS OF THE STAINLESS STEEL USING THE HIGH ENERGY MILLING -THE ANALYSIS OF EXPERIMENTAL FACTORS ON MILLING USING A FULL FACTORIAL DESIGN.** **K.P2.83**  
Claudiney de Sales Pereira Mendonça<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Leonardo Albergaria Oliveira<sup>1</sup>, Alexandre Nogueira Ottoboni Dias<sup>1</sup>, José Henrique de Freitas Gomes<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá

- 17:45 Secondary dendritic growth during upward vertical and horizontal directional solidification of Al-3wt.%Cu alloy castings K.P2.84**  
André Santos Barros<sup>1</sup>, Paulo Lourenço Monteiro Junior<sup>1</sup>, Nardiny Diego Souza Alves<sup>1</sup>, José Maria do Vale Quaresma<sup>1</sup>, Otávio Fernandes Lima da Rocha<sup>2</sup>, Antonio Luciano Seabra Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Feasibility of scaffold production using Ti-13Nb-13Zr alloy and naphthalene as space-holder K.P2.85**  
Persio Mozart Pinto<sup>1</sup>, Amanda Akemy Komorizono<sup>1</sup>, Leonardo Antonini<sup>1</sup>, Durval Rodrigues Jr.<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 SYNTHESIS AND PURIFICATION OF METHYL-PHTHALOCYANINES COPPER K.P2.86**  
Carlos Alberto Mitio Hirano<sup>1</sup>, Paulo Sergio Calefi<sup>1</sup>, Anderson Orzari Ribeiro<sup>2</sup>, Charles Biral Silva<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade Federal do ABC
- 17:45 Analysis of the microstructure development of the AA 7075 aluminum alloy after cold rolling process K.P2.87**  
Ágata Mayara Paula Pontes<sup>1</sup>, Leonardo Albergaria Oliveira<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 POROSITY OF STEEL X<sub>22</sub> SINTERED AFTER 100 HOURS OF MECHANICAL ALLOYING WITH VANADIUM CARBIDE K.P2.88**  
Michele Stanziola Knychala<sup>1</sup>, Roberta Alves Gomes Matos<sup>1</sup>, Jonas Mendes<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Processing of FeNiCrCuZn, FeNiCrCuZn(Nb)<sub>0,5</sub>, FeNiCrCuZnNb high entropy alloys by mechanical alloying K.P2.89**  
André Mello Bepe<sup>1</sup>, Katia Regina Cardoso<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Texture evolution of niobium single crystal processed by interrupted ECAE K.P2.90**  
Heide Heloise Bernardi<sup>1</sup>, Hugo Ricardo Zschommler Sandim<sup>2</sup>, Raúl Eduardo Bolmaro<sup>3</sup>; <sup>1</sup>Faculdade de Tecnologia de São José dos Campos Prof. Jessen Vidal, <sup>2</sup>Universidade de São Paulo - Escola Engenharia Lorena, <sup>3</sup>Universidad Nacional de Rosario-CONICET
- 17:45 Wear performance of epoxy resin and alumina-epoxy composite coatings applied in SAE1020 steel substrate used on accessories for subsea umbilicals K.P2.91**  
Jhonny Dias Oliveira<sup>1,2</sup>, André Gustavo de Sousa Galdino<sup>1</sup>, Renan Carreiro Rocha<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Prysmian Cabos e Sistemas do Brasil S.A
- 17:45 JATOBÁ Beamline - High Energy In Situ X-Ray Diffraction and Tomography K.P2.92**  
Leonardo Wu<sup>1</sup>, Eduardo Bertoni da Fonseca<sup>1</sup>, André Paulo Tschiptschin<sup>1,2</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>Escola Politecnica da USP
- 17:45 Effect of heat treatments on the microstructure and hardness of a Ti-15Zr-xMo alloy. K.P2.93**  
Caio Castanho Xavier<sup>1,2</sup>, Carlos Roberto Grandini<sup>1,2</sup>, Luís Augusto Rocha<sup>3,1,2</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>Brazilian Branch of the Institute of Biomaterials, Tribocorrosion and Nanomedicine, <sup>3</sup>Universidade do Minho

- 17:45 INFLUENCE OF CUTTING PARAMETERS ON TOOL WEAR AND ROUGHNESS DURING THE PROCESS OF MACHINING OF STEEL STAINLESS MARTENSITIC AISI 410** **K.P2.94**  
Marcelo Antunes de Paula<sup>1</sup>, Marcos Valério Ribeiro<sup>1</sup>, Renan Pereira Gama<sup>1</sup>;  
<sup>1</sup>Universidade Estadual Paulista-Campus de Guaratinguetá
- 17:45 Development and characterization of Ti-10Mo-25Zr alloys for biomaterial applications** **K.P2.95**  
Gabriela Piovesan Santiago Suárez<sup>1</sup>, Raul Oliveira de Araújo<sup>1</sup>, Carlos Roberto Grandini<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru
- 17:45 Quantitative analysis to characterize the Complex Phase steel microstructure using chemical reagent Nital** **K.P2.96**  
Erica Ximenes Dias<sup>1</sup>, Marcelo dos Santos Pereira<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista-Campus de Guaratinguetá
- 17:45 EVALUATION OF HEAT TRANSFER APPLIED TO THE WELDING OF DISSIMILAR METALS (ASTM A240-13C IN CARBON STEEL USI-AR-400)** **K.P2.97**  
Marcos de Paula Cougo<sup>1</sup>, Elisan dos Santos Magalhães<sup>1</sup>, Sandro Metrevelle Marcondes de Lima Silva<sup>1</sup>, Sebastião Carlos da Costa<sup>1</sup>, Mirian de Lourdes Noronha Motta Melo<sup>1</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Effect of thermal cycling in microstructure and mechanical properties of CuAg/SN100C Alloy** **K.P2.98**  
Osmar R. Bagnato<sup>1,2,3</sup>, Patrícia Mendonça Pimentel<sup>4</sup>, Camili Ambrosio<sup>1</sup>, Felipe Silva<sup>1</sup>, Marcelo M Capovilla<sup>1</sup>, Daniel Yukio Kakizaki<sup>1,2</sup>; <sup>1</sup>Universidade São Francisco, <sup>2</sup>Laboratório Nacional de Luz Síncrotron, <sup>3</sup>Centro Universitário Grupo Bom Jesus Curitiba, <sup>4</sup>Universidade Federal Rural do Semi
- 17:45 Optimization of machining Inconel 718 with carbide tool coated using the methodology of Taguchi.** **K.P2.99**  
Cleverson Pinheiro<sup>1,2</sup>, Marcos Valério Ribeiro<sup>1</sup>, Manoel Cleber de Sampaio Alves<sup>1</sup>, Marcel Yuzo Kondo<sup>1</sup>; <sup>1</sup>UNIVERSIDADE ESTADUAL PAULISTA "JúLIO DE MESQUITA FILHO", <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo - Campus Jacareí
- 17:45 Synthesis and characterization of nanostructured silver from the mechanochemical reduction of Ag<sub>2</sub>O** **K.P2.100**  
Meg Carolyn Moraes dos Santos<sup>1</sup>, Mitsuo Lopes Takeno<sup>1</sup>, Sérgio Michielon de Souza<sup>1</sup>, Lizandro Manzato<sup>2</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Amazonas
- 17:45 Characterization Studies of  $\beta$ -Ti<sub>3</sub>O<sub>5</sub> and  $\lambda$ -Ti<sub>3</sub>O<sub>5</sub> nanoparticles** **K.P2.101**  
Kelin Regina Tasca<sup>1</sup>, Carlos Giles<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP
- 17:45 ADDITIVE MANUFACTURE WITH IN625 SUPERALLOY USING LASER AND PLASMA TRANSFERRED ARC** **K.P2.102**  
Eloisa Pereira Cardozo<sup>1</sup>, Ana Sofia C. M. D'Oliveira<sup>1</sup>, Supryio Ganguly<sup>2</sup>, Gonçalo Rodrigues Pardal<sup>2</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Cranfield University
- 17:45 Evaluation of the formation and reversion of martensite induced by deformation in the austenite of a stainless steel lean duplex UNS S32304** **K.P2.103**  
Raphael Bianchi de Vicente<sup>1</sup>, Caio Flaret Argentino Oliveira<sup>1</sup>, Geovani Rodrigues<sup>1</sup>, Claudiney de Sales Pereira Mendonça<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá

- 17:45 Zn<sub>2</sub>GeO<sub>4</sub> nanostructure: Optical properties and photocatalytic applications** **K.P2.104**  
Mateus Vinicius de Paiva<sup>1</sup>, Isabela Rosado Belê<sup>1</sup>, Murilo Pires de Lima<sup>1</sup>, Rodrigo Furquim Ghiraldi<sup>1</sup>, Walmir Eno Pöttker<sup>1</sup>, Elson Longo<sup>2</sup>, Felipe Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Preparation and Structural Characterization of Ti-25Ta-10Zr alloy for Biomedical Applications** **K.P2.105**  
Fernanda Freitas Quadros<sup>1</sup>, Pedro Akira Bazaglia Kuroda<sup>1</sup>, Carlos Roberto Grandini<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru
- 17:45 Aluminum 7075 turning analysis with polished carbide tools and coating titanium diboride** **K.P2.106**  
Stella Andreoli Mira de Assumpção, Sarah David Müzel, Manoel Cleber de Sampaio Alves
- 17:45 Synthesis and characterizations of magnetic Ni-20%at.Fe nanoparticles** **K.P2.107**  
André Paganotti<sup>1</sup>, Sergio Gama<sup>1</sup>, Ricardo Alexandre Galdino da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema
- 17:45 Study of the properties of cerium oxide on the depolymerization process of poly (ethylene terephthalate)** **K.P2.108**  
Amanda Delvizio Pereira<sup>1</sup>, Eloi Alves da Silva<sup>1</sup>, Carlos Vital Paixão de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo
- 17:45 Synthesis and physical properties characterization of Magnetic Fe<sub>3</sub>O<sub>4</sub> / Fe<sub>2</sub>O<sub>3</sub> Microtubes** **K.P2.109**  
César Augusto Díaz Pomar<sup>1</sup>, José Antonio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Magnetic phase diagram of thin terbium films** **K.P2.110**  
Fábio Henrique Sales<sup>1</sup>, Iedo Alves de Souza<sup>1</sup>, Jose Joaquim Souza Melo<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão
- 17:45 Heat Treatment Evaluation of Steel ASTM A-131 Grade A by X-Ray Diffraction** **K.P2.111**  
Francisco Ferreira Junior<sup>1</sup>, Luciana Gaspar Feio<sup>1</sup>, Ednelson Silva Costa<sup>1</sup>, Lino Alberto Soares Rodrigues<sup>1</sup>, EDUARDO MAGALHÃES BRAGA<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 17:45 Investigation of core-shell and microtube morphology formation of Co and Fe due to thermal oxidation** **K.P2.112**  
Paula Pereira Janusonis<sup>1</sup>, José Antonio Souza<sup>1</sup>, César Augusto Díaz Pomar<sup>1</sup>, CYNTHIA MARINA RIVALDO GOMEZ<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Comparative Evaluation The Use Of Babassu Oil In The Tempering Of A Steel Submitted To Termochemical Treatment** **K.P2.113**  
Fernanda Malato Praxedes<sup>1</sup>, Jean Valdir Uchoa Teixeira<sup>1</sup>, Nádia Regina Jaste Cardoso<sup>1</sup>, Otávio Fernandes Lima da Rocha<sup>1</sup>, Fernando de Almeida Gonçalves<sup>1</sup>, EVALDO JÚLIO FERREIRA SOARES<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Comparative evaluation of different environments in stainless steel degradation used in orthodontic treatment** **K.P2.114**  
Jean Valdir Uchoa Teixeira<sup>1</sup>, Fernanda Malato Praxedes<sup>1</sup>, elza monteiro leao filha<sup>1</sup>, andre cruz maciel<sup>1</sup>, Adriel souza<sup>1</sup>, enio mauricio nery santos<sup>2</sup>, claiton jose ribeiro acacio santos<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará, <sup>2</sup>Universidade Federal do Pará

- 17:45 Study of anisotropy in automotive steels by means Finite Element Analysis and EBSD technique K.P2.115**  
Erika Aparecida da Silva<sup>1</sup>, Marcelo dos Santos Pereira<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista-Campus de Guaratinguetá
- 17:45 Influence of rapid solidification in the formation of intermetallic precipitates in AA319.0 aluminum alloy K.P2.116**  
Maria Eduarda Tedesco Farina<sup>1</sup>, Berenice Anina Dedavid<sup>1</sup>, Pedro Bell Santos<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul
- 17:45 Study of the ZnO for the Treatment Photocatalytic Wastewater. K.P2.117**  
Rodrigo Furquim Ghiraldi<sup>1</sup>, Isabela Rosado Belê<sup>1</sup>, Mateus Vinicius de Paiva<sup>1</sup>, Murilo Pires de Lima<sup>1</sup>, Felipe Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Pitting corrosion resistance of friction stir welded lean duplex stainless steel UNS S82441 evaluated by cyclic potentiodynamic polarization and critical pitting temperature (CPT) K.P2.118**  
Antonio Marcos dos Santos Leite<sup>1</sup>, Maysa Terada<sup>1</sup>, Eduardo Bertoni da Fonseca<sup>2</sup>, Victor Ferrinho Pereira<sup>2</sup>, Isolda Costa<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 17:45 Thermal and particle tracing simulation of a friction stir processed plates of API-5L-X80 steel. K.P2.119**  
RAFAEL ARTHUR GIORJAO<sup>1,2</sup>, Julián Arnaldo Ávila<sup>3</sup>, Eduardo Bertoni da Fonseca<sup>2</sup>, Johnnatan Rodríguez<sup>2</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Brazilian Center for Research in Energy and Materials, <sup>3</sup>Brazilian Center for Research in Energy and Materials (CNPEM) , Brasil
- 17:45 Influence of Nb buffer layer on exchange coupling induced at Co/IrMn interface K.P2.120**  
Isabel Liz Castro Merino<sup>1</sup>, Edson Passamani<sup>2</sup>, Valberto Pedruzzi Nascimento<sup>2</sup>, Fernando Pelegri<sup>3</sup>, Elisa Baggio Saitovitch<sup>1</sup>; <sup>1</sup>Centro Brasileiro de Pesquisas Físicas, <sup>2</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO, <sup>3</sup>Universidade Federal de Goiás
- 17:45 Determination critical temperatures of the interstitial free steel: T<sub>nr</sub>, Ar<sub>3</sub> and Ar<sub>1</sub> with continuous cooling multiple strains by hot torsion test K.P2.121**  
Helder Keitaro Arcari Ambo<sup>1</sup>, Marcelo Lucas Pereira Machado<sup>1</sup>; <sup>1</sup>Instituto Federal do Espírito Santo, ES, Brazil
- 17:45 Solidification thermal parameters, microstructure and tensile properties of a ternary Al-10wt%Sn-5wt%Cu alloy K.P2.122**  
ARMANDO AUGUSTO DE CAMPOS<sup>1</sup>, thiago costa<sup>1</sup>, FELIPE BERTELLI<sup>2</sup>, AMAURI GARCIA<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Santa Cecília
- 17:45 Study of the deformation and recrystallization process from an alloy of Al 4.5% Cu K.P2.123**  
Bruna Gobbi Garcia<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Corrosion resistance based on the microstructural array of an Al-3wt%Cu- 1wt%Li alloy K.P2.124**  
Márcio Nunes Zurlo<sup>1</sup>, Givanildo Alves dos Santos<sup>1</sup>, Elaine Pavini Cintra<sup>1</sup>, Antonio Augusto Couto<sup>2</sup>, Wislei Riuper Ramos Osorio<sup>3</sup>, Roberto Manuel Torresi<sup>4</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares, <sup>3</sup>Universidade Estadual de Campinas, <sup>4</sup>Instituto de Química - USP

- 17:45 Influence of the alumina addition in the wear resistance of the sintered AISI 52100 steel** **K.P2.125**  
Bruna Horta Bastos Kuffner<sup>1</sup>, Gilbert Silva<sup>1</sup>, Carlos Alberto Rodrigues<sup>1</sup>, Geovani Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Influence of different percentages of alumina addition in the high energy ball milling process of the AISI 52100 steel** **K.P2.126**  
Bruna Horta Bastos Kuffner<sup>1</sup>, Gilbert Silva<sup>1</sup>, Carlos Alberto Rodrigues<sup>1</sup>, Geovani Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá

## Thursday, September 29<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION K.OR4 (08:30 - 10:15) - Room Amoreiras III*

- 08:45 CHARACTERIZATION OF METAL NANOPARTICLES OF GOLD, SILVER, COPPER AND SILVER-PALLADIUM ALLOY STABILIZED IN CHITOSAN. BACTERICIDE PROPERTIES\** **K.OR4.17**  
GALO CARDENAS<sup>1</sup>, pamelaa saavedra<sup>2</sup>, Luis Vergara González<sup>2</sup>, hugo adalberto klahn<sup>3</sup>; <sup>1</sup>UNIVERSIDAD DEL BIOBIO, <sup>2</sup>UNIVERSIDAD SAN SEBASTIAN, <sup>3</sup>UNIVERSIDAD CATOLICA DE VALPARAISO
- 09:00 Determining the diameter of silver nanoclusters via in situ capacitance measurements** **K.OR4.18**  
Vitor Toshiyuki Abrão Oiko<sup>1</sup>, Rafael Cintra Hensel Ferreira<sup>1</sup>, Kevin Liu Rodrigues<sup>1</sup>, Varlei Rodrigues<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 09:15 Simple one-step green synthesis of gold nanoparticles with controlled size using imidazolium ionic liquid as ligand** **K.OR4.19**  
Ana Flávia Suzana<sup>1</sup>, Sandra Helena Pulcinelli<sup>1</sup>, Celso Valentim Santilli<sup>1</sup>, Stéphanie Blanchandin<sup>2</sup>, Valérie Briois<sup>2</sup>, Florian Meneau<sup>3</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Synchrotron SOLEIL, <sup>3</sup>Laboratório Nacional de Luz Síncrotron
- 09:30 Structural characterization of silver nanoparticles**  
Paulo Ricardo Garcia<sup>1</sup>, Edi Carlos Pereira de Sousa<sup>1</sup>, Walter Maigon Pontuschka<sup>1</sup>, Cristiano Luís Pinto de Oliveira<sup>1</sup>; <sup>1</sup>Instituto de Física-USP

# **SYMPOSIUM L - Advanced Materials and Devices for Organic Electronics and Bioelectronics**

## **Symposium organizers:**

Lucas Fugikawa Santos (*UNESP*)

Ivan H. Bechtold (*UFSC*)

Frank Nelson Crespilho (*USP*)

Gregório Couto Faria (*USP*)

Welber Gianini Quirino (*UFJF*)



# Tuesday, September 27<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION L.OR1 (09:45 - 10:45) - Room Amoreiras II*

- 09:45 Manufacturing high performance organic electronic circuits** **L.OR1.1\***  
David Martin Taylor<sup>1</sup>, Colin Peter Watson<sup>2</sup>, Beverley A Brown<sup>2</sup>; <sup>1</sup>Bangor University, <sup>2</sup>SmartKem Ltd
- 10:15 Two dimensional, electronic particle tracking in liquids with a graphene-based magnetic sensor array** **L.OR1.2**  
Rodrigo Neumann Barros Ferreira<sup>1</sup>, Michael Engel<sup>2</sup>, Mathias Bernhard Steiner<sup>1</sup>; <sup>1</sup>IBM Research - Brazil, <sup>2</sup>IBM Research - Watson
- 10:30 Optoelectronics and photonics microdevices fabricated using femtosecond laser writing** **L.OR1.3**  
Adriano J. G. Otuka<sup>1</sup>, Nathália B. Tomázio<sup>1</sup>, Gustavo Foresto B. Almeida<sup>1</sup>, Josiani Cristina Stefanelo<sup>1</sup>, Marcos Roberto Cardoso<sup>1</sup>, Antonio Ricardo Zanatta<sup>1</sup>, Cleber R. Mendonça<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo

### *SESSION L.OR2 (11:15 - 12:00) - Room Amoreiras II*

- 11:15 Corona charging with constant current: Can it be used to characterize dielectric thin films for organic electronics?** **L.OR2.4**  
José Alberto Giacometti<sup>1</sup>; <sup>1</sup>Institute of Physics of São Carlos - USP
- 11:30 Modeling the dielectric constant and charge density of PDDA/CuTsPc LbL films** **L.OR2.5**  
Rafael Cintra Hensel Ferreira<sup>1</sup>, Kevin Liu Rodrigues<sup>1</sup>, Antonio Riul Jr.<sup>1</sup>, Varlei Rodrigues<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 11:45 Effect of fullerene degradation on the open-circuit voltage of organic solar cells: a sub-band gap quantum efficiency and electroluminescence analysis** **L.OR2.6**  
Alexandre de Castro Maciel<sup>1</sup>, Andrew M Telford<sup>2</sup>, Jason Rohr<sup>2</sup>, Elisabeth Rice<sup>2</sup>, Jiaying Wu<sup>2</sup>, Zhe Li<sup>3</sup>, Emily M Speller<sup>3</sup>, Harrison H Lee<sup>3</sup>, Wing Chung Tsoi<sup>3</sup>, James Durrant<sup>2</sup>, Jenny Nelson<sup>2</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Imperial College London, <sup>3</sup>Swansea University

### *SESSION L.OR3 (14:00 - 16:15) - Room Amoreiras II*

- 14:15 Extreme Sensitivity Biosensing Platform Based on Hyperbolic Metamaterials** **L.OR3.7\***  
GIUSEPPE STRANGI

- 14:45 Alternative approaches to replace Au in bottom contact organic thin-film transistors for non-invasive diagnostics** **L.OR3.9**  
Marco Roberto Cavallari<sup>1</sup>, Pin-Chu Chen<sup>1</sup>, Jiho Yoon Yoon<sup>1</sup>, Amrita Masurkar Masurkar<sup>1</sup>, Fernando Josepetti Fonseca<sup>2</sup>, Ioannis Kymissis<sup>1</sup>; <sup>1</sup>Department of Electrical Engineering, Columbia University, New York, NY 10027, United States, <sup>2</sup>Escola Politécnica da Universidade de São Paulo (EPUSP), SP, Brazil
- 15:00 Second harmonic generation in self-assembled peptide nanotubes: Structure-property relationship** **L.OR3.10\***  
Suchismita Guha Guha<sup>1</sup>; <sup>1</sup>University of Missouri Columbia
- 15:30 Thermal and mechanical analyses of an acrylate polymer aiming resolution improvement in microdevices** **L.OR3.11**  
Pedro Monteiro Cônsoli<sup>1</sup>, Adriano J. G. Otuka<sup>1</sup>, Kelly Tasso Paula<sup>1,2</sup>, Francisco José dos Santos<sup>2</sup>, Dimas Roberto Vollet<sup>2</sup>, Dario Antonio Donatti<sup>2</sup>, Fábio Simões de Vicente<sup>2</sup>, Debora Terezia Balogh<sup>1</sup>, Cleber R. Mendonça<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos, <sup>2</sup>Universidade Estadual Paulista- Campus Rio Claro
- 15:45 Vibrational and optical properties of thin films based on benzoxazole derivatives** **L.OR3.12**  
Louise Patron Etcheverry<sup>1</sup>, Eduardo Ceretta Moreira<sup>2</sup>, Fabiano Severo Rodembusch<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Fundação Universidade Federal do Pampa
- 16:00 A wearable, flexible sensor for determining sweat conductance with impedance spectroscopy measurements**  
Lorenzo Antonio Buscaglia<sup>1</sup>, Deivy Wilson Masso<sup>2</sup>, Felipe Jose Pavinatto<sup>2</sup>, Osvaldo Novais Oliveira Jr<sup>2</sup>; <sup>1</sup>Sao Carlos School of Engineering - University of Sao Paulo, <sup>2</sup>São Carlos Institute of Physics

## Poster presentations

### *SESSION L.P1 (17:45 - 19:30)*

- 17:45 Effect of aniline monomer concentration on the electropolymerization process and its influence on the technological application in chemical biosensors** **L.P1.1**  
Hugo José Dias Mello<sup>1</sup>, Marcelo Mulato<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Efficient bioanode based on oligomerized glucose oxidase and a flexible carbon fiber electrode** **L.P1.2**  
Andressa Ribeiro Pereira<sup>1</sup>, Frank Nelson Crespilho<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo
- 17:45 Evaluation of a miniaturized biofuel cell based on alcohol dehydrogenase and bilirubin oxidase gas-diffusion cathode** **L.P1.3**  
Graziela Cristina Sedenho<sup>1</sup>, Frank Nelson Crespilho<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo
- 17:45 A yeast and enzyme-based electrode: ethanol production and oxidation** **L.P1.4**  
Kamila Cássia Pagnoncelli<sup>1</sup>, Andressa Ribeiro Pereira<sup>1</sup>, Frank Nelson Crespilho<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo

- 17:45 Langmuir-Freundlich Model Explains the Adsorption Mechanism of the Antigen CA19-9 on Biosensors Made with Chitosan/Con A Films for Early Diagnosis of Pancreatic Cancer** **L.P1.5**  
Andrey Coatrini Soares<sup>1</sup>, Juliana Coatrini Soares<sup>1</sup>, Flávio Makoto Shimizu<sup>1</sup>, Valquiria Cruz Rodrigues<sup>1</sup>, Matias Eliseo Melendez<sup>2</sup>, André Lopes Carvalho<sup>2</sup>, José Humberto Tavares Guerreiro Fregnani<sup>2</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>;  
<sup>1</sup>Universidade de São Paulo, <sup>2</sup>Hospital de Câncer de Barretos
- 17:45 Biopolymer based ionogels as active layers in low-cost gas sensors and electronic noses** **L.P1.6**  
Mariana Martins de Oliveira Netto<sup>1</sup>, Jonas Gruber<sup>2</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Instituto de Química - USP
- 17:45 Adsorption isotherms with the Langmuir-Freundlich Model in the Detection of the Biomarker p53 Associated with Various Types of Cancer** **L.P1.7**  
Juliana Coatrini Soares<sup>1</sup>, Andrey Coatrini Soares<sup>2</sup>, Paulo Augusto Raymundo Pereira<sup>3</sup>, Valquiria Cruz Rodrigues<sup>1</sup>, Flávio Makoto Shimizu<sup>1</sup>, Matias Eliseo Melendez<sup>4</sup>, Sergio Antonio Spinola Machado<sup>3</sup>, José Humberto Tavares Guerreiro Fregnani<sup>4</sup>, André Lopes Carvalho<sup>4</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>;  
<sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos/Universidade de São Paulo, <sup>3</sup>Instituto de Química de São Carlos - Universidade de São Paulo, <sup>4</sup>Hospital de Câncer de Barretos
- 17:45 Adsorption mechanisms in the detection of cancer biomarkers investigated with image processing** **L.P1.8**  
Valquiria Cruz Rodrigues<sup>1</sup>, Cesar Comin<sup>1</sup>, Juliana Coatrini Soares<sup>1</sup>, Andrey Coatrini Soares<sup>2</sup>, Matias Eliseo Melendez<sup>3</sup>, José Humberto Tavares Guerreiro Fregnani<sup>3</sup>, André Lopes Carvalho<sup>4</sup>, Luciano F Costa<sup>1</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>;  
<sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Hospital do Câncer de Barretos, <sup>4</sup>Hospital de Câncer de Barretos
- 17:45 Amperometric biosensor based on layer-by-layer film of functionalized reduced graphene oxide for the glucose detection in real samples** **L.P1.9**  
Daniela Branco Tavares Mascagni<sup>1</sup>, Marystela Ferreira<sup>2</sup>; <sup>1</sup>UNIVERSIDADE ESTADUAL PAULISTA "JÚLIO DE MESQUITA FILHO", <sup>2</sup>Universidade Federal de São Carlos - campus Sorocaba
- 17:45 Fabrication and characterization of Chitosan/AuNp nanostructured films with DNA immobilized for detecting cancer at early stages** **L.P1.10**  
Olivia Carr<sup>1,2</sup>, Flávio Makoto Shimizu<sup>2</sup>, Jorge Augusto de Moura Delezuk<sup>2</sup>, Lidia Maria Rebolho Batista Arantes<sup>3</sup>, Matias Eliseo Melendez<sup>3</sup>, André Lopes Carvalho<sup>3</sup>, Osvaldo Novais Oliveira Jr<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos-Universidade de São Paulo, <sup>2</sup>São Carlos Institute of Physics, <sup>3</sup>Molecular Oncology Research Center
- 17:45 Photoluminescent properties of the Eu(TTA)<sub>3</sub>(H<sub>2</sub>O)<sub>2</sub> complexin gelatin and chitosan membrane** **L.P1.11**  
Luiz Guilherme Ambrósio de Carvalho<sup>1</sup>, Luiz Gustavo de Lima Guimarães<sup>1</sup>, Ellen Raphael<sup>1</sup>, Daniela Pereira Santos<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Detection of Acute Kidney Injury Biomarker Using Extended Gate Field-Effect Transistors** **L.P1.12**  
Juliana F. dos Santos<sup>1</sup>, Nirton C. S. Vieira<sup>1</sup>, Idelma A. A. Terra<sup>1</sup>, Naiara Zambianco<sup>2</sup>, Francisco Eduardo Gontijo Guimarães<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>;  
<sup>1</sup>Instituto de Física de São Carlos, <sup>2</sup>Universidade Federal de São Carlos

- 17:45 Microfluidic electronic tongue applied in soil analysis** **L.P1.13**  
Maria L. Braunger<sup>1</sup>, Mawin J. M. Jimenez<sup>1</sup>, Flavio Shimizu Shimizu<sup>2</sup>, Lucas R. Amaral<sup>3</sup>, Paulo S. G. Magalhães<sup>3</sup>, Antonio Riul Jr.<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - Universidade Estadual de Campinas, <sup>2</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>3</sup>Faculdade de Engenharia Agrícola - Universidade Estadual de Campinas
- 17:45 Nanostructured electrochemical glucose biosensor based on poly(Py@EDOT)** **L.P1.14**  
Ana Maria Rocco<sup>1</sup>, Álvaro Ferreira Monteiro<sup>1</sup>, Marcus Vinícius David Rangel e Silva<sup>2,1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro - EQ, <sup>2</sup>Instituto Nacional de Metrologia, Qualidade e Tecnologia
- 17:45 The membrane mimetic matrix affects the adsorption of tyrosinase and influences on the biosensors' performance to polyphenols detection** **L.P1.15**  
 Matheus Santos Pereira<sup>1</sup>, Mateus Dassie Maximino<sup>1</sup>, Cibely Silva Martin<sup>1</sup>, Priscila Alessio<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 Biosensor amperometric based development in uricase oxidase associated with platinum nanoparticles for detection uric acid.** **L.P1.16**  
Eduardo Almeida Anuniação<sup>1</sup>, Marystela Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba
- 17:45 Vertical flow assay using gold nanoparticles for rapid immunosensing of proteins** **L.P1.17**  
Gisele Elias Nunes Pauli<sup>1,2</sup>, Alfredo de la Escosura-Muñiz<sup>2</sup>, Claudio Parolo<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>, Arben Merkoçi<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Catalan Institute of Nanoscience and Nanotechnology
- 17:45 Surface functionalization of carbon fiber electrodes for alcohol dehydrogenase enzyme immobilization** **L.P1.18**  
Mian Abdul Ali<sup>1</sup>, Frank Nelson Crespilho<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo
- 17:45 Carbon fiber arrays as implantable electrodes for glucose/O<sub>2</sub> biofuel cell** **L.P1.19**  
Fernanda Cristina Pena Ferreira Sales<sup>1</sup>, Frank Nelson Crespilho<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos
- 17:45 Study of the incorporation of the Portulaca grandiflora flower in a matrix of poly(vinyl alcohol) into the development of a chemical sensor of pH** **L.P1.20**  
Ricardo Lima Guimarães<sup>1</sup>, Gilmara Gonzaga Pedrosa<sup>1</sup>, Flávio Vinícius Viana de Holanda<sup>1</sup>, Débora Clara Coelho da Mota Silveira<sup>1</sup>, Filipe Matheus Cabral Santos<sup>1</sup>, Marcos Antonio Coelho Júnior<sup>1</sup>, Fernandes Henrique de Azevedo Jr<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 17:45 The correlation between the electronic structure and optical properties of xanthenes derivatives** **L.P1.21**  
 Samuel de Faria Vieira<sup>1</sup>, Aluisio de Andrade Bartolomeu<sup>2</sup>, Luiz Carlos Da Silva Filho<sup>2,3</sup>, Augusto Batagin Neto<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Itapeva, <sup>2</sup>Programa de Pós-Graduação em Ciência e Tecnologia de Materiais, <sup>3</sup>Universidade Estadual Paulista - Campus Bauru
- 17:45 Nanostructured biosensor based on Layer-by-Layer films for use in an e-tongue to detect E. Coli** **L.P1.22**  
Flávio Makoto Shimizu<sup>1</sup>, Stanley E. R. Bilatto<sup>2</sup>, Daniel Souza Corrêa<sup>2</sup>, Odilio Assis<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>2</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Institute of Physics of São Carlos - USP, <sup>2</sup>Embrapa Instrumentação

- 17:45 An amperometric sensor based on carbon nanotubes and 4-nitroaniline adsorbed on silica gel modified with zirconium oxide for determination of ascorbic acid in food samples** **L.P1.23**  
Sarah Kelly Melo Cavalcante<sup>1,2</sup>, Mayrane Carla Nascimento<sup>1</sup>, Elenice Mendes Silva Gomes<sup>2</sup>, Walker de Lima Cordeiro<sup>2</sup>, Joab Serra Rodrigues da Silva<sup>1</sup>, Antonio Osimar Silva<sup>2</sup>, Jonas dos Santos Sousa<sup>1</sup>, Euripedes Alves Silva Filho<sup>2</sup>, Wilney de Jesus Rodrigues Santos<sup>1</sup>, Lauro Tatsuo Kubota<sup>3</sup>, Marília Oliveira Goulart<sup>2</sup>, Phabyanno Rodrigues Lima<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas, <sup>2</sup>Universidade Federal de Alagoas, <sup>3</sup>Instituto de Química - UNICAMP
- 17:45 A Nanostructured Flexible Device For Salivary Biomarkers Detection** **L.P1.24**  
Paulo Augusto Raymundo Pereira<sup>1,2</sup>, Flávio Makoto Shimizu<sup>2</sup>, Sergio Antonio Spinola Machado<sup>1</sup>, Osvaldo Novais Oliveira Jr<sup>2</sup>; <sup>1</sup>Instituto de Química de São Carlos, <sup>2</sup>Instituto de Física de São Carlos
- 17:45 Transparent conductive oxides application in the detection Cyclodextrin Glycosyltransferase enzyme** **L.P1.25**  
Cleber Alexandre Amorim<sup>1</sup>, Kate Cristina Blanco<sup>2</sup>, Lucas Fugikawa Santos<sup>3</sup>, Adenilson José Chiquito<sup>4</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Institute of Physics of São Carlos - USP, <sup>3</sup>UNESP, <sup>4</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Development PMMA/PPy nanofibers electrospun for applications in gas sensors.** **L.P1.26**  
Camilla Martins Ruiz<sup>1</sup>, Guilherme Dognani<sup>1</sup>, Bruno Henrique Santana Goís<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Jessyka Carolina Bittencourt<sup>1</sup>, Angela Priscila Pelegrini Bolach<sup>1</sup>, Deuber Lincon da Silva Agostini<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 A sensitive electrochemical detection of ascorbic acid using 4-nitrophenol self-assembled monolayers over gold nanoparticles electrode** **L.P1.27**  
Sarah Kelly Melo Cavalcante<sup>1,2</sup>, Mayrane Carla Nascimento<sup>1,2</sup>, Elenice Mendes Silva Gomes<sup>2</sup>, Cristian Bernado da Silva<sup>1</sup>, Jailson dos Santos Silva<sup>1</sup>, Antonio Osimar Silva<sup>2</sup>, Johnatan Duarte de Freitas<sup>1</sup>, Alan John Duarte de Freitas<sup>1</sup>, Euripedes Alves Silva Filho<sup>2</sup>, Wilney de Jesus Rodrigues Santos<sup>1</sup>, Marília Oliveira Goulart<sup>2</sup>, Phabyanno Rodrigues Lima<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas, <sup>2</sup>Universidade Federal de Alagoas
- 17:45 Study of percolation threshold electrospun nanofibers for gas sensors** **L.P1.28**  
Camilla Martins Ruiz<sup>1</sup>, Bruno Henrique Santana Goís<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Jessyka Carolina Bittencourt<sup>2</sup>, Guilherme Dognani<sup>1</sup>, Angela Priscila Pelegrini Bolach<sup>1</sup>, Clarissa de Almeida Olivati<sup>1</sup>, Flávio Camargo Cabrera<sup>1</sup>, Renivaldo José dos Santos<sup>3</sup>, Deuber Lincon da Silva Agostini<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual Paulista - Campus de Presidente Prudente, <sup>3</sup>Universidade Estadual Paulista - Campus Rosana
- 17:45 Caustic Soda detection in bovine milk with EGFET devices** **L.P1.29**  
Matheus Feres Freitas<sup>1</sup>, Joaquim Paulo da Silva<sup>1</sup>, Jefferson Esquina Tsuchida<sup>1</sup>, Marcelo Mulato<sup>2</sup>, JULIO CESAR UGUCIONI<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras, <sup>2</sup>Universidade de São Paulo
- 17:45 Development of a pH indicator organic film based on Cellulose acetate for monitor the perishable food quality** **L.P1.30**  
Marcella Rocha Franco<sup>1</sup>, Rodrigo Fernando Bianchi<sup>1</sup>, Luciana Rodrigues da Cunha<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto

- 17:45 Synthesis and characterization with molecular imprinted technique and its function as chemical sensors for artemisinin L.P1.31**  
Walker de Lima Cordeiro<sup>1,2</sup>, Sarah Kelly Melo Cavalcante<sup>1,2</sup>, Mayrane Carla Nascimento<sup>1</sup>, José Anderson Farias da Silva Bomfim<sup>1</sup>, Fernando Alves Ferreira<sup>1</sup>, Elenice Mendes Silva Gomes<sup>1,2</sup>, Antonio Osimar Silva<sup>2</sup>, Joab Serra Rodrigues da Silva<sup>1</sup>, Wilney de Jesus Rodrigues Santos<sup>1</sup>, Euripedes Alves Silva Filho<sup>2</sup>, Marília Oliveira Goulart<sup>2</sup>, Phabyanno Rodrigues Lima<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas, <sup>2</sup>Universidade Federal de Alagoas
- 17:45 Fluorescence and light sensitive electrospun polymer nanofiber: search for quasi-one dimensional (1D) color indicator dosimeter materials L.P1.32**  
 Nathália Oliveira Braga<sup>1</sup>, Paulo Henrique de Sousa Picciani<sup>2</sup>, Giovana Ribeiro Ferreira<sup>3</sup>, Rodrigo Fernando Bianchi<sup>4</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Universidade Federal dos Vales do Jequitinhonha e Mucuri, <sup>4</sup>Universidade Federal de Ouro Preto
- 17:45 Preparation and characterization of polyaniline composite and carbon nanotubes associated with cement structures for monitoring efforts in mechanics. L.P1.33**  
Silmar Antonio Travain<sup>1</sup>, Brillian Aquino Fernandes<sup>2</sup>, Luiz Orlando Ladeira<sup>3</sup>; <sup>1</sup>UNESP Guaratinguetá, <sup>2</sup>Universidade Federal de Ouro Preto, <sup>3</sup>Universidade Federal de Minas Gerais
- 17:45 Synthesis of Zinc Oxide Nanoparticles by Polyol Route L.P1.34**  
Eduardo Ferreira Barbosa<sup>1</sup>, Jaqueline Alves Coelho<sup>1</sup>, Edna Regina Spada<sup>2</sup>, João B. Floriano<sup>1</sup>, Paula C. Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Física de São Carlos
- 17:45 Reactivity of lignin subunits: electronic structure calculations on monomers L.P1.35**  
Rosângela Almeida Maia<sup>1</sup>, Augusto Batagin Neto<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Itapeva
- 17:45 Optical and Electric Characterization of P3DDT Synthesized Electrochemically L.P1.36**  
Sankler Soares de Sá<sup>1</sup>, Eralci Moreira Therézio<sup>1</sup>, Alexandre Marletta<sup>2</sup>, Raigna Augusta da Silva Zadra Armond<sup>2</sup>, Silésia de Fátima Curcino da Silva<sup>2</sup>; <sup>1</sup>Universidade Federal de Mato Grosso, <sup>2</sup>Universidade Federal de Uberlândia
- 17:45 Study of Degradation of Blends with Thiophene Copolymers L.P1.37**  
Alessandra Stacchini Menandro<sup>1</sup>, Roselena Faez<sup>2</sup>, Laura Oliveira Péres<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Ruthenium Complexes: Synthesis and Electro-optical Applications L.P1.38**  
Cristian Momoli Salla<sup>1</sup>, Jefferson Silva Martins<sup>2</sup>, Hugo C. Braga<sup>1</sup>, Juliana Eccher<sup>1</sup>, Hugo Gallardo<sup>1</sup>, Bernardo de Souza<sup>1</sup>, Welber Gianini Quirino<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Juiz de Fora
- 17:45 One-step approach to obtain polypyrrole-indigo carmine-silver nanoparticles nanocomposite: improved optical contrast and electroactivity L.P1.39**  
 Lara F. Loguercio<sup>1</sup>, Pedro G. Demingos<sup>1</sup>, Luiza de Mattos Manica<sup>1</sup>, Jordana Borges Griep<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>, Jacqueline Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

- 17:45 Reactivity indexes for the study of carbon-based materials as active layers of chemical sensors: a molecular approach** L.P1.40  
Augusto Batagin Neto<sup>1</sup>, Marcos Geovanni de Souza Pinheiro<sup>1</sup>, João Pedro Barros Cuba<sup>1</sup>, Victor Melles<sup>1</sup>, Leonardo Gois Lascane<sup>1</sup>, Susan Aki Kitai<sup>1</sup>, Larissa Oliveira Mandú<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Itapeva
- 17:45 Study of optical spectroscopic of polymeric films of poly (3-hexylthiophene) regiorregulares doped with tetracyanoquinodimethane** L.P1.41  
Diego Fernando Silva Sousa<sup>1,2</sup>, Erick Piovesan<sup>2</sup>, F. H. Cristovan<sup>3</sup>;  
<sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Uberlândia, <sup>3</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Poly(3-thiophene ethyl acetate) for organic electronics application: Synthesis and structural, thermal and optical characterizations** L.P1.42  
Aline Câmara de Oliveira<sup>1</sup>, Fernando Henrique Cristovan<sup>1</sup>, Rossano Lang<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Morphological and superficial study of thin films based on conjugated semiconductor polymer PBTTC-C14** L.P1.43  
José Enrique Eirez Izquierdo<sup>1</sup>, Marco Roberto Cavallari<sup>2</sup>, Marcelo Assumpção Pereira da Silva<sup>3</sup>, Fernando Josepetti Fonseca<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Department of Electrical Engineering, Columbia University, New York, NY 10027, United States, <sup>3</sup>Instituto de Física de São Carlos
- 17:45 Photophysical characterization of organic compounds derived from aminobenzothiazole** L.P1.44  
Nathalie de Oliveira Lunardi<sup>1</sup>, Fabiano Severo Rodembusch<sup>2</sup>, Eduardo Ceretta Moreira<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal do Pampa, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Sustainable route to prepare conjugate polymers** L.P1.45  
Rebeca da Rocha Rodrigues<sup>1</sup>, Laura Oliveira Péres<sup>1</sup>, Cristiano Raminelli<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema
- 17:45 Mixing three polymers to achieve white emission** L.P1.46  
Luana Cristina Wouk de Menezes<sup>1</sup>, Wesley Renzi<sup>2</sup>, Flavio Franchello<sup>2</sup>, Edson Laureto Laureto<sup>2</sup>, Ivan Dias<sup>2</sup>, Jeferson Ferreira de Deus<sup>3</sup>, Marco Aurélio Toledo da Silva<sup>3</sup>, José Leonil Duarte<sup>2</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Estadual de Londrina, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Synthesis, structural characterization and photophysical properties of a novel isoxazole** L.P1.47  
Ana Carolina Ferreira de Brito<sup>1</sup>, Jason Guy Taylor<sup>1</sup>, Thiago Cazati<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Ouro Preto
- 17:45 Electrochemical Polymerization of a Donor-Acceptor Polymer Containing Benzothiadiazole** L.P1.48  
Uesley A. Stival<sup>1</sup>, Paula C. Rodrigues<sup>1</sup>, João B. Floriano<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Impedance Spectroscopy of Melanin Thin Films and Humidity Sensor Applications** L.P1.49  
Eliane Aparecida Morais<sup>1</sup>, João Vitor Paulin<sup>2</sup>, Carlos F. O. Graeff<sup>2</sup>, Honória de Fátima Gorgulho<sup>1</sup>, Wagner Souza Machado<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei, <sup>2</sup>Universidade Estadual Paulista Júlio de Mesquita Filho

- 17:45 Synthesis and Characterization of a Push-Pull Terpolymer Based on Anthracene, Fluorene and Benzothiadiazole** **L.P1.50**  
 Ana Carolina Floriano<sup>1</sup>, Daiana Santos da Silveira<sup>1</sup>, Gabriel Marques Rosa<sup>2</sup>, Luciano Morais Lião<sup>2</sup>, Erick Piovesan<sup>3</sup>, Fernando Henrique Cristovan<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Universidade Federal de Goiás, <sup>3</sup>Universidade Federal de Uberlândia
- 17:45 Electrochemical and spectroscopic properties of Prussian blue produced from [Fe(CN)<sub>5</sub>(ptt)]<sup>3-</sup>** **L.P1.51**  
Bruno Morandi Pires<sup>1</sup>, Flavia Elisa Galdino<sup>1</sup>, Juliano A Bonacin<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Molecular alignment effects on spectroscopic properties 2,1,3-benzothiadiazole guested in liquid-crystalline compounds** **L.P1.52**  
Francelly Emily Lucas<sup>1</sup>, Gilberto Ferreira Borges Jr.<sup>2</sup>, Wender Bruno Calixto Alves<sup>3</sup>, Ivan H. Bechtold<sup>4</sup>, André Alexandre Vieira<sup>5</sup>, RODRIGO CRISTIANO<sup>6</sup>, Hugo Gallardo<sup>4</sup>, Raigna Augusta da Silva<sup>3</sup>, Newton Martins Barbosa Neto<sup>7</sup>, Alexandre Marletta<sup>3</sup>, Paulo Alliprandini Filho<sup>1</sup>; <sup>1</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri, <sup>2</sup>Universidade Federal De Minas Gerais, <sup>3</sup>Universidade Federal de Uberlândia, <sup>4</sup>Universidade Federal de Santa Catarina, <sup>5</sup>Universidade Federal da Bahia, <sup>6</sup>Universidade Federal da Paraíba, <sup>7</sup>Universidade Federal do Pará
- 17:45 Investigation of the photophysical and eletrochemical properties of a supramolecular porphyrin/ruthenium (II) complex** **L.P1.53**  
Newton Martins Barbosa Neto<sup>1</sup>, Renato N. Sampaio<sup>2</sup>, Monize Martins Silva<sup>3</sup>, Alzir Azevedo Batista<sup>3</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>University of North Carolina at Chapel Hill, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Automatic pattern identification in self-organized polymeric films** **L.P1.54**  
Carolina Frayne Cuba<sup>1</sup>, Adriana Madalena de Araújo Faria<sup>1</sup>, Andrea Gomes Campos Bianchi<sup>1</sup>, Rodrigo Fernando Bianchi<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto
- 17:45 Photoprocessing of zinc porphyrin molecules in solution.** **L.P1.55**  
Sandro do Nascimento da Costa<sup>1</sup>, Zeus Sales Moreira<sup>1</sup>, Alzir Azevedo Batista<sup>2</sup>, Renato N. Sampaio<sup>3</sup>, Jefferson Márcio Sanches Lopes<sup>1</sup>, Paulo Trindade Araujo<sup>4</sup>, Newton Martins Barbosa Neto<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>University of North Carolina at Chapel Hill, <sup>4</sup>The University of Alabama
- 17:45 Optical Characterization of P3HT Polymeric Films** **L.P1.56**  
Aleffe Bruno Schura<sup>1</sup>, Silésia de Fátima Curcino da Silva<sup>2</sup>, Raigna Augusta da Silva Zadra Armond<sup>2</sup>, Alexandre Marletta<sup>2</sup>, Eralci Moreira Therézio<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Mato Grosso, <sup>2</sup>Universidade Federal de Uberlândia
- 17:45 Influence of the thermall convection process at lower temperatures for PPV-dye-TALH thin films for aplication on solar cells** **L.P1.57**  
 Junior C. S. Pantoja<sup>1</sup>, Ricardo Vignoto Fernandes<sup>1</sup>, Edson Laureto<sup>1</sup>, Mariana Dias de Matos<sup>2</sup>, Elisa Sales de Freitas<sup>2</sup>, Sedinei Leal Guadanhim<sup>2</sup>, Marco Aurélio Toledo da Silva<sup>2</sup>, Sidney Alves Lourenço<sup>2</sup>, Luiz Carlos Poças<sup>2</sup>;  
<sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Design, synthesis and characterization of a new series of liquid crystalline compounds derived from the tris(N-phenyltriazole) core** **L.P1.58**  
Carlos A. Ratto<sup>1</sup>, Eduard Westphal<sup>2</sup>, Carlos E. M. Campos<sup>1</sup>, Hugo Gallardo<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Tecnológica Federal do Paraná

- 17:45 The adsorption mechanisms behind biosensing** **L.P1.59**  
Iram Taj Awan<sup>1</sup>, Niravkumar Jitendrabhai Joshi<sup>1</sup>, Andrey Coatrini Soares<sup>1</sup>,  
 Matias Eliseo Menlendez<sup>2</sup>, André Lopes Carvalho<sup>3</sup>, José Humberto Tavares  
 Guerreiro Fregnani<sup>3</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São  
 Carlos/Universidade de São Paulo, <sup>2</sup>Hospital de Câncer de Barretos - Centro de  
 Pesquisa em Oncologia Molecular, <sup>3</sup>Hospital de Câncer de Barretos
- 17:45 Development of conductive nanofibers for PVA/PEDOT:PSS by** **L.P1.60**  
**electrospinning for application in gas sensors**  
Bruno Henrique Santana Goís<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Jessyka Carolina  
 Bittencourt<sup>1</sup>, Camilla Martins Ruiz<sup>1</sup>, Guilherme Dognani<sup>1</sup>, Deuber Lincon da  
 Silva Agostini<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 PFeBT/quartz interface and its morphology** **L.P1.61**  
Maykol Damasceno Oliveira<sup>1</sup>, Ángel Alberto Hidalgo<sup>1</sup>, Maria Leticia Vega<sup>1</sup>,  
 Alisson de Jesus Santana<sup>2</sup>, Paula C. Rodrigues<sup>2,3</sup>; <sup>1</sup>Universidade Federal do  
 Piauí, <sup>2</sup>Universidade Federal do Paraná, <sup>3</sup>Universidade Tecnológica Federal do  
 Paraná
- 17:45 Preparation and characterization of polyvinyl alcohol films doped with** **L.P1.62**  
**SnO<sub>2</sub>:F and perylene**  
Jeferson Ferreira de Deus<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Development and parameterization of nanofibers electrospun of** **L.P1.63**  
**poly(vinylidene fluoride) with polypyrrole**  
André Antunes da Silva<sup>1</sup>, Jessyka Carolina Bittencourt<sup>1</sup>, Bruno Henrique  
 Santana Goís<sup>1</sup>, Guilherme Dognani<sup>1</sup>, Angela Priscila Pelegrini Bolach<sup>1</sup>, Camilla  
 Martins Ruiz<sup>1</sup>, Deuber Lincon da Silva Agostini<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de  
 Presidente Prudente
- 17:45 Synthesis and characterization of a new luminescent twin dimer** **L.P1.64**  
**pyridinium ionic compound containing the 1,3,4-oxadiazole heterocycle**  
 Fernando Molin<sup>1</sup>, Guilherme Augusto Justen<sup>1</sup>, Eduard Westphal<sup>1</sup>; <sup>1</sup>Universidade  
 Tecnológica Federal do Paraná
- 17:45 Electronic structure calculations for the study of polyaniline-based** **L.P1.65**  
**chemical sensors: evaluation of structural and reactivity properties**  
Larissa Oliveira Mandú<sup>1</sup>, Augusto Batagin Neto<sup>1</sup>; <sup>1</sup>Universidade Estadual  
 Paulista - Campus Itapeva
- 17:45 Buckypaper as capacitive electrode for fire sensor**  
Paula Fabíola Pantoja Pinheiro<sup>1</sup>, Fernanda Rodrigues Sousa<sup>1</sup>, Marcos Allan  
 Leite dos Reis<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 17:45 Study of polymeric blends to obtain a light emitting electrochemical cell**  
**(L.E.C.)**  
Estácio Paiva de Araújo<sup>1</sup>, Silesia de Fatima Cursino da Silva<sup>1</sup>, Alexandre  
 Marletta<sup>1</sup>, Raigna Augusta da Silva Zadra Armond<sup>1</sup>; <sup>1</sup>Universidade Federal de  
 Uberlândia

**Wednesday, September 28<sup>th</sup>**

## Oral presentations

\* Invited Lecture

### **SESSION L.OR4 (09:45 - 10:45) - Room Amoreiras II**

- 09:45 Organic electronics for *in vitro* electrophysiological sensing: Device structures and methods to measure low-frequency collective cell activity** **L.OR4.13\***  
Henrique Leonel Gomes<sup>1</sup>, Maria do Carmo de Medeiros<sup>2</sup>, Pedro Carrilho Inácio<sup>1</sup>, Ana Garcias Mestre<sup>1</sup>, Sanaz Asgarifar<sup>1</sup>, José Bragança<sup>1</sup>, Fabio Biscarini<sup>3</sup>; <sup>1</sup>Universidade do Algarve, <sup>2</sup>Universidade de Coimbra, <sup>3</sup>University of Modena and Reggio Emilia
- 10:15 Rhodanese incorporated in bio-inspired ultrathin films of phospholipids: improvement of the enzyme activity for the construction of bioelectronic devices** **L.OR4.14**  
Luciano Caseli<sup>1</sup>, Felipe Tejada Araújo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 10:30 Anisotropic charge distribution in large-area graphene** **L.OR4.15**  
Lucyano J. A. Macedo<sup>1</sup>, Frank Nelson Crespilho<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Química de São Carlos

### **SESSION L.OR5 (11:15 - 12:00) - Room Amoreiras II**

- 11:15 Improved optical, electrochemical and morphological properties of silver nanoparticles/indigo carmine and dodecyl sulfate doped polypyrrole nanocomposites** **L.OR5.16**  
Luiza de Mattos Manica<sup>1</sup>, Lara F. Loguercio<sup>1</sup>, Pedro G. Demingos<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>, Jacqueline Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:30 Hybrid White Organic Light-emitting Diodes Combining Blue-fluorescent Polymer and Red-phosphorescent Pt(II) Complexes as Active Layer** **L.OR5.17**  
José Carlos Germino<sup>1</sup>, Raquel Aparecida Domingues<sup>2</sup>, Fernando Junior Quites<sup>3</sup>, Jilian Nei de Freitas<sup>4</sup>, Marcelo Meira Faleiros<sup>1</sup>, Emmanuel Santos Moraes<sup>1</sup>, Teresa Dib Zambon Atvars<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de São Paulo, <sup>3</sup>Universidade Federal de Mato Grosso, <sup>4</sup>Centro de Tecnologia da Informação Renato Archer
- 11:45 Polyaniline electrodes of high superficial area for pseudocapacitors** **L.OR5.18**  
Luana Lacy Mattos<sup>1</sup>, Rodrigo Monico Peixoto<sup>2</sup>, Nicolle Ruppenthal<sup>2</sup>, Carleane Patricia da Silva Reis<sup>2</sup>, William Dallapícula Nunes<sup>2</sup>, Maria Luisa Sartorelli<sup>2</sup>, Françoise Toledo Reis<sup>2</sup>; <sup>1</sup>CEITEC SA, <sup>2</sup>Universidade Federal de Santa Catarina

### **SESSION L.OR6 (14:00 - 16:15) - Room Amoreiras II**

- 14:00 Impedimetric and field-effect aptasensors for medical and environmental applications** **L.OR6.19\***  
Pedro Estrela<sup>1</sup>; <sup>1</sup>University of Bath
- 14:30 Physical-chemical modifications induced by ion bombardment on organic devices via dual-beam microscopy** **L.OR6.20**  
Cristol de Paiva Gouvêa<sup>1,2</sup>, Harold Jose Camargo Avila<sup>1</sup>, Erlon Henrique Martins Ferreira<sup>2</sup>, Martin Mendoza<sup>2</sup>, Marco Cremona<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Instituto Nacional de Metrologia, Qualidade e Tecnologia
- 14:45 A new method for selecting sensing units in an electronic-tongue** **L.OR6.21**  
José Alberto Giacometti<sup>1</sup>, Flávio Makoto Shimizu<sup>1</sup>, Olivia Carr<sup>1</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP

- 15:15 Molecular Quantum Capacitors for Medical Diagnostics** **L.OR6.22\***  
Paulo Roberto Bueno<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 15:45 A self-assembled antibody-based platform for melatonin detection** **L.OR6.23**  
Laís Canniatti Brazaca<sup>1</sup>, Camila Barbosa Bramorski<sup>1</sup>, Bruno Campos Janegitz<sup>2</sup>,  
 Juliana Cancino Bernardi<sup>1</sup>, Regina Pekelmann Markus<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>;  
<sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Federal de São Carlos
- 16:00 On the growth, structure and dynamics of P3EHT crystals** **L.OR6.24**  
Giovanni Paro Cunha<sup>1</sup>, Eduardo Ribeiro de Azevedo<sup>1</sup>, Gregorio Couto Faria<sup>2,1</sup>,  
 Duc Trong Duong<sup>2</sup>, Alberto Salleo<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos,  
<sup>2</sup>Stanford University

## Poster presentations

### SESSION L.P2 (17:45 - 19:30)

- 17:45 Development of organic light emitting diodes by blade coating** **L.P2.66**  
Viviane Nogueira Hamanaka<sup>1</sup>, MARCOS HENRIQUE MAMORU OTSUKA  
 HAMANAKA<sup>2</sup>, Vinicius Lago Pimentel<sup>2</sup>, Fernando Josepetti Fonseca<sup>1</sup>;  
<sup>1</sup>Universidade de São Paulo, <sup>2</sup>Centro de Tecnologia da Informação Renato  
 Archer
- 17:45 Preparation of transparent high conductive PEDOT:PSS thin films** **L.P2.67**  
Satoru Yoshida<sup>1</sup>, Herick Garcia Takimoto<sup>1</sup>, Emerson Roberto Santos<sup>1</sup>, Shu Hui  
 Wang<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 PEDOT:PSS thin films irradiated with UV-Ozone for P-OLEDs devices** **L.P2.68**  
Emerson Roberto Santos<sup>1</sup>, Juliana Aparecida Vendrami<sup>2</sup>, Satoru Yoshida<sup>1</sup>,  
 Herick Garcia Takimoto<sup>1</sup>, Elvo Calixto Burini Junior<sup>3</sup>, Roberto Koji Onmori<sup>1</sup>,  
 Shu Hui Wang<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Faculdade  
 de Tecnologia Zona Leste, <sup>3</sup>Instituto de Energia e Ambiente da Universidade de  
 São Paulo
- 17:45 Application of a composite containing ORMOSIL material and conductive polymer in light-emitting device fabrication** **L.P2.69**  
Renan Colucci<sup>1</sup>, Fábio Simões de Vicente<sup>1</sup>, Giovanni Gozzi<sup>1</sup>; <sup>1</sup>Universidade  
 Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Study of the charge transport in composites comprising PEDOT:PSS and GPTMS** **L.P2.70**  
 Renan Colucci<sup>1</sup>, Fábio Simões de Vicente<sup>1</sup>, Giovanni Gozzi<sup>1</sup>; <sup>1</sup>Universidade  
 Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Understanding polymer-salt interactions in light emitting electrochemical cells** **L.P2.71**  
Bruno Bassi Millan Torres<sup>1</sup>, Roberto Mendonça Faria<sup>1</sup>, Debora Terezia  
 Balogh<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos
- 17:45 Probing chemical information in PEO-Lithium Triflate thin films at nanoscale using IR-SNOM** **L.P2.72**  
Bruno Bassi Millan Torres<sup>1</sup>, Francisco Carlos Barbosa Maia<sup>2</sup>, Raul de Oliveira  
 Freitas<sup>2</sup>, Debora Terezia Balogh<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos,  
<sup>2</sup>Laboratório Nacional de Luz Síncrotron

- 17:45 Organic Light Emitting Diode (OLED) on the Roadway** **L.P2.73**  
Elvo Calixto Burini Junior<sup>1</sup>, Marcelo de Oliveira Jesus<sup>1</sup>, Emerson Roberto Santos<sup>2</sup>, Danilo Ferreira de Souza<sup>2</sup>, Rinaldo Caldeira Pinto<sup>1</sup>, Arnaldo Gakiya Kanashiro<sup>1</sup>; <sup>1</sup>INSTITUTO DE ENERGIA E AMBIENTE/USP, <sup>2</sup>Universidade de São Paulo
- 17:45 Alternative solvents for the preparation of films used in organic photovoltaic cells** **L.P2.74**  
Guilherme da Silva Miranda<sup>1,2</sup>, Bruno Bassi Millan Torres<sup>1,2</sup>, Debora Terezia Balogh<sup>2</sup>, Roberto Mendonça Faria<sup>1,2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos
- 17:45 Fabrication and electrical characterization of pure and mixed polythiophene films by impedance spectroscopy technique** **L.P2.75**  
Lucas Vinicius de Lima Citolino<sup>1</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 Theoretical Study of the Space-Charge Limited Effective Mobility in a Bi-layer Device** **L.P2.77**  
 Marlus Koehler<sup>1</sup>, Deize Corradi Grodniski<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Polarized light emitting liquid crystalline polymer for OLED applications** **L.P2.78**  
Larissa Gomes França<sup>1</sup>, Paulo Alliprandini Filho<sup>2</sup>, Alexandre Marletta<sup>3</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri, <sup>3</sup>Universidade Federal de Uberlândia
- 17:45 Using Fused Deposition Modeling 3D printing for Simplified Fabrication of Integrated Microfluidic Devices** **L.P2.80**  
Gabriel Gaál<sup>1</sup>, Maria Helena Piazzetta<sup>2</sup>, Angelo Luiz Gobbi<sup>2</sup>, Antonio Riul Jr.<sup>3</sup>, Varlei Rodrigues<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>2</sup>Brazilian Nanotechnology National Laboratory, <sup>3</sup>Instituto de Física "Gleb Wataghin"-UNICAMP
- 17:45 Organic solar cell devices with columnar liquid crystals as active layer** **L.P2.81**  
Alessandro Lopes Alves<sup>1</sup>, Edivandro Giroto<sup>1,2</sup>, Juliana Eccher<sup>1</sup>, Harald Bock<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre de Recherche Paul Pascal
- 17:45 Coupling optical techniques with scanning tunneling microscopy to investigate organic films** **L.P2.82**  
Otávio Alonso Freire Alves<sup>1</sup>, Gabriel Henrique Nunes<sup>1</sup>, Rogerio Magalhaes Paniago<sup>1</sup>, Angelo Malachias<sup>1</sup>, Gustavo Almeida Magalhães Sáfar<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Discrete Ray-trace Simulation of Organic Light-emitting Diodes** **L.P2.83**  
Lucas Fugikawa Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus de São José do Rio Preto
- 17:45 Effects of Antioxidant Agents in Electrical Behavior of MEH-PPV OLEDs** **L.P2.84**  
Luiz Brito de Souza Filho<sup>1</sup>, José Pereira dos Santos Júnior<sup>2</sup>, Ángel Alberto Hidalgo<sup>2</sup>, José Ribeiro dos Santos Júnior<sup>2</sup>, Washington da Silva Sousa<sup>3</sup>, Vicente Galber Freitas Viana<sup>4</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Tocantins, <sup>2</sup>Universidade Federal do Piauí, <sup>3</sup>Universidade Federal do Maranhão, <sup>4</sup>Instituto Federal de Educação, Ciência e Tecnologia do Piauí

- 17:45 Study of electrical properties of self-assembled films with polyaniline and carbon nanotubes composites in Field Effect Transistor geometry.** L.P2.85  
Luiz Carlos Mariano<sup>1</sup>, Victor Hugo Rodrigues de Souza<sup>1</sup>, Fabio Santos Lisboa<sup>2</sup>, Edemir Luiz Kowalski<sup>3</sup>, Maria Luiza Miranda Rocco<sup>4</sup>, Marlus Koehler<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Instituto LACTEC, <sup>4</sup>Instituto de Química / UFRJ
- 17:45 Random copolymer of poly(3-hexyloxythiophene) and poly(3-thiophene methyl acetate) for optoelectronic applications** L.P2.86  
Débora Aparecida Ribeiro<sup>1</sup>, Bianca Pinheiro de Sousa<sup>1</sup>, Fernando Henrique Cristovan<sup>1</sup>, Rossano Lang<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Rapid and easy synthesis of silver nanowires for application in flexible and transparent electrodes.** L.P2.87  
Felipe Barbosa Soares<sup>1</sup>, Sidney Alves Lourenço<sup>2</sup>, Carlos Eduardo Cava<sup>2</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Transient techniques for measuring the charge carrier mobility of organic semiconductors** L.P2.88  
Douglas Coutinho Coutinho<sup>1</sup>, Gregorio Couto Faria<sup>2</sup>, Heinz von Seggern<sup>3</sup>, Roberto Mendonça Faria<sup>4</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Física de São Carlos, <sup>3</sup>Technische Universität Darmstadt, <sup>4</sup>Universidade de São Paulo
- 17:45 Lifespan and luminance in MEH-PPV devices with antioxidants** L.P2.89  
Jose Pereira Santos Junior<sup>1</sup>, Luiz Brito de Souza Filho<sup>2</sup>, Ángel Alberto Hidalgo<sup>1</sup>, José Ribeiro dos Santos Júnior<sup>1</sup>, Washington da Silva Sousa<sup>3</sup>, João Mariz Guimarães Neto<sup>1</sup>, Edivaldo L. Queiróz<sup>1</sup>, Maria Leticia Vega<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Tocantins, <sup>3</sup>Universidade Federal do Maranhão
- 17:45 Organic solar cells on packaging cardboard** L.P2.90  
Idomeneu Gomes de Souza Filho<sup>1,2</sup>, Elvira Maria Correia Fortunato<sup>3</sup>, Rodrigo Ferrão de Paiva Martins<sup>3</sup>, Roberto Mendonça Faria<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos- Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>3</sup>Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa
- 17:45 Electrical characterization of Poly (3-hexylthiophene) (P3HT) monolayer devices** L.P2.91  
Mariana Richelle Pereira da Cunha<sup>1</sup>, Helder Nunes da Cunha<sup>2</sup>, Alexandre de Castro Maciel<sup>2</sup>, Roberto Mendonça Faria<sup>3</sup>; <sup>1</sup>Escola de Engenharia de São Carlos- Universidade de São Paulo, <sup>2</sup>Universidade Federal do Piauí, <sup>3</sup>Universidade de São Paulo
- 17:45 N-channel organic field-effect transistors fabricated by the Inkjet printing technique** L.P2.92  
Josiani Cristina Stefanelo<sup>1</sup>, Lilian Soares Cardoso<sup>1</sup>, Roberto Mendonça Faria<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Universidade de São Paulo
- 17:45 Depth profile conductivity in ITO and transparent oxides** L.P2.93  
Maykol Damasceno Oliveira<sup>1</sup>, Ángel Alberto Hidalgo<sup>1</sup>, Edivaldo L. Queiróz<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí

- 17:45 The influence of the composition in light-emitting properties of composites produced with PEDOT:PSS, GPTMS and Zn<sub>2</sub>SiO<sub>4</sub>:Mn** L.P2.94  
Flávio Henrique Feres<sup>1</sup>, Giovani Gozzi<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista-Campus Rio Claro
- 17:45 Development, improvement and evaluation of parameters of a spray machine for polymeric thin films** L.P2.95  
Pedro Cicolin Leme<sup>1</sup>, Fernando Josepetti Fonseca<sup>1</sup>, Guilherme de Souza Braga<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo
- 17:45 Spin-coated Metal-Insulator-Semiconductor capacitors based on P3HT-PVP for sensing applications.** L.P2.96  
Marcos Antonio Moura de Sousa<sup>1</sup>, Oswaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Institute of Physics of São Carlos - USP
- 17:45 Effect Of Oxygen On The Electrical Properties Of Bulk Heterojunction Organic Solar Cells** L.P2.97  
Daniel Roger Bezerra Amorim<sup>1</sup>, Roberto Mendonça Faria<sup>2</sup>, Douglas Coutinho Coutinho<sup>3</sup>; <sup>1</sup>Instituto de Física de Saõ Carlos - USP, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Characterization of digital textile printing and polymer blend (PFO-DMP:P3HT) for application in manufacture of organic diodes emitting white light – WOLEDs.** L.P2.98  
Emanuelle Ferreira Thomazini<sup>1</sup>, Madson Albertini<sup>2</sup>, Wesley Renzi<sup>2</sup>, Flavio Franchello<sup>2</sup>, Ivan Frederico Lupiano Dias<sup>2</sup>, José L. Duarte<sup>2</sup>, Luiz Carlos Poças<sup>3</sup>, Sidney Alves Lourenço<sup>3</sup>, Marco Aurélio Toledo da Silva<sup>3</sup>; <sup>1</sup>Instituto Tecnológico da Aeronáutica, <sup>2</sup>Universidade Estadual de Londrina, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Understand the exciton dynamics in conjugated polymer/chlorophyll heterostructures** L.P2.99  
Gustavo Targino Valente<sup>1</sup>, Francisco Eduardo Gontijo Guimarães<sup>1</sup>; <sup>1</sup>Institute of Physics of São Carlos - USP
- 17:45 A study of conductivity in the composite of poly((3-hexylthiophene):TIPs-pentacene** L.P2.100  
Maiza da Silva Ozório<sup>1</sup>, Douglas Henrique Vieira<sup>1</sup>, Neri Alves<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 Correlation of film morphology, chemical composition and electrical properties of light-emitting electrochemical cells (LECs)** L.P2.101  
Thalita Antoniassi Canassa<sup>1</sup>, Renan Pereira Pedro<sup>1</sup>, Guilherme Rodrigues de Lima<sup>1</sup>, Lucas Fugikawa Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus de São José do Rio Preto
- 17:45 Direct charge-carrier mobility determination by open-gate potential decay time measurement** L.P2.102  
Guilherme Rodrigues de Lima<sup>1</sup>, João Paulo Braga<sup>1</sup>, Lucas Fugikawa Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus de São José do Rio Preto
- 17:45 Liquid crystalline phthalocyanines as semiconductor layers for OFETs** L.P2.103  
Ezequiel Melo Melo<sup>1</sup>, Juliana Eccher<sup>1</sup>, Petru Apostol<sup>2</sup>, Harald Bock<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre de Recherche Paul Pascal
- 17:45 Synthesis and application of 2-aminoanthracene derivatives on OLEDs** L.P2.104  
Fernanda Amorim Santos<sup>1</sup>, Ana Paula da Rocha Pissurno<sup>1</sup>, Willian Pereira Gomes<sup>1</sup>, Regiane Godoy Lima<sup>1</sup>, Rosangela Silva Laurentiz<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia/UNESP-IS

- 17:45 Electrical properties of organic thin-film diodes manufactured by automated spray deposition** **L.P2.105**  
José Bruno Cantuária<sup>1</sup>, Guilherme Rodrigues de Lima<sup>1</sup>, Lucas Fugikawa Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus de São José do Rio Preto
- 17:45 Screen-printed PEDOT:PSS/MWNT-based electrodes onto paper for supercapacitor applications** **L.P2.106**  
Maykel dos Santos Klem<sup>1,2</sup>, Aline Santos<sup>2</sup>, Rogério Miranda Morais<sup>1,2</sup>, Neri Alves<sup>1,2</sup>; <sup>1</sup>Programa de Pós-Graduação em Ciência e Tecnologia de Materiais, <sup>2</sup>Universidade Estadual Paulista - Campus de Presidente Prudente
- 17:45 Fabrication of a vertical field-effect transistor using Al<sub>2</sub>O<sub>3</sub>/PMMA and Sn permeable electrode** **L.P2.107**  
Gabriel Leonardo Nogueira<sup>1,2</sup>, Maiza da Silva Ozório<sup>1,2</sup>, Marcelo Marques da Silva<sup>1,2</sup>, Rogério Miranda Morais<sup>1,2</sup>, Neri Alves<sup>1,2</sup>; <sup>1</sup>Programa de Pós-Graduação em Ciência e Tecnologia de Materiais, <sup>2</sup>Universidade Estadual Paulista - Campus de Presidente Prudente
- 17:45 Alternating conductivity of PANI/PVS thin films: Effect of doping and temperature** **L.P2.108**  
Alana Fernandes Golin<sup>1</sup>, Rodrigo Fernando Bianchi<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto
- 17:45 Study of the stability of characteristic parameters of thin-film transistors (TFTs) with an active layer of metal oxide in ambient atmosphere.** **L.P2.109**  
João Paulo Braga<sup>1</sup>, Guilherme Rodrigues de Lima<sup>1</sup>, Lucas Fugikawa Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus de São José do Rio Preto
- 17:45 Anodized oxide for use inorganic electronics.** **L.P2.110**  
Marcelo Marques da Silva<sup>1,2</sup>, Gabriel Leonardo Nogueira<sup>1,2</sup>, Neri Alves<sup>1,2</sup>, José Alberto Giacometti<sup>3</sup>; <sup>1</sup>Programa de Pós-Graduação em Ciência e Tecnologia de Materiais, <sup>2</sup>Universidade Estadual Paulista - Campus de Presidente Prudente, <sup>3</sup>Instituto de Física de São Carlos - Universidade de São Paulo
- 17:45 Temperature dependent measurements on a PBDTT-FTTE:PC<sub>71</sub>BM-based organic solar cell** **L.P2.111**  
Francineide Lopes de Araújo<sup>1</sup>, Douglas Coutinho Coutinho<sup>2</sup>, Alexandre de Castro Maciel<sup>3</sup>, Andrew M Telford<sup>4</sup>, Sachetan Tuladhar<sup>4</sup>, Jenny Nelson<sup>4</sup>, Roberto Mendonça Faria<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Federal do Piauí, <sup>4</sup>Imperial College London
- 17:45 A Study of an electrochemical transistor based on PEDOT: PSS/MWNCT screen printed onto flexible substrates** **L.P2.112**  
Aline Santos<sup>1</sup>, Rogério Miranda Morais<sup>2,1</sup>, Maykel dos Santos Klem<sup>2,1</sup>, Neri Alves<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus de Presidente Prudente, <sup>2</sup>Programa de Pós-Graduação em Ciência e Tecnologia de Materiais
- 17:45 Study of charge transfer process on cyanine dyes blends by Light-induced Electron Spin Resonance** **L.P2.113**  
Marcus Vinícius Gonçalves Vismara<sup>1</sup>, Oswaldo Nunes-Neto<sup>1</sup>, Anna Christina Véron<sup>2</sup>, Jakob Heier<sup>2</sup>, Geiger Thomas<sup>2</sup>, Frank Nüesch<sup>2</sup>, Carlos F. O. Graeff<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Bauru, <sup>2</sup>Swiss Federal Laboratories for Materials Science and Technology

- 17:45 Transparent Organic Light up-Converter Devices (TOLCDs) based on sensitive near-infrared cyanines and naphthalocyanines** **L.P2.114**  
Rian Esteves Aderne<sup>1</sup>, Sandra Jenatsch<sup>2</sup>, Anna Christina Véron<sup>2</sup>, Roland Hany<sup>2</sup>, Mônica Cristina Melquíades<sup>3</sup>, Cristiano Legnani<sup>3</sup>, Welber Gianini Quirino<sup>3</sup>, Marco Cremona<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Swiss Federal Laboratories for Materials Science and Technology, <sup>3</sup>Universidade Federal de Juiz de Fora
- 17:45 Investigation on charge carrier mobility in rrP3HT:PMMA blends for OPV application** **L.P2.115**  
Harold Jose Camargo Avila<sup>1</sup>, Arthur Rodrigues J. Barreto<sup>1</sup>, Cristol Gouvêa<sup>1,2</sup>, Fernando Stavale<sup>3</sup>, Deyse Costa<sup>4</sup>, Marco Cremona<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Instituto Nacional de Metrologia, Qualidade e Tecnologia, <sup>3</sup>Centro Brasileiro de Pesquisas Físicas, <sup>4</sup>Fundação Universidade Federal de Viçosa
- 17:45 Study of optical anisotropy in thin films of akyl-polythiophene derivative** **L.P2.116**  
EMILLY SILVA GERVAZONI<sup>1</sup>, Edilene Assunção da Silva<sup>1</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 Study of photoconductivity effect in organized alkyl- polythiophene derivative films** **L.P2.117**  
Lucas Ferreira Xavier Ortega<sup>1</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 Analysis of Structural Properties of PVA/PANI Nanofibers Electrospun** **L.P2.118**  
Jessyka Carolina Bittencourt<sup>1</sup>, Sabrina Aléssio Camacho<sup>1</sup>, Carlos José Leopoldo Constantino<sup>1</sup>, Deuber Lincon da Silva Agostini<sup>1</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 Fabrication and Electrical Characterization of Nanostructured Films of Polythiophene Derivatives.** **L.P2.119**  
Lucas Kaique Roncaselli<sup>1</sup>, Maria Luisa Braunger<sup>2</sup>, Edilene Assunção da Silva<sup>1</sup>, Marystela Ferreira<sup>3</sup>, Henrique de Santana<sup>4</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Universidade Federal de São Carlos - campus Sorocaba, <sup>4</sup>Universidade Estadual de Londrina
- 17:45 Fabrication and characterization of low- band gap polymer films PCPDTBT/stearic acid deposited by Langmuir Blodgett** **L.P2.120**  
Vinicius Jessé Rodrigues de Oliveira<sup>1</sup>, Maria L. Braunger<sup>2</sup>, Roger C. Hiorns<sup>3</sup>, Christine Dagron Lartigau<sup>3</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>Université de Pau et des Pays de l'Adour
- 17:45 Characterization of a Columnar Liquid Crystal Doped with Metallic Nanoparticles** **L.P2.121**  
Bárbara Schvuchov Kern<sup>1</sup>, Juliana Eccher<sup>1</sup>, Deborah S. A. Liguori<sup>1</sup>, Harald Bock<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre de Recherche Paul Pascal
- 17:45 Study of Homeotropic Alignment in Thin Films of Columnar Liquid Crystals** **L.P2.122**  
Luiza Spanamberg Silveira de Souza<sup>1</sup>, Juliana Eccher<sup>1</sup>, Marli Ferreira<sup>1,2</sup>, Deise M. P. O. Santos<sup>1,2</sup>, Harald Bock<sup>2</sup>, Hugo Gallardo<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre de Recherche Paul Pascal

- 17:45 PM-IRRAS studies of Langmuir and Langmuir Blodgett films of polythiophene/stearic acid** **L.P2.123**  
Edilene Assunção da Silva<sup>1</sup>, Laura Oliveira Péres<sup>2</sup>, Luciano Caseli<sup>2</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Universidade Federal de São Paulo - Campus de Diadema
- 17:45 Spectroscopic Ellipsometry of thin films of Titanium Oxynitride – TiON** **L.P2.124**  
Hunos Paixão Madureira<sup>1</sup>, Ángel Alberto Hidalgo<sup>1</sup>, Rômulo Ribeiro Magalhães de Sousa<sup>1</sup>, Jussier de Oliveira Vitoriano<sup>2</sup>, Cleânio Luz Lima<sup>1</sup>, Clodomiro Alves Jr.<sup>3</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Federal do Rio Grande do Norte, <sup>3</sup>Universidade Federal Rural do Semi
- 17:45 Photophysics of fluorescent polystyrenes based on ESIPT monomers** **L.P2.125**  
Luís Gustavo Duarte<sup>1</sup>, Jônatas Faleiro Berbigier<sup>2</sup>, Janaína Menezes Perez<sup>2</sup>, Priscila Sayoko Silva Wakabayashi<sup>3</sup>, Alexandre Gonçalves Dal Bó<sup>3</sup>, Tiago Elias Allievi Frizon<sup>3</sup>, Fabiano Severo Rodembusch<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do Rio Grande do Sul, <sup>3</sup>Universidade do Extremo Sul Catarinense
- 17:45 Organic photovoltaic devices based on discotic liquid crystals** **L.P2.126**  
Simone VENTURIM Bernardino<sup>1</sup>, Juliana Eccher<sup>1</sup>, Marli Ferreira<sup>1</sup>, Deise M. P. O. Santos<sup>1</sup>, Harald Bock<sup>2</sup>, Ivan H. Bechtold<sup>1</sup>, Marta E. R. Dotto<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre de Recherche Paul Pascal
- 17:45 Effect of solvents and donor/acceptor concentration in the energy transference of PFO:P3OT blends** **L.P2.127**  
Wesley Renzi<sup>1</sup>, Neusmar Junior Artico Cordeiro<sup>1</sup>, Flavio Franchello<sup>1</sup>, Vitor Bianchin Pelegati<sup>2</sup>, Carlos Lenz Cesar<sup>2</sup>, Edson Laureto Laureto<sup>1</sup>, José Leonil Duarte<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Instituto de Física "Gleb Wataghin"
- 17:45 STUDY OF ELECTRICAL CONDUCTIVITY OF MIXED POLYTHIOPHENE DERIVATIVES LANGMUIR-BLODGETT FILMS** **L.P2.128**  
Aislan Douglas Machado<sup>1</sup>, Edilene Assunção da Silva<sup>1</sup>, Maria L. Braunger<sup>2</sup>, Clarissa de Almeida Olivati<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 A Photophysical Interpretation of the Thermochromism Polyfluorene Derivative-Europium Complex in Different Proportions of Polymer/Europium** **L.P2.129**  
Raquel Aparecida Domingues<sup>1</sup>, Denis Augusto Turchetti<sup>2</sup>, Matheus Guthemberg Setter<sup>3</sup>, Teresa Dib Zambon Atvars<sup>3</sup>, Leni Campos Akcelrud<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do Paraná, <sup>3</sup>University of Campinas
- 17:45 Correlations between structure and chiral properties of polyfluorene derivatives** **L.P2.130**  
Bruno Nowacki<sup>1</sup>, Cristiano Zanlorenzi<sup>1</sup>, Alexander Baev<sup>2</sup>, Paras Prasad<sup>2</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>University at Buffalo
- 17:45 Light emission of a polyfluorene derivative containing complexed europium ions** **L.P2.131**  
Denis Augusto Turchetti<sup>1</sup>, Mariela Nolasco<sup>2</sup>, Daiane Szczerbowski<sup>1</sup>, Luis Dias Carlos<sup>2</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade de Aveiro

- 17:45 Self-Assembly Monolayers of Gold Nanorods (AuNRs) for SERS Substrates Applications** **L.P2.132**  
Anerise de Barros<sup>1</sup>, Cristine Santos de Oliveira<sup>1</sup>, Larissa Helena de Oliveira<sup>2</sup>, Diego Pereira dos Santos<sup>1</sup>, Italo Odone Mazali<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 GHz permittivity of composites of carbon black and polyaniline with styrene-butadiene-styrene** **L.P2.133**  
Carla Patrícia Lacerda Rubinger<sup>1</sup>, Maria Elena Leyva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Electronic structure calculations for the study of polypyrrole-based chemical sensors: evaluation of structural and reactivity properties** **L.P2.134**  
Susan Aki Kitai<sup>1</sup>, Augusto Batagin Neto<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Itapeva
- 17:45 The influence of conjugated blend on luminescent properties of polyfluorene** **L.P2.135**  
Giovana Artuzo Parolin<sup>1</sup>, Laura Oliveira Péres<sup>1</sup>, Roselena Faez<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 The effect of roughness in the sheet resistance of printed films on paper** **L.P2.136**  
Rogério Miranda Morais<sup>1,2</sup>, Maykel dos Santos Klem<sup>1,2</sup>, Aline Santos<sup>2</sup>, Gabriel Leonardo Nogueira<sup>1,2</sup>, Neri Alves<sup>1,2</sup>; <sup>1</sup>Programa de Pós-Graduação em Ciência e Tecnologia de Materiais, <sup>2</sup>Universidade Estadual Paulista - Campus de Presidente Prudente
- 17:45 Photophysical Study of Charge Transfer Interactions Between Donor-Acceptor Columnar Liquid Crystals** **L.P2.137**  
Franco Sauvisky<sup>1</sup>, Edivandro Giroto<sup>1,2</sup>, Deise M. P. O. Santos<sup>1,2</sup>, Harald Bock<sup>2</sup>, Hugo Gallardo<sup>1</sup>, Ivan H. Bechtold<sup>1</sup>, Marta Elisa Rosso Dotto<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Centre de Recherche Paul Pascal

## Thursday, September 29<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION L.OR7 (08:30 - 10:15) - Room Amoreiras II*

- 09:00 Eumelanin for bioelectronics** **L.OR7.25\***  
Carlos F. O. Graeff<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Bauru
- 09:30 Triplet Exciplex Electroluminescence from Two Columnar Liquid Crystal Semiconductors** **L.OR7.26**  
Juliana Eccher<sup>1</sup>, Ana Cláudia Batista Almeida<sup>2</sup>, Thiago Cazati<sup>2</sup>, Heinz von Seggern<sup>3</sup>, Harald Bock<sup>4</sup>, Ivan H. Bechtold<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade Federal de Ouro Preto, <sup>3</sup>Technische Universität Darmstadt, <sup>4</sup>Centre de Recherche Paul Pascal

- 09:45 Novel Lanthanide (III)  $\beta$ -diketonate Ternary Complexes for NIR Organic Light Emitting Diodes** L.OR7.27  
zubair ahmed<sup>1</sup>, Rian Aderne<sup>1</sup>, Jiang Kai<sup>1</sup>, marco cremona<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 10:00 Chemical sensors array analysis for concentration determination in a binary mixture of analytes** L.OR7.28  
Rafael Rodrigues<sup>1</sup>, Mildred Awuor Airo<sup>2</sup>, Siziwe Gqoba<sup>2</sup>, Nosipho Moloto<sup>2</sup>, Márcia Windson Costa Caetano Greenshields<sup>1</sup>, Messai A. Mamo<sup>3</sup>, Neil John Coville<sup>2</sup>, Alfredo R. M. de Oliveira<sup>1</sup>, Ivo Alexandre Hümmelgen<sup>1</sup>;  
<sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>University of the Witwatersrand, <sup>3</sup>University of Johannesburg



# SYMPOSIUM M - Plasmonics and Photonics in Nanostructured Materials

## Symposium organizers:

Lazaro A. Padilha (*UNICAMP*)

Luciana Reyes Pires Kassab (*FATEC-SP*)

Zakya H. Kafafi (*Lehigh University*)

Diogo Burigo Almeida (*University of Michigan*)

Cid Bartolomeu de Araújo (*UFPE*)



## Tuesday, September 27<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION M.OR1 (09:45 - 10:45) - Room Cerejeira*

- 09:45** **Linear and Nonlinear Optics in Two-Dimensional Materials and Nanocomposites** **M.OR1.1\***  
Christiano J.S. de Matos<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie
- 10:15** **Suppression of the surfactant-induced SERS blinking in a graphene oxide/gold nanorod nanocomposite** **M.OR1.2**  
Pilar Gregory Vianna<sup>1</sup>, Daniel Grassescchi<sup>1</sup>, Greice K. B. Costa<sup>2,3</sup>, Isabel C. S. Carvalho<sup>3</sup>, Sergio H. Domingues<sup>1</sup>, Jake Fontana<sup>4</sup>, Christiano J. S. de Matos<sup>1</sup>; <sup>1</sup>Universidade Presbiteriana Mackenzie, <sup>2</sup>Universidade Federal do Rio de Janeiro, <sup>3</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>4</sup>Naval Research Laboratory
- 10:30** **Alloyed thin films and nanostructures for plasmonics** **M.OR1.3**  
Marina S Leite<sup>1</sup>; <sup>1</sup>Department of Materials Science and Engineering Institute for Research in Electronics

#### *SESSION M.OR2 (11:15 - 12:00) - Room Cerejeira*

- 11:15** **A SEF sandwich nanobiosensor based on Au nanorods** **M.OR2.4**  
Linus Pauling Faria Peixoto<sup>1</sup>, Jacqueline Ferreira Leite Santos<sup>2</sup>, Gustavo Fernandes Souza Andrade<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 11:30** **Simple Approach to Obtain a Localized Surface Plasmon Resonance Sensor Based on poly(dimethylsiloxane)/Gold Nanoparticles Nanocomposite** **M.OR2.5**  
Anderson Thesing<sup>1</sup>, Lara F. Loguercio<sup>1</sup>, Arthur Exner<sup>1</sup>, Jacqueline Ferreira<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:45** **Sensing platform obtained by Insitu electrochemical synthesis of gold nanoparticles on ITO substrate in aqueous/ionic liquid media: electrochemical and plasmonic sensor** **M.OR2.6**  
Lara F. Loguercio<sup>1</sup>, Anderson Thesing<sup>1</sup>, Pedro G. Demingos<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>, Jacqueline Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

## Wednesday, September 28<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION M.OR3 (09:45 - 10:45) - Room Carvalho I*

- 09:45 Interface Engineering Colloidal Quantum Dot Solar Cells via Surface Chemistry and Band Gap Control** **M.OR3.7\***  
Nanlin Zhang<sup>1</sup>, Darren Neo<sup>1</sup>, Yujiro Tazawa<sup>1</sup>, Xiuting Liu<sup>1</sup>, Hazel Assender<sup>1</sup>, Richard G Compton<sup>1</sup>, Andrew A.R. Watt<sup>2</sup>; <sup>1</sup>University of Oxford, <sup>2</sup>Department of Materials, University of Oxford, Oxford OX1 3PH, United Kingdom
- 10:15 Commercial Prospects for Using Quantum Dots in Solid-State Lighting** **M.OR3.8\***  
Hunter McDaniel<sup>1</sup>, Matt Bergren<sup>1</sup>, Karthik Ramasamy<sup>1</sup>, Aaron Jackson<sup>1</sup>;  
<sup>1</sup>UbiQD, LLC, 134 Eastgate Dr, Los Alamos, NM 87544

### *SESSION M.OR4 (11:15 - 12:00) - Room Carvalho I*

- 11:15 Cesium Lead Halide Perovskite Quantum Dots for Optoelectronic Applications** **M.OR4.9**  
Emre Yassitepe<sup>1</sup>, Zhenyu Yang<sup>2</sup>, Oleksandr Voznyy<sup>2</sup>, Juan Andrés Castañeda<sup>3</sup>, Lazaro A Padilha<sup>3</sup>, Edward H Sargent<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP, <sup>2</sup>University of Toronto, <sup>3</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 11:30 Structurally engineered nanocrystal quantum dots for optoelectronic applications** **M.OR4.10\***  
Wan Ki Bae<sup>1</sup>; <sup>1</sup>Korea Institute of Science and Technology

### *SESSION M.OR5 (14:00 - 16:15) - Room Carvalho I*

- 14:00 Optical Nonlinearities with Metallic Nanoparticles : Second Harmonic Generation and Beyond** **M.OR5.11\***  
Pierre-François Brevet<sup>1</sup>; <sup>1</sup>University Claude Bernard Lyon 1
- 14:30 Direct observation of plasmonic hot spots from the second and third harmonic near-fields in two-dimensional gold nanotriangle arrays** **M.OR5.12**  
Jorge Ricardo Mejía Salazar<sup>1</sup>, Edna Regina Spada<sup>1</sup>, Raul de Oliveira Freitas<sup>2</sup>, Francisco Carlos Barbosa Maia<sup>2</sup>, Roberto Mendonça Faria<sup>1</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Laboratório Nacional de Luz Síncrotron
- 14:45 Femtosecond laser pulses in diamond: nonlinear optics and defect generation for quantum information** **M.OR5.13**  
Juliana M.P. Almeida<sup>1</sup>, Charlie Oncebay<sup>1</sup>, Jonathas de Paula Siqueira<sup>1</sup>, Leonardo De Boni<sup>1</sup>, Francisco Eduardo Gontijo Guimarães<sup>1</sup>, Sérgio R. Muniz<sup>1</sup>, Cleber Renato Mendonça<sup>1</sup>; <sup>1</sup>São Carlos Institute of Physics
- 15:00 Photoluminescence and nonlinear optical properties of rare-earth doped borate nanomaterials** **M.OR5.14\***  
Lauro June Queiroz Maia<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás

- 15:30 Third-order nonlinear optical response of Pt nanoparticles and Pt ions in sapphire** **M.OR5.15**  
 Bonifacio Uc Can<sup>1</sup>, Raúl Rangel Rojo<sup>1</sup>, Aldo Peña Ramírez<sup>1</sup>, Henrique Thadeu Baltar de Medeiros Cabral Moraes<sup>2</sup>, Cid Bartolomeu de Araújo<sup>2</sup>, Alejandro Crespo Sosa<sup>3</sup>, María-Luisa García-Betancourt<sup>3</sup>, Alicia María Oliver y Gutiérrez<sup>3</sup>; <sup>1</sup>Centro de Investigación Científica y de Educación Superior de Ensenada, <sup>2</sup>Universidade Federal de Pernambuco, <sup>3</sup>Universidad Nacional Autónoma de México
- 15:45 Controlling light with Plasmonics** **M.OR5.16\***  
 Leonardo de Farias Araujo<sup>1</sup>, Sebastian Etcheverry<sup>2</sup>, Greice Kelly Bezerra da Costa<sup>3</sup>, João Manoel Barbosa Pereira<sup>1</sup>, Alexandre de Resende Camara<sup>4</sup>, Christiano J.S. de Matos<sup>5</sup>, Walter Margulis<sup>2</sup>, Jake Fontana<sup>6</sup>, Isabel C. S. Carvalho<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Acreo Swedish ICT AB, <sup>3</sup>Universidade Federal do Rio de Janeiro, <sup>4</sup>Universidade do Estado do Rio de Janeiro, <sup>5</sup>Universidade Presbiteriana Mackenzie, <sup>6</sup>Naval Research Laboratory

## Poster presentations

### *SESSION M.P1 (17:45 - 19:30)*

- 17:45 The reduction of tellurium in binary glasses in the system TeO<sub>2</sub>-Sb<sub>2</sub>O<sub>3</sub>** **M.P1.1**  
Tamires Martinhão Machado<sup>1</sup>, Maurício Antonio Pereira da Silva<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Synthesis of SiO<sub>2</sub>-MoO<sub>3</sub> silicate glasses by sol-gel method for photonic application** **M.P1.2**  
Marina Gomes Murta Moreno<sup>1</sup>, Roberto Bertholdo<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 17:45 Synthesis and characterization of copper-silicon oxide multilayer of nanocomposites for plasmonic photovoltaic applications.** **M.P1.3**  
Felipe Mondaca<sup>1</sup>, Mauricio Arias<sup>1</sup>, Ramon Zarate<sup>1</sup>; <sup>1</sup>Universidad Católica del Norte
- 17:45 Revealing the Unique Band Structure of CuInS<sub>2</sub>, CuInSe<sub>2</sub> and CuInSe<sub>x</sub>S<sub>2-x</sub> (CIS) Quantum Dots** **M.P1.4**  
Gabriel Nagamine<sup>1</sup>, Hunter McDaniel<sup>2</sup>, Lazaro A Padilha<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>2</sup>Ubiquitous Quantum Dots
- 17:45 Microstructured Polymer Optical Fiber and Silver Nanoparticles to Collect and Enhance, via Plasmon Effect, a Dye Fluorescence** **M.P1.5**  
Dayane de Souza Bancoff<sup>1</sup>, Linus Pauling Faria Peixoto<sup>2</sup>, Thiago Henrique Rosales Marques<sup>1</sup>, Gustavo Fernandes Souza Andrade<sup>2</sup>, Cristiano Monteiro de Barros Cordeiro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal de Juiz de Fora
- 17:45 Crystals growth of BZFO applied in gas sensors** **M.P1.6**  
Paola Gay dos Santos<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Rafael Uarth Fassbender<sup>1</sup>, Luís Fernando da Silva<sup>2</sup>; <sup>1</sup>Universidade Federal de Pelotas, <sup>2</sup>Instituto de Química de Araraquara/UNESP

- 17:45 Preparation and characterization of fluorotellurite glasses in the ternary system  $\text{TeO}_2\text{-Nb}_2\text{O}_5\text{-PbF}_2$**  **M.P1.7**  
Juliana Santos Barbosa<sup>1</sup>, Camila Pereira<sup>2</sup>, Fabia Castro Cassanjes<sup>1</sup>, Gaël Poirier<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo
- 17:45 Feasibility of the determination of fluorine in glass samples by high-resolution continuum source molecular absorption spectrometry** **M.P1.8**  
Carolina Dakuzaku Freschi<sup>1</sup>, Luis Felipe Costa Gouvêa<sup>1</sup>, Gian Paulo Freschi<sup>1</sup>, Gaël Poirier<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 17:45 Improved stability of gold nanospheres protected by chitosan in the presence of KCl and ethanol aggregating agents** **M.P1.9**  
DEBORA GUIMARAES OLIVEIRA<sup>1</sup>, Giovana Almeida Pimentel<sup>1</sup>, Gustavo Fernandes Souza Andrade<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Analytical and experimental study of the reflectivity of a gold film under Kretschmann configuration for varying external refractive index** **M.P1.10**  
Dayane de Souza Bancoff, Wanderleia Dias<sup>1</sup>, Jonas Henrique Osório<sup>1</sup>, René Alfonso Nome<sup>1</sup>, Cristiano Monteiro de Barros Cordeiro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Improving the stability of gold nanoparticles by chitosan for the SERS study of adsorption of dyes** **M.P1.11**  
DEBORA GUIMARAES OLIVEIRA<sup>1</sup>, Linus Pauling Faria Peixoto<sup>1</sup>, Santiago Sánchez-Cortés<sup>2</sup>, Gustavo Fernandes Souza Andrade<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>Instituto de la Estructura de la Materia
- 17:45 Waveguide system glassy by femtosecond laser irradiation** **M.P1.12**  
Sabrina Nicoleti Carvalho dos Santos<sup>1</sup>, Gustavo Foresto B. Almeida<sup>2</sup>, Juliana M.P. Almeida<sup>2</sup>, Cleber R. Mendonça<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP, <sup>2</sup>Instituto de Física de São Carlos
- 17:45 Synthesis of silver nanoprisms and their SERS activity** **M.P1.13**  
Beatriz Rocha de Moraes<sup>1</sup>, Celly Mieko Shinohara Izumi<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Silver nanoparticles enhances VIS and NIR luminescence of  $\text{Pr}^{3+}$  doped TZYN glasses: Effect of heat treatment** **M.P1.14**  
Rajesh Dagupati<sup>1</sup>, Mohammad Reza Dousti<sup>2,1</sup>, Raja Junaid Amjad<sup>1,3</sup>, Andrea Simone Stucchi de Camargo<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Universidade Federal de Alagoas, <sup>3</sup>COMSATS Institute of Information Technology
- 17:45 Electron Transfer Between PbS Quantum Dots and Metal Oxides** **M.P1.15**  
Ana Carolina Rodrigues<sup>1</sup>, Lázaro Aurélio Padilha<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"
- 17:45 Exciton-exciton interaction in cesium-lead-halide perovskite quantum dots** **M.P1.16**  
Juan Andrés Castañeda<sup>1</sup>, Gabriel Nagamine<sup>1</sup>, Emre Yassitepe<sup>1</sup>, Luiz Gustavo Bonato<sup>1</sup>, Sjoerd Hoogland<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>, Edward H Sargent<sup>2</sup>, Carlos Henrique Brito Cruz<sup>1</sup>, Lázaro A Padilha<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>University of Toronto
- 17:45 Neodymium and Silver Nanoparticles Codoped Binary Zinc Tellurite Nonlinear Glass Laser Matrix** **M.P1.17**  
Lyane Costa<sup>1</sup>, Maria José Valenzuela Bell<sup>1</sup>, Virgílio de Carvalho dos Anjos<sup>1</sup>, Rodrigo Ferreira Falci<sup>1</sup>, Hamid Reza Darabian<sup>1</sup>, Luciana Kassab<sup>2</sup>, D S da Silva<sup>3</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora, <sup>2</sup>UNESP, <sup>3</sup>Universidade de São Paulo

- 17:45 Lanthanide Luminescence: Europium complexes, Photoluminescence and Computational Chemistry Analyses** **M.P1.18**  
João Marcos Brandet<sup>1</sup>, Elson Longo<sup>2</sup>, Ieda Lúcia Viana Rosa<sup>3</sup>, Felipe Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Química, UNESP - Universidade Estadual Paulista, Araraquara, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Influence of Shell Thickness on the Two Photon Absorption of Core/Shell Heterostructures** **M.P1.19**  
Leonardo Werneck Trindade de Barros<sup>1</sup>, Ana Gabriela de Freitas Barbosa<sup>1</sup>, Byeong Jeong<sup>2</sup>, Wan Bae<sup>3</sup>, Lazaro A Padilha<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin", <sup>2</sup>Kigali Institute of Science & Technology, <sup>3</sup>Korea Advanced Institute of Science & Technology
- 17:45 Energy conversion using nano and meso structures of BaHfO<sub>3</sub>** **M.P1.20**  
Vanessa Delfino Kegler<sup>1</sup>, Mário Lúcio Moreira<sup>2</sup>, Cristiane Raubach Ratmann<sup>2</sup>, Tatiane Strelow Lilge<sup>2</sup>; <sup>1</sup>Fundação Universidade Federal de Rondônia, <sup>2</sup>Universidade Federal de Pelotas
- 17:45 Shell-Isolated Nanoparticle-Enhanced Fluorescence (SHINEF) of CdTe Quantum Dots** **M.P1.21**  
Igor Osorio Roman<sup>1</sup>, Caroline Silva Danna<sup>2,1</sup>, Aldo Eloizo Job<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Faculdade de Presidente Prudente
- 17:45 Au@MnO<sub>2</sub> : substrates for SHINERS and SHINEF** **M.P1.22**  
Gabriela de Paula Oliveira<sup>1</sup>, Gustavo Fernandes Souza Andrade<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Upconversion photoluminescence generation due to absorption of four- and five-photons in Y<sub>2</sub>SiO<sub>5</sub>:Tb<sup>3+</sup>** **M.P1.23**  
Simone Araújo Vieira<sup>1</sup>, Igor Pessoa Miranda<sup>1</sup>, Nikifor Rakov Gomez<sup>2</sup>, Cid Bartolomeu de Araújo<sup>1</sup>, Edilson Lucena Falcão-Filho<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Fundação Universidade Federal do Vale do São Francisco
- 17:45 Reversible memory phenomena in TeO<sub>2</sub>-ZnO films with Au nanoparticles** **M.P1.24**  
Leonardo Bontempo<sup>1</sup>, Sebastião G. dos Santos Filho<sup>1</sup>, Luciana Reyes Pires Kassab<sup>2</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Faculdade de Tecnologia de São Paulo
- 17:45 Surface relief gratings made by interference lithography: application as plasmonic sensors and as template for flexible sensors** **M.P1.25**  
Arthur Exner<sup>1</sup>, Anderson Thesing<sup>1</sup>, Ribal Georges Sabat<sup>2</sup>, Marcos Jose Leite Santos<sup>1</sup>, Jacqueline Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Royal Military College of Canada
- 17:45 Luminescent properties of Rhodamine-B-doped organic/Silica monolithic Xerogels prepared by sol-gel process** **M.P1.26**  
Diego da Silva Manoel<sup>1</sup>, Fábio Simões de Vicente<sup>1</sup>, Dimas Roberto Vollet<sup>1</sup>, Dario Antonio Donatti<sup>2</sup>, Alexandre Mesquita<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Giant Hyper-Rayleigh Scattering Observed in a Class of Chiral Polymers** **M.P1.27**  
Marcelo Gonçalves Vivas<sup>1</sup>, Guy Koeckelberghs<sup>2</sup>, Cleber R. Mendonça<sup>3</sup>, Leonardo De Boni<sup>4</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Katholieke Universiteit Leuven, <sup>3</sup>Instituto de Física de São Carlos - USP, <sup>4</sup>Instituto de Física de São Carlos - USP

- 17:45 Investigation of Non-Stoichiometric Silicon Nitride Optical and Electrical Properties for Electroluminescence Applications** **M.P1.28**  
Francio Souza Berti Rodrigues<sup>1</sup>, Guilherme Sombrio<sup>1</sup>, Paulo Franzen<sup>1</sup>, Henri Ivanov Boudinov<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Periodic surface pattern and nanostructure formation on glass during simultaneous mid-IR and deep-UV irradiation** **M.P1.29**  
Felipe Ptak Lemos<sup>1</sup>, Paula Caldas<sup>1</sup>, Rodrigo Prioli Menezes<sup>1</sup>, Isabel C. S. Carvalho<sup>1</sup>, Michael Fokine<sup>2</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>2</sup>Royal Institute of Technology / Kungliga Tekniska Högskolan
- 17:45 Plasmonic silver nanowires as sensitive sensors for herbicide thiram through Surface-enhanced Raman Spectroscopy: understanding the adsorption behavior and analytical limit of detection** **M.P1.30**  
Paola Corio<sup>1</sup>, Evandro Ivanov<sup>1</sup>, Romulo Augusto Ando<sup>1</sup>; <sup>1</sup>Instituto de Química - USP
- 17:45 Crystallization of anatase TiO<sub>2</sub> in niobium potassium phosphate glasses** **M.P1.31**  
Carolina Dakuzaku Freschi<sup>1</sup>, José Tadeu Gouvea Junior<sup>1</sup>, Lia Mara Silva Marcondes<sup>1</sup>, Jefferson Luis Ferrari<sup>2</sup>, Fabia Cassanjes<sup>1</sup>, Gian Paulo Freschi<sup>1</sup>, Gaël Poirier<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade Federal de São João Del Rei
- 17:45 Plasmonics effects in Cu nanoparticles-containing tellurite glasses** **M.P1.32**  
Tamires Martinhão Machado<sup>1</sup>, Gustavo Fernandes Souza Andrade<sup>1</sup>, Maurício Antonio Pereira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora
- 17:45 Plasmonic effects, energy transfer, or chemical exchange: on the optical properties of WO<sub>3</sub>-NaPO<sub>3</sub> glasses doped with trivalent rare earth ions and containing silver nanoparticles** **M.P1.33**  
Mohammad Reza Dousti<sup>1</sup>, Gaël Poirier<sup>2</sup>, Raja Junaid Amjad<sup>3</sup>, Andrea Simone Stucchi de Camargo<sup>3</sup>; <sup>1</sup>Universidade Federal de Alagoas, <sup>2</sup>Universidade Federal de Alfenas, <sup>3</sup>Instituto de Física de São Carlos
- 17:45 Spectroscopic investigation of sulfur-based self-assembled gold nanoparticles arrays** **M.P1.34**  
Danilo OLIVEIRA DE SOUZA<sup>1</sup>, Adílson R. Prado<sup>1</sup>, Maria José Pontes<sup>1</sup>, Moises Renato Nunes Ribeiro<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo
- 17:45 Infrared photoluminescence of Nd<sup>3+</sup>-Yb<sup>3+</sup> doped germanate oxide glass under excitation at 977.7 nm** **M.P1.35**  
Felipe Elan Barbosa Silva<sup>1</sup>, Maurício Eiji Camilo<sup>2</sup>, José Augusto Magar Garcia<sup>2</sup>, Luciana Reyes Pires Kassab<sup>2</sup>, Edilson Lucena Falcão-Filho<sup>1</sup>, Cid Bartolomeu de Araújo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Faculdade de Tecnologia de São Paulo
- 17:45 Luminescent Tantalum Germanate Glasses and Glass-ceramics** **M.P1.36**  
Cristiano Ramos da Cunha<sup>1</sup>, Fabia Cassanjes<sup>1</sup>, Gael Yves Poirier<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 17:45 Enhanced optical properties of Er<sup>3+</sup> doped germanate glasses with Ag and Si nanoparticles for photonic applications** **M.P1.37**  
Leonardo Bontempo<sup>1</sup>, Renan Lucas Ribeiro<sup>2</sup>, José Augusto Martins Garcia<sup>2</sup>, Cid Bartolomeu de Araújo<sup>3</sup>, Luciana Reyes Pires Kassab<sup>2</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo, <sup>2</sup>Faculdade de Tecnologia de São Paulo, <sup>3</sup>Universidade Federal de Pernambuco
- 17:45 Production of core/shell nanoparticles by gas aggregation source and radial magnetron sputtering** **M.P1.38**  
Valquiria Fernanda Lima<sup>1</sup>, Douglas A. S Gioielli Santos<sup>1</sup>, Antonio Domingues Santos<sup>1</sup>; <sup>1</sup>Instituto de Física-USP

- 17:45 Band depletion and InAs quantum dots optical properties in III-V semiconductor nanomembranes** **M.P1.39**  
 Lucas Atila Bernardes Marçal<sup>1</sup>, Bárbara Rosa<sup>1,2</sup>, Gustavo Almeida Magalhães Sáfar<sup>1</sup>, Raul de Oliveira Freitas<sup>3</sup>, Oliver G. Schmidt<sup>4</sup>, Christoph Deneke<sup>5,4</sup>, Paulo Sérgio Soares Guimarães<sup>1,2</sup>, Angelo Malachias<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Instituto Nacional de Ciência e Tecnologia de Nanodispositivos Semicondutores, <sup>3</sup>Laboratório Nacional de Luz Síncrotron, <sup>4</sup>Leibniz Institute for Solid State and Materials Research Dresden, <sup>5</sup>Brazilian Center for Research in Energy and Materials
- 17:45 Spherical silver nanoparticles over bidimensional supports for enhanced laser-assisted, SPR-mediated PATP oxidation** **M.P1.40**  
Letizia Papa<sup>1</sup>, Isabel Cristina de Freitas<sup>1</sup>, Rafael dos Santos Geonmonond<sup>1</sup>, Caroline Brambilla de Aquino<sup>2</sup>, Joana Claudio Pieretti<sup>2</sup>, Sergio Humberto Domingues<sup>2</sup>, Romulo Augusto Ando<sup>1</sup>, Pedro Henrique Cury Camargo<sup>1</sup>; <sup>1</sup>Instituto de Química - USP, <sup>2</sup>Universidade Presbiteriana Mackenzie
- 17:45 Nano-Spectroscopy on the photonic heterostructure: graphene-hexagonal Boron Nitride** **M.P1.41**  
Francisco Carlos Barbosa Maia<sup>1</sup>, Ingrid David Barcelos<sup>2</sup>, Alisson Ronieri Cadore<sup>2</sup>, Leonardo C. Campos<sup>2</sup>, Angelo Malachias<sup>2</sup>, Raul de Oliveira Freitas<sup>1</sup>, Christoph Deneke<sup>1</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>Universidade Federal de Minas Gerais
- 17:45 Synthesis and characterization of germanate glasses containing niobium oxide for luminescent devices** **M.P1.42**  
Lia Mara Silva Marcondes<sup>1</sup>, Brenda Batista de Oliveira<sup>1</sup>, Isabela dos Santos Catozzo<sup>1</sup>, Fabia Cassanjes<sup>1</sup>, Gaël Poirier<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas

## Thursday, September 29<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION M.OR6 (08:30 - 10:15) - Room Carvalho I*

- 08:45 Plasmon-Exciton interaction with plasmonic nanostructures** **M.OR6.17\***  
Euclides Marega Junior<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP
- 09:15 Characterization of Surface Plasmons by SNOM** **M.OR6.18**  
Antonio Domingues Santos<sup>1</sup>, Fabio Lombardi Maximino<sup>1</sup>; <sup>1</sup>Instituto de Física-USP
- 09:30 Random laser properties in Rhodamine B-doped SWCNT/polymer composites** **M.OR6.19**  
Adriano J. G. Otuka<sup>1</sup>, Lucas Fiocco Sciuti<sup>1</sup>, Paulo Henrique Dias Ferreira<sup>2</sup>, Cleber R. Mendonça<sup>1</sup>, Leonardo De Boni<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Universidade Federal de São Carlos

**09:45 Ethanol can control size of silver nanoparticles produced by assisted laser ablation M.OR6.20**

Victor Ermakov<sup>1</sup>, Ernesto Jimenez Villar<sup>2</sup>, Emre Yassitepe<sup>3</sup>, Nelson Fabian Villegas Borrero<sup>1</sup>, José Maria Clemente da Silva Filho<sup>1</sup>, Gilberto Fernandes de Sá<sup>2</sup>, Ana Flávia Nogueira<sup>3</sup>, Carlos Lenz Cesar<sup>4</sup>, Francisco das Chagas Marques<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>2</sup>Universidade Federal de Pernambuco, <sup>3</sup>Universidade Estadual de Campinas, <sup>4</sup>Instituto de Física Gleb Wathagin-UNICAMP

**10:00 Glassy material processing by direct laser writing at ultrashort pulse regime M.OR6.21**

Juliana M.P. Almeida<sup>1</sup>, Danilo Manzani<sup>2</sup>, Sidney J.L. Ribeiro<sup>2</sup>, Antonio Carlos Hernandez<sup>1</sup>, Craig B. Arnold<sup>3</sup>, Cleber R. Mendonça<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos, <sup>2</sup>Instituto de Química de Araraquara/UNESP, <sup>3</sup>Princeton University

# **SYMPOSIUM N - Advanced semiconductor and hybrid architectures**

**Symposium organizers:**

Carlos César Bof Bufon (*LNNano/CNPEM*)

Christoph Deneke (*LNNano/CNPEM*)

Shay Reboh (*LETI*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION N.OR1 (09:45 - 10:45) - Room Amoreiras III*

- 09:45 Programmed Assembly of Molecular Frameworks: a new class of Designer solids? N.OR1.1\***  
Christof Woell<sup>1</sup>; <sup>1</sup>Karlsruhe Institute of Technology
- 10:15 Water-gated organic thin film transistors: operation and application as biosensors N.OR1.2**  
Rafael Furlan de Oliveira<sup>1</sup>, Leandro Mercês<sup>2,1</sup>, Tatiana Parra Vello<sup>2,1</sup>, Carlos César Bof Bufon<sup>2,1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Estadual de Campinas
- 10:30 Strain-induced self-rolled-up organic field effect transistor N.OR1.3**  
Kleyton Torikai<sup>1,2</sup>, Rafael Furlan de Oliveira<sup>2</sup>, Davi Henrique Starnini de Camargo<sup>2</sup>, Carlos César Bof Bufon<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais

### *SESSION N.OR2 (11:15 - 12:00) - Room Amoreiras III*

- 11:15 Study of effect the solvent in the nanosystems of ZnO@ZnS core-shell N.OR2.4**  
Cristiane Raubach Ratmann<sup>1</sup>, Efracio Mamani Flores<sup>1</sup>, Ezequiel Cafumann Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 11:30 Nickel Phthalocyanine / ZnO Nanorod Heterostructures for Ozone gas Sensing N.OR2.5**  
Niravkumar Jitendrabhai Joshi<sup>1</sup>, Luís Fernando da Silva<sup>2</sup>, Flávio Makoto Shimizu<sup>1</sup>, Jean Claude M'Peko<sup>1</sup>, Valmor Roberto Mastelaro<sup>1</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 11:45 Photoluminescence and structural study of Sm and Tb-doped TiO<sub>x</sub> thin films N.OR2.6**  
Diego Leonardo Silva Scoca<sup>1,2</sup>, Antonio Ricardo Zanatta<sup>3</sup>, Fernando Alvarez<sup>4,2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>UNICAMP, <sup>3</sup>Instituto de Física de São Carlos - USP, <sup>4</sup>Instituto de Física "Gleb Wataghin" - UNICAMP

### *SESSION N.OR3 (14:00 - 16:15) - Room Amoreiras III*

- 14:00 Megahertz Flexible Low-Voltage Organic Thin-Film Transistors N.OR3.7\***  
Hagen Klauk<sup>1</sup>; <sup>1</sup>Max Planck Institute for Solid State Research
- 14:30 Investigation of charge transport mechanisms in horizontal and vertical metal-organic heterojunctions N.OR3.8**  
Leandro Mercês<sup>1,2</sup>, Rafael Furlan de Oliveira<sup>1</sup>, Davi Henrique Starnini de Camargo<sup>1</sup>, Carlos César Bof Bufon<sup>1,3</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>UNICAMP, <sup>3</sup>University of Campinas

- 14:45 Three-dimensional organic conductive networks embedded in paper for flexible and foldable devices** **N.OR3.9**  
Murilo Santhiago<sup>1</sup>, Jefferson Bettini<sup>1</sup>, Sidnei Ramis Araujo<sup>1</sup>, Carlos César Bof Bufon<sup>2,1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Estadual de Campinas
- 15:00 Structural, thermal, and electrical properties of hybrid PHB/Fe<sup>0</sup> obtained by RF magnetron sputtering.** **N.OR3.10**  
 Kelen Cristina dos Reis<sup>1</sup>, Kelen Cristina dos Reis<sup>1</sup>, Joaquim Paulo da Silva<sup>1</sup>, Teodorico Castro Ramalho<sup>1</sup>; <sup>1</sup>Universidade Federal de Lavras
- 15:15 Advanced characterization of semiconductors** **N.OR3.11\***  
Nikolay Cherkashin<sup>1</sup>, François-Xavier Darras<sup>1</sup>, Maxim Korytov<sup>1</sup>, Christophe Gatel<sup>1</sup>, Martin J. Hytch<sup>1</sup>; <sup>1</sup>The National Center for Scientific Research
- 15:45 An alternative technology for RF packaging solutions based on soft substrates** **N.OR3.12**  
 Célio Antônio Finardi<sup>1</sup>, Cristina Battesini Adamo<sup>1</sup>, Alexander Flacker<sup>1,2</sup>, André Fontoura Ponchet<sup>1</sup>, Ricardo Cotrin Teixeira<sup>1</sup>, Roberto Ricardo Panepucci<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>Centro de Componentes Semicondutores-UNICAMP
- 16:00 Structural and thermodynamic analysis of the compound {[Zn(2,5-pdc)(H<sub>2</sub>O)<sub>2</sub>]. H<sub>2</sub>O}<sub>n</sub> and its dehydrated and delaminated forms.** **N.OR3.13**  
Larissa Lavorato Lima<sup>1</sup>, Leonã da Silva Flores<sup>1</sup>, Sergio Rodrigues Tavares<sup>1</sup>, Florence Pereira Novais Antunes<sup>1</sup>, Gustavo Senra Gonçalves de Carvalho<sup>1</sup>, Charlane Cimini Corrêa<sup>1</sup>, Alexandre Amaral Leitão<sup>1</sup>; <sup>1</sup>Universidade Federal de Juiz de Fora

## Poster presentations

### SESSION N.P1 (17:45 - 19:30)

- 17:45 Study of Al doped CaTiO<sub>3</sub> nanoparticles for As removal** **N.P1.1**  
Rocío María Tamayo Calderón<sup>1</sup>, Rodrigo A. Espinoza-González<sup>2</sup>, Francisco Gracia Garoca<sup>1</sup>; <sup>1</sup>University of Chile, <sup>2</sup>Universidad de Chile
- 17:45 An automated approach to identify semiconductor properties** **N.P1.2**  
Paulo Augusto Nardi<sup>1</sup>, Ana Paula de Moura<sup>2</sup>, José A. Varela<sup>2</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Of the β-Ag<sub>2</sub>WO<sub>4</sub> to the α-Ag<sub>2</sub>WO<sub>4</sub>: A Structural and Morphological Study from the Variation on the Synthesis Temperature** **N.P1.3**  
Pablo Santana Lemos<sup>1</sup>, Román Alvarez Roca<sup>2</sup>, Içamira Costa Nogueira<sup>1</sup>, Elson Longo<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Instituto de Química - IQ - Unesp - Araraquara
- 17:45 Negative Photoconductivity in p-type PbTe:BaF<sub>2</sub> Films** **N.P1.4**  
Paula Oliveira Braga<sup>1</sup>, Demetrio Werner Soares<sup>1</sup>, Marcelos Lima Peres<sup>1</sup>, Mariana Andrade Boense Tavares<sup>1</sup>, Marília Páscoa Pirralho<sup>1</sup>, Fernando Silva Pena<sup>1</sup>, Paulo Henrique Rapp<sup>2</sup>, Eduardo Abramof<sup>2</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais

- 17:45 Ultrafast Transport Transient in n-Doped ZnS in Wurtzite and Zinblende Phases** **N.P1.5**  
Clóves Gonçalves Rodrigues<sup>1</sup>, Agamenon Lima do Vale<sup>1</sup>, Roberto Luzzi<sup>2</sup>;  
<sup>1</sup>Pontifícia Universidade Católica de Goiás, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 17:45 Growth and characterization of Mn-doped ZnO thin films** **N.P1.6**  
Camila Ianhez Pereira dos Santos<sup>1</sup>, Ariano De Giovanni Rodrigues<sup>1</sup>, Marcio Peron Franco de Godoy<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Comparison of the photocatalytic activity of TiO<sub>2</sub> synthesized under different techniques of heat treatment and stirring types** **N.P1.7**  
Marcela Dias França<sup>1</sup>, Karen Araujo Borges<sup>2</sup>, Lidiane Maria dos Santos<sup>3</sup>, Antonio Otavio Toledo Patrocínio<sup>3</sup>, Antônio Eduardo Hora Machado<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia Goiano, Campus Ceres, <sup>2</sup>Instituto Luterano de Ensino Superior de Itumbiara, <sup>3</sup>Universidade Federal de Uberlândia
- 17:45 Anomalous photoconductivity in topological crystalline insulator Pb<sub>1-x</sub>Sn<sub>x</sub>Te** **N.P1.8**  
Marcelos Lima Peres<sup>1</sup>, Mariana Andrade Boense Tavares<sup>1</sup>, Demetrio Werner Soares<sup>1</sup>, Eduardo Abramof<sup>2</sup>, Celso Israel Fornari<sup>2</sup>, Anderson Kenji Okasaki<sup>2</sup>, Paulo Henrique Rapp<sup>2</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Defects-related optical properties on Zn<sub>1-x</sub>Cd<sub>x</sub>O thin films** **N.P1.9**  
Suelen Castro<sup>1</sup>, Sabrina Lara dos Reis<sup>1</sup>, Ariano De Giovanni Rodrigues<sup>1</sup>, Marcio Peron Franco de Godoy<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 ZrO<sub>2</sub> and Sb-doped SnO<sub>2</sub> thin films, obtained by Sol-Gel Technique, applied to FETs.** **N.P1.10**  
Miguel Henrique Boratto<sup>1</sup>, Lyudmila V. Goncharova<sup>2</sup>, Giovanni Fanchini<sup>2</sup>, Luis Vicente de Andrade Scalvi<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>University of Western Ontario
- 17:45 Different growth regimes for Ag-catalyzed InP nanowires** **N.P1.11**  
Mariana Nica Zavarize Nica<sup>1</sup>, Douglas Soares de Oliveira<sup>2,3</sup>, Luiz Henrique Galvão Tizei<sup>4</sup>, Mônica Alonso Cotta<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>3</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>4</sup>Université Paris-Sud
- 17:45 Transition from negative to positive photoconductivity in p-type Pb<sub>1-x</sub>Eu<sub>x</sub>Te films** **N.P1.12**  
Marília Páscoa Pirralho<sup>1</sup>, Marcelos Lima Peres<sup>1</sup>, Demetrio Werner Soares<sup>1</sup>, Paula Oliveira Braga<sup>1</sup>, Anderson Kenji Okasaki<sup>2</sup>, Celso Israel Fornari<sup>2</sup>, Paulo Henrique Rapp<sup>2</sup>, Eduardo Abramof<sup>2</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Instituto Nacional de pesquisas espaciais
- 17:45 Thermoelectric properties of Majorana bound states** **N.P1.13**  
Juan Pablo Ramos Andrade<sup>1,2</sup>, Oscar Ávalos Ovando<sup>2</sup>, Pedro Alejandro Orellana<sup>1</sup>, Sergio Eduardo Ulloa<sup>2</sup>; <sup>1</sup>Universidad Técnica Federico Santa María, <sup>2</sup>Ohio University
- 17:45 A theoretical investigation of BiFeO<sub>3</sub> magnetic phase transition under pressure** **N.P1.14**  
Luis Henrique da Silveira Lacerda<sup>1</sup>, Renan Augusto Pontes Ribeiro<sup>1</sup>, Alexandre Camilo Junior<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

- 17:45 Effect of Process Parameters on Luminescent Properties of CaMoO<sub>4</sub> Doped N.P1.15**  
Ana Paula de Azevedo Marques<sup>1</sup>, Ariane Sandrine Mazzei Charalabopoulos<sup>1</sup>,  
 Fabio S. Tavares<sup>1</sup>, Rosana de Fátima Gonçalves<sup>1</sup>, Máximo Siu Li<sup>2</sup>, Elson  
 Longo<sup>3</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema, <sup>2</sup>Institute of  
 Physics of São Carlos - USP, <sup>3</sup>Universidade Federal de São Carlos - Campus:  
 São Carlos
- 17:45 Optical and magnetic-optical properties of (311)B GaAsBi/GaAs quantum N.P1.16**  
 well  
Gabriela Augusta Prando<sup>1</sup>, Miguel Angel Gonzalez Balanta<sup>2</sup>, Vanessa Orsi  
 Gordo<sup>1</sup>, Janne Puustinen<sup>3</sup>, Helder Galeti<sup>1</sup>, Haifaa Alghamdi<sup>4</sup>, Mohamed  
 Henini<sup>4</sup>, Mircea Guina<sup>3</sup>, Yara Galvão Gobato<sup>1</sup>; <sup>1</sup>Universidade Federal de São  
 Carlos, <sup>2</sup>University of Campinas, <sup>3</sup>Tampere University of Technology /  
 Tampereen teknillinen yliopisto, <sup>4</sup>University of Nottingham
- 17:45 Investigation of photoconductivity effect in Zn<sub>1-x</sub>Cd<sub>x</sub>O films N.P1.17**  
Luis Bolaños Vargas<sup>1</sup>, Marcelos Lima Peres<sup>1</sup>, Marcio Peron Franco de Godoy<sup>2</sup>,  
 Suelen Castro<sup>2</sup>, Demetrio Werner Soares<sup>1</sup>, Marília Páscoa Pirralho<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade Federal de São Carlos -  
 Campus: São Carlos
- 17:45 On the relationship between deposition power and phase control of cobalt N.P1.18**  
 oxide thin films deposited by reactive magnetron sputtering  
Nilton Francelosi Azevedo Neto<sup>1</sup>, André Luis de Jesus Pereira<sup>2</sup>, João Carlos  
 Angélico<sup>1</sup>, Kleper de Oliveira Rocha<sup>1</sup>, Paulo Noronha Lisboa-Filho<sup>1</sup>, José  
 Humberto Dias da Silva<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>Fundação  
 Universidade Federal da Grande Dourados
- 17:45 Influence of intercalated anions in optical properties of LDH hosts N.P1.19**  
Amanda Estela de Lima<sup>1</sup>, Méri Domingos Vieira<sup>1</sup>, Glaucio Braga Ferreira<sup>1</sup>;  
<sup>1</sup>Universidade Federal Fluminense
- 17:45 Characterization of TiO<sub>2</sub> catalyst synthesized by a sol-gel method modified N.P1.20**  
 with glycol  
Lidiaine Maria dos Santos<sup>1</sup>, Maria Rita de Cássia Santos<sup>2</sup>, Antônio Eduardo  
 Hora Machado<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universidade Federal de  
 Goiás
- 17:45 Growth evolution of AZO thin films deposited by magnetron sputtering at N.P1.21**  
 room temperature  
 Michel Chaves<sup>1</sup>, Everson Martins<sup>1</sup>, Steven Frederick Durrant<sup>1</sup>, Elidiane  
 Cipriano Rangel<sup>1</sup>, Tiago Fiorini da Silva<sup>2</sup>, José Humberto Dias da Silva<sup>3</sup>, José  
R. Ribeiro Bortoleto<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Sorocaba,  
<sup>2</sup>Instituto de Física-USP, <sup>3</sup>Universidade Estadual Paulista "Júlio de Mesquita  
 Filho", Bauru, SP, Brasil
- 17:45 Asymmetrically-shaped Morphologies in Wurtzite GaP Nanowire Growth N.P1.22**  
Bruno César da Silva<sup>1</sup>, Douglas Soares de Oliveira<sup>1</sup>, Fernando Iikawa<sup>1</sup>,  
 Jefferson Bettini<sup>2</sup>, Mônica Alonso Cotta<sup>1</sup>, Luiz Fernando Zagonel<sup>1</sup>;  
<sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia  
 e Materiais
- 17:45 Electrical characterization of layer-by-layer films of graphene N.P1.23**  
 nanoplatelets  
Mawin J. M. Jimenez<sup>1</sup>, Rafael Furlan de Oliveira<sup>2</sup>, Tiago Pedroso de Almeida<sup>1</sup>,  
 Maria Helena Piazzetta<sup>3</sup>, Varlei Rodrigues<sup>1</sup>, Carlos César Bof Bufon<sup>3</sup>, Angelo  
 Luiz Gobbi<sup>3</sup>, Antonio Riul Jr.<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-  
 UNICAMP, <sup>2</sup>Brazilian Center for Research in Energy and Materials, <sup>3</sup>Brazilian  
 Nanotechnology National Laboratory

- 17:45 Effect of Eu<sup>3+</sup>, Tb<sup>3+</sup> and Tm<sup>3+</sup> codoping on the properties of CaMoO<sub>4</sub> thin films** **N.P1.24**  
Ariane Sandrine Mazzei Charalabopoulos<sup>1</sup>, Ana Paula de Azevedo Marques<sup>1</sup>, Fabio S. Tavares<sup>1</sup>, Rosana de Fátima Gonçalves<sup>1</sup>, Máximo Siu Li<sup>2</sup>, Elson Longo<sup>3</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema, <sup>2</sup>Institute of Physics of São Carlos - USP, <sup>3</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Synthesis of CdSe Quantum Dot and its Surface functionalization by Ligand Exchange with group Thiol** **N.P1.25**  
Gabriel Dornela Alves da Rocha<sup>1</sup>, Sidney Alves Lourenço<sup>1</sup>, Marco Aurélio Toledo da Silva<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Towards pure phase of the quaternary metal oxide CuBiW<sub>2</sub>O<sub>8</sub>** **N.P1.26**  
Leandro Ize Gutierrez<sup>1</sup>, Pedro Migowski<sup>1</sup>, Adriano F. Feil<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul
- 17:45 Effect of the chemical substitution on luminescence properties of (Zn<sub>1-x</sub>Ni<sub>x</sub>)WO<sub>4</sub> crystals** **N.P1.27**  
Magda Sousa da Silva Gondim<sup>1</sup>, Içamira Costa Nogueira<sup>1</sup>, Michelle S. M. Pinheiro de Oliveira<sup>1</sup>, Pablo Santana Lemos<sup>2</sup>, Paula Fabiana dos Santos Pereira<sup>3</sup>, Elson Longo<sup>4</sup>, José Manuel Rivas Mercury<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Approach on structural and optical properties of system SrTiO<sub>3</sub>@ZnS** **N.P1.28**  
Natan Mendes Casero<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Efracio Mamani Flores<sup>1</sup>, Pedro L. G. Jardim<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 17:45 Photoconductivity in p-type Pb<sub>1-x</sub>Eu<sub>x</sub>Te films in the metallic and insulator regimes** **N.P1.29**  
Rodolfo Santos Fonseca<sup>1</sup>, Marcelos Lima Peres<sup>1</sup>, Demetrio Werner Soares<sup>1</sup>, Marília Páscoa Pirralho<sup>1</sup>, Paulo Henrique Rapp<sup>2</sup>, Eduardo Abramof<sup>2</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Measurement of substitutional and interstitial Mn concentrations in (In,Mn)As islands grown on GaAs by anomalous x-ray diffraction** **N.P1.30**  
Lucas Atila Bernardes Marçal<sup>1</sup>, Letícia Nunes Coelho<sup>2</sup>, Euclides Marega Junior<sup>3</sup>, Rogerio Magalhaes Paniago<sup>1</sup>, Angelo Malachias<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Universidade de Brasília, <sup>3</sup>Instituto de Física de São Carlos - Universidade de São Paulo
- 17:45 Recombination Kinetics of photogenerated electrons in InGaAs/InP quantum wells** **N.P1.31**  
Marco Antonio Tito Patricio<sup>1</sup>, Yuri Pussep<sup>1</sup>, Alfred Gold<sup>2</sup>, Gilmar Marques<sup>3</sup>, Marcio Teodoro<sup>3</sup>, Ray LaPierre<sup>4</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Université de Toulouse, <sup>3</sup>Universidade Federal de São Carlos, <sup>4</sup>McMaster University
- 17:45 Morphological and textural evaluation on porous and dense SiOC ceramics as alternative materials for electrochemical sensors** **N.P1.32**  
Mariana Felix Iastrenski<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Ilmenite materials for spintronic applications: A DFT study** **N.P1.33**  
Renan Augusto Pontes Ribeiro<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>, Luis Henrique da Silveira Lacerda<sup>1</sup>, Alexandre Camilo Junior<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

- 17:45 Electronic interface for p-BaTiO<sub>3</sub>/n-ZnO heterojunction** **N.P1.34**  
Luis Henrique da Silveira Lacerda<sup>1</sup>, Renan Augusto Pontes Ribeiro<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Optical and structural properties of ZnO and ZnO:Al Films: Transparent Conducting Oxides and the Burstein Moss Effect** **N.P1.35**  
 NEILO M TRINDADE<sup>1,2</sup>, Naiara Letícia Marana<sup>3</sup>, Michel Chaves<sup>3</sup>, Julio Ricardo Sambrano<sup>3</sup>, Américo Sheitiro Tabata<sup>3</sup>, José Humberto Dias da Silva<sup>3</sup>, José R. Ribeiro Bortoleto<sup>3</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Universidade Estadual Paulista Júlio de Mesquita Filho
- 17:45 Investigation of crystalline structure and of photoluminescence properties of (Ag<sub>2-2x</sub>Zn<sub>x</sub>)WO<sub>4</sub> microcrystal** **N.P1.36**  
Paula Fabiana Santos Pereira<sup>1</sup>, Içamira Costa Nogueira<sup>2</sup>, Pablo Santana Lemos<sup>1</sup>, Clayane Carvalho Dos Santos<sup>1</sup>, Ivo Mateus Pinatti<sup>1</sup>, Ieda Lúcia Viana Rosa<sup>1</sup>, Elson Longo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal do Maranhão
- 17:45 Synthesis and characterization of calcium copper titanate (CCTO) doped with eletron donor** **N.P1.37**  
FERNANDA MAGALHÃES DE OLIVEIRA CAMPOS<sup>1</sup>, Francisco Moura Filho<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Optical characterization of the polymer epoxy doped with Bi<sub>2</sub>S<sub>3</sub> semiconductor** **N.P1.38**  
Victor Ciro Solano Reynoso<sup>1</sup>, Raul Fernando Cuevas<sup>2</sup>; <sup>1</sup>UNESP-Campus de Ilha Solteira, <sup>2</sup>Universidade Federal de Uberlândia
- 17:45 Colossal Mass Diffusion Transfer: TiO<sub>2</sub> Microtubes** **N.P1.39**  
CYNTHIA MARINA RIVALDO GOMEZ<sup>1</sup>, Fabio Furlan Ferreira<sup>1</sup>, José Antonio Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Structure and effects of silver nanoparticles on the surface of α-Ag<sub>2-x</sub>WO<sub>4</sub>.** **N.P1.40**  
Felipe Gollino<sup>1</sup>, Alberico Borges Ferreira da Silva<sup>2</sup>, Elson Longo<sup>3</sup>; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo, <sup>2</sup>Instituto de Química de São Carlos, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Synthesis and characterization of periodic mesoporous organosilicas functionalized with 1,4,5,8-naphthalenediimide chromophores** **N.P1.41**  
Bruna Castanheira<sup>1</sup>, Fabiane de Jesus Trindade<sup>2</sup>, Sergio Brochsztain<sup>3</sup>, Antonio Carlos Silva Costa Teixeira<sup>1</sup>; <sup>1</sup>Escola Politecnica da USP, <sup>2</sup>Instituto de Química - USP, <sup>3</sup>Fundação Universidade Federal do Abc
- 17:45 Porous silicon monolayer for sensor and photovoltaic applications: Structural and optical characterization** **N.P1.42**  
Carlos Eduardo Silveira Dias<sup>1</sup>, Rosimara Passos Toledo<sup>1</sup>, Danilo Roque Huanca<sup>1</sup>, Sávio José Zaccaro<sup>1</sup>, Rero Marques Rubinger<sup>1</sup>, Walter Jaimes Salcedo<sup>2</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade de São Paulo
- 17:45 Experimental investigation of photoconductivity in n-type PbTe quantum wells** **N.P1.43**  
Fernando Silva Pena<sup>1</sup>, Marília Páscoa Pirralho<sup>1</sup>, Marcelos Lima Peres<sup>1</sup>, Demetrio Werner Soares<sup>1</sup>, Paula Oliveira Braga<sup>1</sup>, Anderson Kenji Okasaki<sup>2</sup>, Celso Israel Fornari<sup>2</sup>, Paulo Henrique Rapp<sup>2</sup>, Eduardo Abramof<sup>2</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais

- 17:45 Functionalization and electrical characteristics of a FET biosensor based on InP** **N.P1.44**  
Aldeliane Maria da Silva<sup>1</sup>, Hélio Obata<sup>1</sup>, João Hermes Clerici<sup>1</sup>, Antonio Augusto Godoy von Zuben<sup>1</sup>, Mônica Alonso Cotta<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP
- 17:45 Effect of Chromium doping on the dielectric and current-voltage characteristics in polycrystalline CaCu<sub>3</sub>Ti<sub>4</sub>O<sub>12</sub>** **N.P1.45**  
joao frederico haas leandro monteiro<sup>1</sup>, André Vitor Chaves de Andrade<sup>1</sup>, Eder Carlos Ferreira de Souza<sup>1</sup>, Sandra Regina Masetto Antunes<sup>1</sup>, Christiane Philippini Ferreira Borges<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Aqueous synthesis of type II colloidal core/shell nanocrystals** **N.P1.46**  
Pablo Henrique Meneses<sup>1</sup>, Victor Ciro Solano Reynoso<sup>2</sup>, Raul Fernando Cuevas<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Campus de Ilha Solteira
- 17:45 Study of the effects of different transport and block layers on the emission and efficiency of CdSe-ZnS and CdSe QD-OLEDs** **N.P1.47**  
Neusmar Junior Artico Cordeiro<sup>1</sup>, Wesley Renzi<sup>1</sup>, Gabriel Dornela Alves da Rocha<sup>2</sup>, Edson Laureto Laureto<sup>1</sup>, Sidney Alves Lourenço<sup>2</sup>, José Leonil Duarte<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Universidade Tecnológica Federal do Paraná
- 17:45 SiOC ceramics as potential materials for electrochemical sensors: investigation of crystalline phases** **N.P1.48**  
Mariana Felix Iastrenski<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Synthesis and characterization of poly(acrylic acid)-co-ethylene glycol dimethacrylate for amitriptyline adsorption in aqueous medium** **N.P1.49**  
Jhessica de Cássia Mendonça<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>, Fernanda Midori de Oliveira<sup>1</sup>, Marcello Ferreira da Costa<sup>1</sup>, César Ricardo Teixeira Tarley<sup>1,2</sup>; <sup>1</sup>Universidade Estadual de Londrina, <sup>2</sup>Instituto Nacional de Ciência e Tecnologia (INCT) de Bioanálítica
- 17:45 Interface effects in c-GaN quantum wells** **N.P1.50**  
Leonilson Kiyoshi Sato de Herval<sup>1</sup>, Marcio Peron Franco de Godoy<sup>1</sup>, Tobias Wecker<sup>2</sup>, Donat Josef As<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universität Paderborn
- 17:45 Evaluation of heat treatment time on structural evolution of cyclic silicone networks-derived SiCO ceramics** **N.P1.51**  
Thalita Centofanti<sup>1</sup>, Mariana Gava Segatelli<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Ultracompact hybrid capacitors for molecular systems characterization** **N.P1.52**  
Paula Andreia Petrin<sup>1,2</sup>, Ricardo Magno Lopes Silva<sup>3,1</sup>, Rafael Furlan de Oliveira<sup>1</sup>, Carlos César Bof Bufon<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Faculdade de Ciências/Bauru, <sup>3</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Self-assembled three-dimensional hierarchical Bi<sub>2</sub>WO<sub>6</sub> flower by microwave-assisted route and visible photocatalytic degradation performances** **N.P1.53**  
ALICYA SOUZA ABDALA<sup>1</sup>, Raissa Mendes Silva<sup>1</sup>, Poliana Lima Rocha<sup>1</sup>, Diego Augusto Batista Barbosa<sup>1</sup>, José Renato de Oliveira Lima<sup>1</sup>, Caritas de Jesus Silva Mendonça<sup>1</sup>, Gilza Maria Piedade Prazeres<sup>1</sup>, Carlos William Araujo Paschoal<sup>2</sup>, Elson Longo<sup>3</sup>, Adeilton Pereira Maciel<sup>1</sup>, Marcio Aurélio Pinheiro Almeida<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Universidade Federal do Ceará, <sup>3</sup>Instituto de Química de Araraquara/UNESP

- 17:45 Materials design for ferroelectric applications from DFT: A  $\text{SnZr}_{0.50}\text{Ti}_{0.50}\text{O}_3$  case study** **N.P1.54**  
Sergio Ricardo de Lazaro<sup>1</sup>, Renan Augusto Pontes Ribeiro<sup>1</sup>, Luis Henrique da Silveira Lacerda<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Real-time study to unravel the formation pathway of CdTe@MPA quantum dots** **N.P1.55**  
Fernando Menegatti de Melo<sup>1</sup>, Daniel Grassescchi<sup>2</sup>, Henrique Eisi Toma<sup>1</sup>;  
<sup>1</sup>Instituto de Química da Universidade de São Paulo, <sup>2</sup>Universidade Presbiteriana Mackenzie
- 17:45 Effects of traps localization by photoluminescence spectroscopy** **N.P1.56**  
Yina Julieth Onofre Ramirez<sup>1</sup>, Suelen Castro<sup>1</sup>, Marcio Peron Franco de Godoy<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Stability studies of hybrid aluminum oxide/phosphonic acid self-assembled monolayer nanostructure for the development of capacitive sensors** **N.P1.57**  
Tatiana Parra Vello<sup>1,2</sup>, Cátia Crispilho Corrêa<sup>2</sup>, Carlos César Bof Bufon<sup>1,2</sup>;  
<sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 17:45 Facile template-amino acid in obtaining bismuth oxybromidenanoartitectures with improvement of the photocatalytic and optics properties** **N.P1.58**  
Genesis de Oliveira lima<sup>1</sup>, Diego Augusto Batista Barbosa<sup>1</sup>, José Renato de Oliveira Lima<sup>1</sup>, Caritas de Jesus Silva Mendonça<sup>1</sup>, Gilza Maria Piedade Prazeres<sup>1</sup>, Carlos William Araujo Paschoal<sup>2</sup>, Máximo Siu Li<sup>3</sup>, Elson Longo<sup>4</sup>, Adeilton Pereira Maciel<sup>1</sup>, Marcio Aurélio Pinheiro Almeida<sup>1</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Universidade Federal do Ceará, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Study of pure and Dy<sup>3+</sup>/Tm<sup>3+</sup>-doped strontium molybdates for LED phosphors applications** **N.P1.59**  
Renato Mazin Latini<sup>1</sup>, Ana Paula de Azevedo Marques<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 One-Pot Synthesis of polypyrrole-silver nanocomposites in an ionic liquid : Variation of synthesis parameters** **N.P1.60**  
Larissa Verena Figueiredo Oliveira<sup>1</sup>, Fernanda Ferraz Camilo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 Study of the structural, morphological and optical properties of  $\text{Ag}_2\text{Cr}_x\text{W}_{(1-x)}\text{O}_4$**  **N.P1.61**  
Gabriela Souza Silva<sup>1</sup>, Pablo Santana Lemos<sup>1</sup>, Elson Longo<sup>1,2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Glucose Quantification via FTO biosensor** **N.P1.62**  
RAPHAEL APARECIDO SANCHES NASCIMENTO<sup>1,2</sup>, Marcelo Mulato<sup>2</sup>;  
<sup>1</sup>Universidade Federal de Lavras, <sup>2</sup>Universidade de São Paulo
- 17:45 Analysis of electric impedance of  $\text{V}_2\text{O}_5/\text{POMA}$**  **N.P1.63**  
Mariana Oliveira Diniz<sup>1</sup>, Rodrigo Fernando Bianchi<sup>2</sup>, Elidia Maria Guerra<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São João del-Rei, <sup>2</sup>Universidade Federal de Ouro Preto
- 17:45 Tunable properties of  $\text{Mn}_3\text{O}_4$  hausmannite by Fe<sup>2+</sup> doping: DFT/B3LYP case study** **N.P1.64**  
Renan Augusto Pontes Ribeiro<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>, Luis Henrique da Silveira Lacerda<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

- 17:45 Influence of miniband structure on recombination lifetime in GaAs/AlGaAs multilayers** N.P1.65  
Belarmino Gomes Tavares<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos
- 17:45 Experimental Parameters Research for Oxides of Synthesis by Microwave** N.P1.66  
Ezequiel Cafumann Ratmann<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 17:45 Zn<sub>1-x</sub>Cu<sub>x</sub>O Thin Films Grown by Spray-Pyrolysis Technique** N.P1.67  
Diego Scolfaro<sup>1</sup>, Marcio Peron Franco de Godoy<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Influence of the synthesis methods on the structural and optical properties of BaWO<sub>4</sub> crystals** N.P1.68  
Içamira Costa Nogueira<sup>1</sup>, Michelle S. M. Pinheiro de Oliveira<sup>1</sup>, Magda Sousa da Silva Gondim<sup>1</sup>, Pablo Santana Lemos<sup>2</sup>, Elson Longo<sup>3</sup>, José Manuel Rivas Mercury<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>3</sup>Instituto de Química de Araraquara/UNESP

## Tuesday, September 27<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION N.OR4 (09:45 - 10:45) - Room Amoreiras III*

- 09:45 Semiconductor Nanomembranes in Optoelectronics and Biology** N.OR4.14\*  
Abhishek Bhat<sup>1</sup>; <sup>1</sup>University of Wisconsin-Madison
- 10:15 Synchrotron nano-diffraction evidence of strain transfer of InAs islands on compliant Si substrates** N.OR4.15  
Lucas Atila Bernardes Marçal<sup>1</sup>, Marie-Ingrid Richard<sup>2,3</sup>, Rogério Magalhaes Paniago<sup>1</sup>, Francesca Cavallo<sup>4,5</sup>, Max G. Lagally<sup>5</sup>, Oliver G. Schmidt<sup>6</sup>, Tobias U. Schulli<sup>2</sup>, Christoph Deneke<sup>7</sup>, Angelo Malachias<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>European Synchrotron (ESRF), <sup>3</sup>Aix-Marseille University, <sup>4</sup>Center for High Technology Materials, <sup>5</sup>University of Wisconsin-Madison, <sup>6</sup>Institute for Integrative Nanosciences, <sup>7</sup>Brazilian Nanotechnology National Laboratory
- 10:30 Planar InP nanowires: surface processing and direction control** N.OR4.16  
Mariana Nica Zavarize Nica<sup>1</sup>, Prasana Sahoo<sup>2</sup>, Douglas Soares de Oliveira<sup>2</sup>, Sidnei Ramis Araujo<sup>3</sup>, Jefferson Bettini<sup>3</sup>, Mônica Alonso Cotta<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>3</sup>Brazilian Nanotechnology National Laboratory

**SESSION N.OR5 (11:15 - 12:00) - Room Amoreiras III**

- 11:15 Hybrid-Density Functional Theory Study of the III-V Semiconductors: Structural, Energetic and Electronic Properties Revised** **N.OR5.17**  
Carlos Maciel de Oliveira Bastos<sup>1</sup>, Fernando Pereira Sabino<sup>1</sup>, Guilherme Matos Sipahi<sup>1</sup>, Juarez L. F. Da Silva<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos, <sup>2</sup>Instituto de Química de São Carlos
- 11:30 Synthesis of zinc oxide Nanorod films onto silver seed nanoparticles by Electrochemical method for photocatalytic water purification** **N.OR5.18**  
Alejandro Junior Aranda Aguirre<sup>1</sup>, Hugo Alarcón Caveró<sup>1</sup>, Juan Rodríguez Rodríguez<sup>1</sup>; <sup>1</sup>Universidad Nacional de Ingeniería
- 11:45 Evidence for Concentration Quenching in Tb Doped Nitrogen Rich a-SiN<sub>x</sub>:H Grown by ECR PECVD** **N.OR5.19**  
Giacomo B. F. Bosco<sup>1,2</sup>, Leandro R. Tessler<sup>3</sup>, Jacek Wojcik<sup>1</sup>, Peter Mascher<sup>1</sup>; <sup>1</sup>McMaster University, <sup>2</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>3</sup>Instituto de Física "Gleb Wataghin"-UNICAMP

**SESSION N.OR6 (14:00 - 16:15) - Room Amoreiras III**

- 14:00 Tailoring the interaction of light and sound in nanoscale waveguides and cavities** **N.OR6.20\***  
Gustavo Wiederhecker<sup>1</sup>; <sup>1</sup>University of Campinas, SP, Brazil
- 14:30 Kelvin Probe Force Microscopy of Mesoscopic GaAs Structures** **N.OR6.21**  
Evandro Martin Lanzoni<sup>1</sup>, Saimon Filipe Covre da Silva<sup>1</sup>, Ailton Garcia Junior<sup>1</sup>, Carlos Alberto Costa<sup>1</sup>, Christoph Deneke<sup>1</sup>; <sup>1</sup>Brazilian Nanotechnology National Laboratory
- 14:45 Visible emission of rare-earth ions in nanocrystalline thin films of heterojunction GaAs/SnO<sub>2</sub> and photoinduced properties** **N.OR6.22**  
Diego Henrique de Oliveira Machado<sup>1</sup>, Cristina de Freitas Bueno<sup>1</sup>, Luis Vicente de Andrade Scalvi<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru
- 15:00 Reduced Multi-Exciton Interaction in Engineered Core/Shell Nanoparticles: A Pathway Towards Highly Efficient LEDs** **N.OR6.23**  
Gabriel Nagamine<sup>1</sup>, Byeong Jeong<sup>2</sup>, Doh Lee<sup>3</sup>, Wan Bae<sup>2</sup>, Lazaro A Padilha<sup>1</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>2</sup>Korea Institute of Science and Technology, <sup>3</sup>Korea Advanced Institute of Science & Technology
- 15:15 Distinguishing elastic and plastic relaxations in AlGa<sub>N</sub> epitaxial films on patterned GaN (0001) single crystals.** **N.OR6.24**  
Sergio Luiz Morelhao<sup>1</sup>, Jaroslaw Z. Domagala<sup>2</sup>; <sup>1</sup>Instituto de Física-USP, <sup>2</sup>Institute of Physics, Polish Academy of Sciences
- 15:30 Nanometer-scale monitoring of quantum-confined Stark effect and emission efficiency droop in multiple GaN/AlN quantum disks in nanowires** **N.OR6.25**  
Gabriel Ziviani Vitiello<sup>1</sup>, Luiz Fernando Zagonel<sup>2</sup>, Mathieu Kociak<sup>3</sup>, Luiz Galvão Tizei<sup>3</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin" - UNICAMP, <sup>2</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>3</sup>Université Paris-Sud
- 15:45 Single and Entangled Photons from Semiconductor Piezoelectric Quantum-Dot Devices** **N.OR6.26\***  
Rinaldo Trotta<sup>1</sup>; <sup>1</sup>Institute of Semiconductor and Solid State Physics Johannes Kepler University Linz

# **SYMPOSIUM 0 - Materials and Devices for Third Generation Solar Cells**

## **Symposium organizers:**

Valtencir Zucolotto (*USP*)

Nelson Durán (*Unicamp*)

Wagner José Favaro (*Unicamp*)

Juliana Cancino Bernardi (*USP*)



# Wednesday, September 28<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION O.OR1 (09:45 - 10:45) - Room Amoreiras I*

- 09:45 Energy level alignment at interfaces in organic- and perovskite-based photovoltaic cells** **O.OR1.1\***  
Norbert Koch<sup>1,2</sup>; <sup>1</sup>Humboldt-Universität zu Berlin, <sup>2</sup>Helmholtz-Zentrum Berlin für Materialien und Energie
- 10:15 Printing electronics for solar energy conversion, storage and applications** **O.OR1.2\***  
Fengling Zhang<sup>1</sup>; <sup>1</sup>Linköping University / Linköpings universitet

### *SESSION O.OR2 (11:15 - 12:00) - Room Amoreiras I*

- 11:15 Probing the transient behavior of perovskite solar cells at the nanoscale** **O.OR2.3\***  
Joseph Garrett<sup>1</sup>, Elizabeth Tennyson<sup>1</sup>, Jeremy N Munday<sup>1</sup>, Marina S Leite<sup>1</sup>;  
<sup>1</sup>University of Maryland
- 11:45 Charge photogeneration and recombination dynamics in a new solar cell architecture: the light harvesting capacitor** **O.OR2.4**  
JOAQUIM BRASIL FILHO<sup>1</sup>, Paulo Barbeitas Miranda<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos

### *SESSION O.OR3 (14:00 - 16:15) - Room Amoreiras I*

- 14:00 Comparative study on different electron transport materials for P3HT-based organic solar cells** **O.OR3.5**  
Luiza de Queiroz Corrêa<sup>1</sup>, Francisco Anderson de Sousa Lima<sup>1</sup>, Juliana Luiza de S. Martins<sup>1</sup>, Diego Bagnis<sup>1</sup>; <sup>1</sup>CSEM Brasil
- 14:15 DC-sputtered MoOx thin-films as hole transport layer in organic photovoltaics** **O.OR3.6\***  
André L.F. Cauduro<sup>1</sup>, Mehrad Ahmadpour<sup>1</sup>, Roberto Dos Reis<sup>2</sup>, Gong Chen<sup>2</sup>, Andreas Schmid<sup>2</sup>, Christophe Méthivier<sup>3</sup>, Nadine Witkowski<sup>4</sup>, Paulo F. P. Fichtner<sup>5,6</sup>, Horst-Günter Rubahn<sup>1</sup>, Morten Madsen<sup>1</sup>; <sup>1</sup>NanoSYD, University of Southern Denmark, Denmark, <sup>2</sup>National Center for Electron Microscopy, The Molecular Foundry, LBNL, Berkeley, CA, US, <sup>3</sup>Sorbonne Universités, UPMC Univ Paris 06, CNRS UMR 7197, Laboratoire de Réactivité de Surface (LRS), France, <sup>4</sup>Sorbonne Universités, UPMC Univ Paris 06, UMR CNRS 7588, Institut des Nanosciences de Paris (INSP), France, <sup>5</sup>PPGMicro- Graduate Program on Microelectronics, Universidade Federal do Rio Grande do Sul, Brazil, <sup>6</sup>Engineering School, Universidade Federal do Rio Grande do Sul, , Brazil
- 14:45 Inverted organic solar cells using nanocellulose as substrate** **O.OR3.7**  
Saionara Vilhegas Costa<sup>1</sup>, Silvia Janietz<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>University of Campinas, SP, Brazil, <sup>2</sup>Fraunhofer IAP, Potsdam-Golm, Germany

- 15:00 Reveling effusion mechanisms in thermal reduction of graphene oxide thin films by thermo desorption spectroscopy** O.OR3.8  
Douglas Soares da Silva<sup>1</sup>, Gustavo Alexandre Viana<sup>1</sup>, Rafael Borges Merlo<sup>1</sup>, Francisco das Chagas Marques<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 15:15 Stabilization of organic solar cells using antioxidants** O.OR3.9  
Vida Engmann<sup>1</sup>, Sebastian Engmann<sup>2</sup>, Nikos Tsierekos<sup>3</sup>, Harald Hoppe<sup>4</sup>, Morten Madsen<sup>1</sup>, Horst-Günter Rubahn<sup>1</sup>, Uwe Ritter<sup>3</sup>, Gerhard Gobsch<sup>3</sup>; <sup>1</sup>University of Southern Denmark / Syddansk Universitet, <sup>2</sup>National Institute of Standards and Technology, <sup>3</sup>Ilmenau University of Technology, <sup>4</sup>Friedrich-Schiller-University Jena
- 15:30 Copper antimony sulfide nanoparticles: a study on growth dynamics during synthesis by hot injection** O.OR3.10  
Fábio Baum<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>, Jacqueline Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 15:45 Ionic Diode Materials in Energy Conversion Electrochemistry** O.OR3.11\*  
Frank Marken<sup>1</sup>, Elena Madrid Madrid<sup>1</sup>, Neil McKeown<sup>2</sup>; <sup>1</sup>Department of Chemistry, University of Bath, UK, <sup>2</sup>School of Chemistry, University of Edinburgh, Scotland, UK

## Poster presentations

### SESSION O.P1 (17:45 - 19:30)

- 17:45 Dependence of Synergistic Effect on the Homogeneity Degree of Rutile and Anatase** O.P1.1  
Robson Raphael Guimarães<sup>1</sup>, André Araujo Parussulo<sup>1</sup>, Henrique Eisi Toma<sup>1</sup>, Koiti Araki<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Density functional theory study of the anchoring fullerenes to the Si-bridging atoms of a copolymer** O.P1.2  
Jessica Santos Rego, Marlus Koehler<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Kinetics and Photoelectrochemical Cell Performance of a Series of Ru-phenanthroline based Dye-Sensitized Solar Cells** O.P1.3  
Andressa V. Müller<sup>1</sup>, Renato N. Sampaio<sup>2</sup>, Gerald J. Meyer<sup>2</sup>, André S. Polo<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>University of North Carolina at Chapel Hill
- 17:45 Synthesis and characterization of thin polypyrrole films for dye-sensitized solar cells (DSC)** O.P1.4  
Vivian Faria Machuca<sup>1</sup>, Gislene Valdete Martins<sup>2</sup>, F. H. Cristovan<sup>1</sup>, Marcos Massi<sup>2,1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Instituto Tecnológico de Aeronáutica
- 17:45 Obtaining barium titanate electrode for dye-sensitized solar cells** O.P1.5  
Tatiane Strelow Lilge<sup>1</sup>, Cristiane Raubach Ratmann<sup>1</sup>, Pedro L. G. Jardim<sup>1</sup>, Sergio da Silva Cava<sup>1</sup>, Mário Lúcio Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal de Pelotas
- 17:45 Enhanced photovoltaic performance of inverted bulk-heterojunction solar cells using TiO<sub>2</sub>/reduced graphene oxide films as electron transport layers** O.P1.6  
Andreia de Moraes<sup>1</sup>, João Paulo Carvalho Alves<sup>1</sup>, Francisco Anderson de Sousa Lima<sup>2</sup>, Monica Lira-Cantu<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universitat Autònoma de Barcelona

- 17:45 Dendron-modified organotalc to gel electrolytes for application in dye-sensitized solar cells** **O.P1.7**  
Marcos Antonio Santana Andrade Junior<sup>1</sup>, Armi Tiihonen<sup>2</sup>, Kati Miettunen<sup>2</sup>, Peter Lund<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>, Heloise de Oliveira Pastore<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Aalto University / Aalto-yliopisto
- 17:45 Energy gap reduction of TiO<sub>2</sub> by palladium doping** **O.P1.8**  
Rero Marques Rubinger<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Application of Fe-doped SnO<sub>2</sub> nanoparticles in organic solar cells with enhanced stability** **O.P1.9**  
Maurício Sousa Pereira<sup>1</sup>, Francisco Anderson de Sousa Lima<sup>2</sup>, Thiago Soares Ribeiro<sup>1</sup>, Rodrigo Queiros Almeida<sup>1</sup>, Eduardo Bedê Barros<sup>1</sup>, Igor Frota de Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará, <sup>2</sup>CSEM Brasil
- 17:45 Perovskite solar cells with a niobium pentoxide compact layer: A study by Impedance Spectroscopy** **O.P1.10**  
Jhon Alexander Peñafiel<sup>1</sup>, Rodrigo Szostak<sup>2</sup>, Luis Frederico P. Dick<sup>1</sup>, Antonio Marcos Helgueira de Andrade<sup>1</sup>, Ana Flávia Nogueira<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Application of WO<sub>3</sub>, TiO<sub>2</sub> and Al for use in solar cells** **O.P1.11**  
Guilherme Elias Silva<sup>1</sup>, Rodrigo Fernando Bianchi<sup>2</sup>, Dane Tadeu Cestarolli<sup>1</sup>, Elidia Maria Guerra<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei, <sup>2</sup>Universidade Federal de Ouro Preto
- 17:45 Systematic study on solid-solid phase transition in SiO<sub>2</sub>/TiO<sub>2</sub> and TiO<sub>2</sub>/SiO<sub>2</sub> nanoparticles.** **O.P1.12**  
Rafael da Costa Brito<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>, Jacqueline Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Synthesis and characterization of dipyrrolo[2,3-b:2',3'-e]pyrazine-2,6(1H,5H)-dione based small molecules as promising non-fullerene acceptors for small molecule bulk heterojunction solar cell** **O.P1.13**  
sivakumar gangala<sup>1</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Synthesis and Characterization of TiO<sub>2</sub> nanoparticles doped with Pd prepared by sol-gel reversed micelles** **O.P1.14**  
Sandra Aparecida Martins Silva<sup>1</sup>, Adhimar Flávio Oliveira<sup>1</sup>, Rero Marques Rubinger<sup>1</sup>, Hugo Bonette de Carvalho<sup>2</sup>, Edson da Costa Bortoni<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade Federal de Alfenas
- 17:45 Luminescent properties of N-vinylcarbazole and derivatives for photovoltaic device** **O.P1.15**  
Diérickson Sousa Cordeiro<sup>1</sup>, Tatiana Duque Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 17:45 Solar cells based on CdS sensitized ZnO nanowires** **O.P1.16**  
Isabela Corteletti Rocha<sup>1</sup>, Ellen Raphael<sup>1</sup>, Renato Luiz Siqueira<sup>2</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Characterization of ITON thin film grown by evaporation** **O.P1.17**  
Victor Pederzini<sup>1</sup>, Marina Sparvoli<sup>1</sup>, Igor Yamamoto Abe<sup>2</sup>, Alexandre Lopes<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Escola Politécnica de Universidade de São Paulo
- 17:45 Preparation of a low cost PANI/Cu<sub>x</sub>S based counter electrode for application in CdS/ZnS quantum dots solar cells** **O.P1.18**  
Letícia Gazola Tartuci<sup>1</sup>, Ellen Raphael<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei

- 17:45 SILAR/CDB used to grow ZnO nanostructured film for dye-sensitized solar cells** **O.P1.19**  
Eguiberto Galego<sup>1</sup>, Marilene Morelli Serna<sup>1</sup>, Lalgudi Venkataraman Ramanathan<sup>1</sup>, Rubens Nunes Faria<sup>1</sup>; <sup>1</sup>Comissão Nacional de Energia Nuclear
- 17:45 Optical and photovoltaic properties of oxide-based perovskite ceramics** **O.P1.20**  
Ronaldo Crosio Gennari<sup>1</sup>, José Antônio Eiras<sup>2</sup>, Rossano Lang Carvalho<sup>1</sup>, Manuel Henrique Lente<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Synthesis and characterization of ternary CuFeS<sub>2</sub> environmentally friendly quantum dots** **O.P1.21**  
Leiriana Aparecida Pinto Gontijo<sup>1</sup>, Calink Indiara do Livramento dos Santos<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Performance evaluation of CdS quantum dot-sensitized solar cells at different configurations** **O.P1.22**  
Ellen Raphael<sup>1</sup>, Paulo Henrique Pereira<sup>1</sup>, Isabela Corteletti Rocha<sup>1</sup>, Ana Beatriz Ferreira Vitoreti<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Optical and magneto-optical properties of GaAsPN/GaPN quantum wells** **O.P1.23**  
Felipe Soares Covre<sup>1</sup>, Miguel Angel Gonzalez Balanta<sup>2</sup>, Polyanna Bruna Alves Oliveira<sup>1</sup>, Fernando Iikawa<sup>2</sup>, Mohamed Henini<sup>3</sup>, Charles Cornet<sup>4</sup>, Yoan Léger<sup>4</sup>, Samy Almosni<sup>4</sup>, Helder Galeti<sup>1</sup>, Yara Galvão Gobato<sup>1</sup>, Hind Albalawi<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Estadual de Campinas, <sup>3</sup>University of Nottingham, <sup>4</sup>Institut National des Sciences Appliquées de Rennes
- 17:45 ZnO nanowires containing Eu<sup>3+</sup> ions for solar cells applications** **O.P1.24**  
André Felipe Vale da Fonseca<sup>1</sup>, Caroline de Mayrinck<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Synthesis and characterization of hybrid carbon nanotube/polymer for use in the active layer of organic solar cells** **O.P1.25**  
Luiza De Lazari Ferreira<sup>1</sup>, Hállen Daniel Rezende Calado<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Diffraction and swelling test of chitosan/gelatin membrane with silver nanoparticles** **O.P1.26**  
Lorena Oliveira de Sousa<sup>1</sup>, Osvaldo Novais Oliveira Jr<sup>2</sup>; <sup>1</sup>Escola de Engenharia de São Carlos- Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos
- 17:45 Plasma texturing of carbon counter electrodes for dye-sensitized solar cells** **O.P1.27**  
Armstrong Godoy Junior<sup>1</sup>, Felipe Gondim Carlucci<sup>1</sup>, André Luis de Jesus Pereira<sup>2</sup>, Douglas Marcel Gonçalves Leite<sup>1</sup>, Marcos Massi<sup>1,3</sup>, Walter Miyakawa<sup>1</sup>, Argemiro Sousa da Silva Sobrinho<sup>1</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Fundação Universidade Federal da Grande Dourados, <sup>3</sup>Universidade Federal de São Paulo
- 17:45 Structural and optical properties of NiTiO<sub>3</sub> perovskite for solar cell applications** **O.P1.28**  
Elisban Juani Sacari Sacari<sup>1</sup>, Saravanan Rajendran<sup>2</sup>, Francisco Gracia Garoca<sup>2</sup>, Edgar Mosquera<sup>2</sup>, N. Pugazhenthiran<sup>1</sup>, Ramalinga Viswanathan Mangalaraja<sup>1</sup>; <sup>1</sup>University of Concepción, <sup>2</sup>University of Chile

- 17:45 Fabrication of PbS quantum dots by laser ablation/irradiation routine in ethanol.** O.P1.29  
Nelson Fabian Villegas Borrero<sup>1,2</sup>, Victor Ermakov<sup>1,2</sup>, José Maria Clemente da Silva Filho<sup>1,2</sup>, Francisco das Chagas Marques<sup>1,2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Instituto de Física "Gleb Wataghin" - UNICAMP
- 17:45 Titanium dioxide sensitization with different porphyrins** O.P1.30  
Luiz Fernando de Sousa Lima<sup>1</sup>, Dayse Carvalho da Silva Martins<sup>1</sup>, Ana Luísa Lage<sup>1</sup>, Nelcy D. S. Mohallem<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 PLED and PSC based in poly[9,9-dioctylfluorene- alt-bis-thienylene(benzothiadiazole)]** O.P1.31  
Eric Tsuneki Yoshiura Ono<sup>1</sup>, Herick Garcia Takimoto<sup>1</sup>, Emerson Roberto Santos<sup>1</sup>, Satoru Yoshida<sup>1</sup>, Roberto Koji Onmori<sup>1</sup>, Fernando J. Fonseca<sup>1</sup>, Shu Hui Wang<sup>1</sup>; <sup>1</sup>Escola Politécnica de Universidade de São Paulo
- 17:45 Graphene nanoribbons as counter electrodes for dye sensitized solar cells with cobalt gel polymer electrolytes** O.P1.32  
Stephanie Goulart Dáquina<sup>1</sup>, Paulo Ernesto Marchezi<sup>1</sup>, gabriela sonai sonai<sup>1</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP
- 17:45 Water based, solution-processable, transparent and flexible graphene oxide composite as electrodes in organic solar cell application** O.P1.33  
Lucas Ferreira Lima<sup>1</sup>, Bruno Gabriel Alves Leite Borges<sup>2</sup>, Liliane Cristina Gonçalves<sup>1</sup>, Rodrigo Villegas Salvatierra<sup>1</sup>, Carlos Eduardo Cava<sup>1</sup>, Aldo J.G. Zarkin<sup>1</sup>, Maria Luiza Miranda Rocco<sup>2</sup>, Carolina Ferreira de Matos<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Universidade Federal do Rio de Janeiro
- 17:45 Perovskite films made by evaporation of PbI<sub>2</sub> and CH<sub>3</sub>NH<sub>3</sub>I** O.P1.34  
Natália de Faria Coutinho<sup>1</sup>, José Maria Clemente da Silva Filho<sup>1</sup>, Rafael Borges Merlo<sup>1</sup>, Ana Flávia Nogueira<sup>2</sup>, Francisco das Chagas Marques<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>2</sup>Instituto de Química - UNICAMP
- 17:45 P3HT:PCBM solar cells prepared from an non-halogenated solvent and environmentally friendly** O.P1.35  
Lívia Maria de Castro Sousa<sup>1</sup>, Debora Terezia Balogh<sup>1</sup>, Roberto Mendonça Faria<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo
- 17:45 Study of the Effect of Ligand Exchange on CdSe Quantum Dots** O.P1.36  
Agatha Matsumoto<sup>1</sup>, Michele Odnicki da Silva<sup>1</sup>, Rubens Maciel Filho<sup>2</sup>, Fernando Ely<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Effect of Stearic acid on CdSe and CdTe Quantum Dots Colloidal Synthesis** O.P1.37  
Agatha Matsumoto<sup>1</sup>, Michele Odnicki da Silva<sup>1</sup>, Rubens Maciel Filho<sup>2</sup>, Fernando Ely<sup>1</sup>; <sup>1</sup>Centro de Tecnologia da Informação Renato Archer, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Copper indium sulfide sensitized solar cells** O.P1.38  
Calink Indiara do Livramento dos Santos<sup>1</sup>, Jefferson Luis Ferrari<sup>1</sup>, Marco Antonio Schiavon<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei
- 17:45 Studying the antenna effect among donor materials in photovoltaic devices.** O.P1.39  
Luana Cristina Wouk de Menezes<sup>1</sup>, Cleber Marchiori<sup>1</sup>, Fredrik Von Kieseritzky<sup>2</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Royal Institute of Technology / Kungliga Tekniska Högskolan
- 17:45 Understanding the effect of solvent additive in polymeric thin films: turning a bilayer into a bulk heterojunction photovoltaic device** O.P1.40  
Cleber Fabiano Marchiori<sup>1</sup>, Camilla K.B.Q.M Oliveira<sup>1</sup>, Marlus Koehler<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

- 17:45 Investigation of PbS nanoparticles passivated with different thiolate ligands and their effects on the heterojunction solar cells. O.P1.41**  
Luiz Gustavo Bonato<sup>1</sup>, Emre Yassitepe<sup>1</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Study of optical performance of commercial up converters and quantum dots for application in bifacial solar cell O.P1.42**  
Aline Cristiane Pan<sup>1</sup>, Leandro Santos Grassi Cardoso<sup>1</sup>, Guilherme Torres Marques Vidal<sup>1</sup>, Jennifer Cláudia Passos Teixeira<sup>2</sup>, Joaquim F. M. C. Pratas Leitão<sup>2</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul, <sup>2</sup>Universidade de Aveiro
- 17:45 Modeling Mathematical of the Behavior of Up Converter when Implemented in Bifacial Silicon Solar Cells O.P1.43**  
Aline Cristiane Pan<sup>1</sup>, Leandro Santos Grassi Cardoso<sup>1</sup>, Fernando Soares dos Reis<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio Grande do Sul
- 17:45 Studies on the influence of post annealing treatment and additives on bulk heterojunction OPVs O.P1.44**  
Maiara de Jesus Bassi<sup>1</sup>, Luana Cristina Wouk de Menezes<sup>1</sup>, Camilla K.B.Q.M Oliveira<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Temperature-dependent structural and optical properties of Lead(II) Sulfide quantum dots superlattice O.P1.45**  
José Maria Clemente da Silva Filho<sup>1</sup>, Victor Ermakov<sup>1</sup>, Luiz Gustavo Bonato<sup>2</sup>, Ana Flávia Nogueira<sup>2</sup>, Francisco das Chagas Marques<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>2</sup>Instituto de Química - UNICAMP
- 17:45 All-inorganic cesium lead-halide perovskite quantum-dots for 3<sup>rd</sup> generation solar cells O.P1.46**  
Raphael Moral Moral<sup>1</sup>, Emre Yassitepe<sup>1</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Perovskite solar cells based on polyaniline derivatives as hole transporter material. O.P1.47**  
Adriano dos Santos Marques<sup>1</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP
- 17:45 MoS<sub>2</sub> nanostructures through hydrothermal route: effect of Sulfur precursors on growth and shape O.P1.48**  
André Luis Silveira Fraga<sup>1</sup>, Fábio Baum<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Influence of the molecular weight of poly(vinylpyrrolidone) in the production of silver nanowires by the polyol method. O.P1.49**  
Julia Lopes da Silva Gascho<sup>1</sup>, Patrícia Salvador Tessaro<sup>1</sup>, Sérgio Henrique Pezzin<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina
- 17:45 TiO<sub>2</sub>/SiO<sub>2</sub> and SiO<sub>2</sub>/TiO<sub>2</sub> core/shell nanoparticles: passivation of trapping states to improve photoelectrochemical performance of Dye Sensitized Solar Cells O.P1.50**  
Rafael da Costa Brito<sup>1</sup>, Marcos Jose Leite Santos<sup>1</sup>, Jacqueline Ferreira<sup>1</sup>, Sherdil Khan<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Graphene oxide coated PSiF-DBT nanoparticles by Pickering emulsion as simple and efficient alternative in organic photovoltaic devices nanostructuring O.P1.51**  
Carolina Ferreira de Matos<sup>1</sup>, Natasha D.A. Yamamoto<sup>1</sup>, Aldo J.G. Zarbin<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná

- 17:45 Impedance characterization of TiO<sub>2</sub> Pd doped samples** **O.P1.52**  
Mariana Charleaux Tabchoury<sup>1</sup>, Rero Marques Rubinger<sup>1</sup>, Adhimar Flávio Oliveira<sup>1</sup>, Sandra Aparecida Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Structural Characterization by Diffraction of X-Ray of SnO<sub>2</sub> F (FTO) Thin Films: Deposited by "Spray Pyrolysis" and FTO Commercial with Potential use in Solar Cells.** **O.P1.53**  
ANTONIO PAULO SANTOS SOUZA<sup>1</sup>, Ana Fabíola Leite Almeida<sup>1</sup>, Pierre Basílio Almeida Fechine<sup>1</sup>, Francisco Nivaldo Aguiar Freire<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 17:45 Photocatalytic degradation of methylene blue under UV irradiation by ZnO nanoparticles prepared by Pechini method** **O.P1.54**  
jessica cristina da silva gualberto<sup>1</sup>, Vera Katic<sup>2</sup>, Juliano Alves Bonacin<sup>2</sup>, Raimundo Ribeiro Passos<sup>1</sup>, Leandro Aparecido Pocrifka<sup>1</sup>; <sup>1</sup>Universidade Federal do Amazonas, <sup>2</sup>Institute of Chemistry-UNICAMP
- 17:45 Ultrafast Spectroscopy of Organometallic-Halide Perovskites and Their Byproducts** **O.P1.55**  
Henrique Brolezi Nunciaroni<sup>1</sup>, Julio Alberto Peres Ferencz Jr.<sup>2</sup>, Lazaro A Padilha<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>2</sup>Universidade Federal de Mato Grosso do Sul
- 17:45 RF Power and Temperature Influence on the Crystallinity of RF Sputtering Zinc Oxide Thin Films** **O.P1.56**  
Alex Vinicius Souza Araújo<sup>1</sup>, Jose Uliian Cardoso Almeida<sup>1</sup>, Marcelo Bento Pisani<sup>1</sup>; <sup>1</sup>Universidade Estadual de Santa Cruz
- 17:45 Thermo-mechanical properties of lead iodide thin films** **O.P1.57**  
Rafael Borges Merlo<sup>1</sup>, José Maria Clemente da Silva Filho<sup>1</sup>, Francisco das Chagas Marques<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Understanding the formation of the perovskite films through intramolecular exchange method at ambient conditions** **O.P1.58**  
Rodrigo Szostak<sup>1</sup>, Jhon Alexander Peñafiel<sup>2</sup>, Luis Frederico P. Dick<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 17:45 The additive effect on block copolymer conformation: a theoretical study** **O.P1.59**  
Marlus Koehler<sup>1</sup>, Leandro Benatto<sup>1</sup>, Cleber Fabiano Marchiori<sup>1</sup>, Natasha A. D. Yamamoto<sup>1</sup>, Marcos Gomes Eleutério da Luz<sup>1</sup>, Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 Synthesis and characterization of new dyes for high performance solar cells.** **O.P1.60**  
Maria Rosana E. Silva<sup>1</sup>, Henrique Eisi Toma<sup>1</sup>; <sup>1</sup>Instituto de Química - USP
- 17:45 Synthesis of BaTiO<sub>3</sub> and SrTiO<sub>3</sub> by Microwave Assisted Hidrotermal Method (MAH) using Anatase as Titanium Precursor** **O.P1.61**  
Renata da Silva Magalhães<sup>1</sup>, Wagner Dias Macedo Junior<sup>1</sup>, Agda Eunice de Souza<sup>1</sup>, Maximo Siu Li<sup>2</sup>, Silvio Rainho Teixeira<sup>1</sup>, Elson Longo<sup>3</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Instituto de Física de São Carlos, <sup>3</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Efficiency Optimization of Photovoltaic Solar Cells using Nanoparticles of ZnO and Carbon Nanotubes** **O.P1.62**  
Icoana Lais Leitão Mascarenhas Martins, Renata Cardoso Roncoleta<sup>1</sup>, Pedro Henrique de Oliveira Nogueira<sup>1</sup>, Glécia Virgolino da Silva Luz<sup>1,2</sup>, Pilar Hidalgo Falla<sup>1</sup>, Thiago Ferreira Gomes<sup>1</sup>; <sup>1</sup>Universidade de Brasília, <sup>2</sup>Escola Politécnica de Universidade de São Paulo

# Thursday, September 29<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION O.OR4 (08:30 - 10:15) - Room Amoreiras I*

- 08:30 Stable perovskite solar cells by surface modification with surfactant molecules** **O.OR4.12**  
Matheus Serra de Holanda<sup>1</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP
- 08:45 Characterization of CdTe thin films grown on polyimide substrate by hot wall epitaxy** **O.OR4.13**  
Sukarno Olavo Ferreira<sup>1</sup>, Isnard Domingos Ferraz<sup>1</sup>, Renan Augusto Lisboa Almeida<sup>1</sup>, Tiago José Oliveira<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal de Viçosa
- 09:00 Roll-to-Roll fabrication of polymer solar cells based on P3HT: PCBM - top electrode investigation and performance comparison before and after encapsulation** **O.OR4.14**  
Bárbara Hellen de Souza Miranda<sup>1</sup>, Grzegorz A Potoczny<sup>1</sup>, Jair Francisco Rodrigues<sup>1</sup>, Diego Bagnis<sup>1</sup>; <sup>1</sup>CSEM Brasil
- 09:15 Simulation of the structure and dynamics of conjugated polymers** **O.OR4.15\***  
Jenny Nelson<sup>1</sup>, Anne Guilbert<sup>2</sup>; <sup>1</sup>Centre for Plastic Electronics and Department of Physics, Imperial College London, Prince Consort Road, London, <sup>2</sup>Imperial College London
- 09:45 Studying stability of quasi-solid dye-sensitized solar cells by colorimetric analysis of the electrolyte** **O.OR4.16**  
Marcos Antonio Santana Andrade Junior<sup>1</sup>, Kati Miettunen<sup>2</sup>, Armi Tiihonen<sup>2</sup>, Peter Lund<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>, Heloise de Oliveira Pastore<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Aalto University / Aalto-yliopisto
- 10:00 Hysteresis dependence on CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> deposition method in perovskite solar cells** **O.OR4.17**  
Sílvia Leticia Fernandes<sup>1</sup>, Bruna Andressa Bregadiolli<sup>2</sup>, Carlos Frederico de Oliveira Graeff<sup>2</sup>, Maria Ap. Zaghete<sup>3</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Faculdade de Ciências/Bauru, <sup>3</sup>Instituto de Química - IQ - Unesp - Araraquara

# **SYMPOSIUM P - Materials for energy conversion and storage**

## **Symposium organizers:**

Sydney Ferreira Santos (*UFABC*)

Carlos Moyses Araujo (*Uppsala University*)

Adam Duong (*Université du Québec à Trois-Rivières*)

Fabio Henrique de Barros Lima (*USP*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION P.OR1 (09:45 - 10:45) - Room Amoreiras I*

- 09:45 Pathways to Utilize IR Photons for Photocatalytic Water Splitting P.OR1.1\***  
Tomas Edvinsson<sup>1</sup>; <sup>1</sup>Uppsala University / Uppsala Universitet
- 10:15 Enhancement of the poly(o-methoxyaniline)-poly(3-thiophene acetic acid) self-assembled electrochemical capacitor stability P.OR1.2**  
Ernesto Chaves Pereira de Souza<sup>1</sup>, Wania Aparecida Christinelli<sup>1</sup>, Roger Gonçalves<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 10:30 Effects of thermal annealing and Sn-doping on the microstructure, optical properties and photoelectrochemical performance of hematite thin films P.OR1.3**  
Lígia Parreira Souza<sup>1</sup>, Rodrigo O. G. Chaves<sup>1</sup>, Andre S Ferlauto<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais

### *SESSION P.OR2 (11:15 - 12:00) - Room Amoreiras I*

- 11:15 Computational Nanoscience applied to energy storage and conversion. P.OR2.4\***  
Caetano Rodrigues Miranda<sup>1</sup>; <sup>1</sup>Instituto de Física-USP
- 11:45 Neutralization Pseudocapacitors: an Acid-Base Machine P.OR2.5**  
William Gomes de Moraes<sup>1</sup>, Wellington José Alves Santos Gomes<sup>1</sup>, Fritz Huguenin<sup>1</sup>; <sup>1</sup>Universidade de São Paulo

### *SESSION P.OR3 (14:00 - 16:15) - Room Amoreiras I*

- 14:00 Electronic and Optical Properties of Doped Oxides for Energy Conversion P.OR3.6\***  
Antonio Ferreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal da Bahia
- 14:30 Solar energy conversion: photocatalysts for water treatment and solar fuels production P.OR3.7\***  
Claudia Longo<sup>1</sup>, Natália Sabes Sabatini<sup>1</sup>, Eveline Ramos<sup>1</sup>, Gabriella Rodrigues Daniel<sup>1</sup>, Douglas Del Duque<sup>1</sup>, Giovanni Mutton<sup>1</sup>, Miguel Tayar Galante<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 15:00 IONIC TO ELECTRONIC CONDUCTIVITY IN 0.50[xAg<sub>2</sub>O(1-x)V<sub>2</sub>O<sub>5</sub>]0.50P<sub>2</sub>O<sub>5</sub> GLASSES P.OR3.8**  
Juan Jairo Diaz Marin<sup>1</sup>, Ana Candida Martins Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 15:15 Supramolecular Approach for Production of Nanoparticles and Nanocomposites Materials P.OR3.9\***  
Koiti Araki<sup>1</sup>, Sergio Hiroshi Toma<sup>1</sup>, Josué Martins Gonçalves<sup>1</sup>, Tiago Araujo Matias<sup>1</sup>, Robson Raphael Guimarães<sup>1</sup>; <sup>1</sup>Instituto de Química da Universidade de São Paulo

**15:45 Graphene on-chip for electrochemical energy conversion P.OR3.10\***  
Frank Nelson Crespilho<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos - Universidade de São Paulo

## Poster presentations

### SESSION P.P1 (17:45 - 19:30)

- 17:45 Magnetic and Magnetocaloric properties of Dy<sub>2</sub>CuSi<sub>3</sub> spin-glass compound P.P1.1**  
Mayanny Gomes da Silva<sup>1</sup>, Vinícius Gomes de Paula<sup>2</sup>, Adenilson Oliveira dos Santos<sup>1</sup>, Adelino de Aguiar Coelho<sup>2</sup>, Lisandro Cardoso<sup>2</sup>, Luzeli Moreira da Silva<sup>2</sup>; <sup>1</sup>Universidade Federal do Maranhão, <sup>2</sup>Instituto de Física Gleb Wataghin - UNICAMP
- 17:45 Comparing microwave and conventional sintering methods on the magnetic properties of cobalt ferrites particulate P.P1.2**  
Korllvary Rhanddy Parra Jimenez<sup>1</sup>, Claudia Patricia Fernandez<sup>1</sup>, Ruth H. G. A. Kiminami<sup>1</sup>, Ducinei Garcia<sup>1</sup>, Alexandre José Gualdi<sup>1</sup>, Paulo César de Camargo<sup>1</sup>, Adilson J A de Oliveira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Cristallite size tuning on magnetocaloric effect of ball milled HoAl<sub>2</sub> P.P1.3**  
Vinícius Gomes de Paula<sup>1</sup>, Delcicleide Costa dos Reis<sup>2</sup>, Luzeli Moreira da Silva<sup>2</sup>, Adenilson Oliveira dos Santos<sup>2</sup>, Rossano Lang Carvalho<sup>3</sup>, Larissa Otubo<sup>4</sup>, Adelino de Aguiar Coelho<sup>1</sup>, Lisandro Cardoso<sup>1</sup>; <sup>1</sup>Instituto de Física Gleb Wataghin - UNICAMP, <sup>2</sup>Universidade Federal do Maranhão, <sup>3</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>4</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Intermediary Stage Activated Sintering method for ceramic/cermet consolidation at low temperature P.P1.4**  
Thomaz Augusto Guisard Restivo<sup>1</sup>, Ana Cugler Moreira<sup>1</sup>, Sergio Graciano<sup>1</sup>; <sup>1</sup>Universidade de Sorocaba
- 17:45 Spark plasma sintering of niobium carbide P.P1.5**  
Luana Elisa Cardoso de Siqueira<sup>1,2</sup>, Marcio Gustavo Di Vernieri Cuppari<sup>1</sup>, Izabel Fernanda Machado<sup>3</sup>, Sydney Ferreira Santos<sup>1,2</sup>; <sup>1</sup>Fundação Universidade Federal do Abc, <sup>2</sup>Universidade Federal do ABC, <sup>3</sup>Escola Politecnica da USP
- 17:45 Effect of cold rolling on the hydrogen desorption behavior of MgH<sub>2</sub>, TiH<sub>2</sub>, and ZrH<sub>2</sub> under microwave irradiation P.P1.6**  
Sydney Ferreira Santos<sup>1</sup>, Ivaldete da Silva Dupim<sup>1</sup>, Jacques Huot<sup>2</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Université du Quebec Trois-Rivieres
- 17:45 Stainless steel microsphere sol-gel synthesis and their use in obtaining the cermet UO<sub>2</sub>-stainless steel P.P1.7**  
Luciana Sampaio Ribeiro<sup>1</sup>, Camila Alves Escanio<sup>1</sup>, Edilaine Ferreira da Silva<sup>1</sup>, Felipe Wallysson Ferreira de Oliveira<sup>1</sup>, Yara Sena Pereira<sup>1</sup>, Lucas Gabriel Faria Inácio<sup>1</sup>, Alisson Frank Canuto Brandão<sup>1</sup>, Fernando Soares Lameiras<sup>1</sup>, Ana Maria Matildes dos Santos<sup>1</sup>, Sergio Carneiro dos Reis<sup>1</sup>, Fábio Abud Mansur<sup>1</sup>, Armindo Santos<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear

- 17:45 Hydrogen sorption properties of Mg-Fe-CNT powder mixture processed by ECAP** **P.P1.8**  
Gisele Ferreira de Lima<sup>1</sup>, Katia Regina Cardoso<sup>1</sup>, Dilermando Nagle Travessa<sup>1</sup>, Tomaz Toshimi Ishikawa<sup>2</sup>, Claudio S. Kiminami<sup>2</sup>, Walter José Botta<sup>2</sup>, Alberto Moreira Jorge Junior<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Hydrogen storage properties and in-situ XRD characterization of a nanocrystalline Mg–Ni processed by cold rolling** **P.P1.9**  
Santiago J. A. Figueroa<sup>1</sup>, Ricardo Floriano<sup>2</sup>, Rodrigo José Contieri<sup>2</sup>, Alessandra Cremasco<sup>2</sup>, Daniel Rodrigo Leiva<sup>3</sup>, Walter José Botta<sup>3</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>School of Technology, UNICAMP, Limeira-SP, Brazil, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Recycling the cathode of spent Ni-MH batteries: Application as electrochemical capacitors.** **P.P1.10**  
Pedro Vitor Dixini<sup>1</sup>, Carlos Eduardo Tartaglia Bruzeguini<sup>1</sup>, Beatriz Belotti Carvalho<sup>1</sup>, Andressa Meireles David<sup>1</sup>, Vinicius Guilherme Celante<sup>1</sup>, Vitor Cezar Broetto Pegoretti<sup>2</sup>, Marcos Benedito Jose de Freitas<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Universidade Federal do Espírito Santo
- 17:45 Co, Cu and Mn recycling from spent batteries and their application as electrochemical capacitors** **P.P1.11**  
Eduardo dos Santos Loureiro<sup>1</sup>, Luiza Botan Favalessa<sup>1</sup>, Livia Serra Selvatici<sup>1</sup>, Marcos Benedito Jose de Freitas<sup>2</sup>, Pedro Vitor Morbach Dixini<sup>1</sup>, Vinicius Guilherme Celante<sup>1</sup>, Gisele Xavier Celante<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Universidade Federal do Espírito Santo
- 17:45 Highly efficient nanostructured electrode material for Ni-MH batteries** **P.P1.12**  
Josué Martins Gonçalves<sup>1</sup>, Robson Raphael Guimarães<sup>1</sup>, Cícero Venâncio Nunes Jr.<sup>2</sup>, Alfredo Duarte<sup>1</sup>, Henrique Eisi Toma<sup>1</sup>, Koiti Araki<sup>1</sup>; <sup>1</sup>Instituto de Química - USP, <sup>2</sup>Universidade Estadual do Centro Oeste
- 17:45 Stabilization of  $\alpha$ -Ni(OH)<sub>2</sub> in graphene oxide nanocomposites** **P.P1.13**  
Josué Martins Gonçalves<sup>1</sup>, Robson Raphael Guimarães<sup>1</sup>, Cícero Venâncio Nunes Jr.<sup>2</sup>, Alfredo Duarte<sup>1</sup>, Henrique Eisi Toma<sup>1</sup>, Koiti Araki<sup>1</sup>; <sup>1</sup>Instituto de Química - USP, <sup>2</sup>Universidade Estadual do Centro Oeste
- 17:45 Theoretical Study of Lithium Graphite Intercalation Compounds** **P.P1.14**  
JANUÁRIO KORDIAK<sup>1</sup>, Renan Augusto Pontes Ribeiro<sup>1</sup>, Thiago Castro Rozada<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>, Alexandre Camilo Junior<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Re-synthesis of LiCoO<sub>2</sub> from spent lithium-ion batteries by lixiviation and chemical precipitation methods** **P.P1.15**  
Caroline Santana dos Santos<sup>1</sup>, Jair Scarminio<sup>1</sup>, João Carlos Alves<sup>1</sup>, Paulo Rogério Catarini da Silva<sup>1</sup>, Stephany Pires da Silva<sup>1</sup>, Lucas Evangelista Sita<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Unveiling the migration mechanism of Lithium Graphite Intercalation Compounds in silico** **P.P1.16**  
JANUÁRIO KORDIAK<sup>1</sup>, Renan Augusto Pontes Ribeiro<sup>1</sup>, Thiago Castro Rozada<sup>1</sup>, Sergio Ricardo de Lazaro<sup>1</sup>, Alexandre Camilo Junior<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa

- 17:45 Lithium superionic conductor  $\text{Li}_{1.6}\text{Ni}_{1.3}(\text{Ti}_{0.6}\text{Ge}_{0.4})_{1.7}(\text{PO}_4)_3$  for solid-state batteries** **P.P1.17**  
Swarup Kundu<sup>1</sup>, Norma Maria Pereira Machado<sup>1</sup>, Ana Candida Martins Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Analysis of phases and crystalline structures resulting from thermal decomposition of  $\text{Li}_x\text{CoO}_2$  compound in oxidant atmosphere** **P.P1.18**  
Stephany Pires da Silva<sup>1</sup>, Jair Scarminio<sup>1</sup>, Paulo Rogério Catarini da Silva<sup>1</sup>, Alexandre Urbano<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Recycling cathode from spent ion-lithium batteries as the formation of cobalt anodic oxide films and their electrochemical properties** **P.P1.19**  
Estêvão Pompermayer Cristofori Lima<sup>1</sup>, Vitor Cezar Broetto Pegoretti<sup>2</sup>, Pedro Vitor Morbach Dixini<sup>1</sup>, Marcos Benedito Jose de Freitas<sup>1</sup>; <sup>1</sup>Universidade Federal do Espírito Santo, <sup>2</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO
- 17:45 Re-synthesis of  $\text{LiCoO}_2$  extracted from cathodes of discarded lithium-ion batteries and its characterization as electrochemical electrodes** **P.P1.20**  
 Lucas Evangelista Sita<sup>1</sup>, Stephany Pires da Silva<sup>1</sup>, Jair Scarminio<sup>1</sup>, Paulo Rogério Catarini da Silva<sup>1</sup>, Caroline Santana dos Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Grain size distribution in the cathode powder of discarded lithium-ion batteries** **P.P1.21**  
Fernando Henrique Pavoni<sup>1</sup>, Paulo Rogério Catarini da Silva<sup>1</sup>, Jair Scarminio<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Thermal synthesis, characterization and electrochemical study of high-temperature (HT)  $\text{LiCoO}_2$  obtained from  $\text{Co}(\text{OH})_2$  recycled of spent lithium ion batteries** **P.P1.22**  
Vitor Cezar Broetto Pegoretti<sup>1</sup>, Pedro Vitor Morbach Dixini<sup>2</sup>, Pamela Cristina Smecellato<sup>3</sup>, Sonia Regina Biaggio<sup>3</sup>, Marcos Benedito Jose de Freitas<sup>1</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>3</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Neutralization Batteries** **P.P1.23**  
William Gomes de Moraes<sup>1</sup>, Jonas de Arruda Leite Júnior<sup>1</sup>, Fritz Huguenin<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Neutralization batteries to harvest energy** **P.P1.24**  
Wellington José Alves Santos Gomes<sup>1</sup>, Fritz Huguenin<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Electrodeposition of Nickel on Activated Carbon Fiber Felts Produced from Textile Polyacrylonitrile** **P.P1.25**  
Miguel Angelo do Amaral Junior<sup>1</sup>, Sandro Fonseca Quirino<sup>2</sup>, Newton Adriano dos Santos Gomes<sup>3</sup>, Jossano Saldanha Marcuzzo<sup>1</sup>, Emerson Sarmiento Gonçalves<sup>3</sup>, Jorge Tadao Matsushima<sup>1</sup>, Mauricio Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Instituto Nacional de pesquisas espaciais, <sup>3</sup>Ciência e Tecnologia Espacial
- 17:45 Hydrogen-Oxygen Generating System for Engine Vehicles** **P.P1.26**  
César Augusto Duarte Rodrigues<sup>1</sup>, Eduardo Mascarin<sup>1</sup>, Francisco Pereira Lopes de Azevedo<sup>1</sup>, Germano Tremiliosi-Filho<sup>2</sup>, Fredy João Valente<sup>3</sup>; <sup>1</sup>Hidroflex LTDA, <sup>2</sup>Instituto de Química de São Carlos, <sup>3</sup>Universidade Federal de São Carlos

- 17:45 Finite Element Analysis in Materials Selection for Small Wind Turbine Blades** P.P1.27  
Maximilian da Rosa Bretschneider<sup>1</sup>, Eduardo Luis Schneider<sup>1</sup>, Anderson Braun<sup>1</sup>; <sup>1</sup>Universidade Feevale
- 17:45 Thermodynamic studies of sensible and latent heat storage materials** P.P1.28  
Kristina Lilova<sup>1</sup>; <sup>1</sup>Setaram Inc.
- 17:45 Calorimetry studies of high temperature thermal storage materials used in Concentrated Solar Power (CSP) systems** P.P1.29  
Kristina Lilova<sup>1</sup>, Danilo Massaki Oshima<sup>2</sup>, Link Brown<sup>1</sup>; <sup>1</sup>Setaram Inc., <sup>2</sup>Dairix
- 17:45 Ni<sup>2+</sup> ion exchanged faujasite nanozeolite as solid support for Candida antarctica B lipase immobilization and the complex application for oleic acid esterification.** P.P1.30  
Alex Henrique Miller<sup>1</sup>, José Geraldo Nery<sup>1</sup>; <sup>1</sup>UNESP - Instituto de Biologia, Letras e Ciências Exatas de São José do Rio Preto
- 17:45 Characterization of BSCF perovskites with introduction of scandium** P.P1.31  
Daniel Dornellas Athayde<sup>1</sup>, Eduardo Henrique Martins Nunes<sup>1</sup>, Wander Luiz Vasconcelos<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Assessing the conditions to prepare H<sub>3</sub>PW<sub>12</sub>O<sub>40</sub> catalyst supported on Nb<sub>2</sub>O<sub>5</sub> for transesterification of macaw palm oil** P.P1.32  
Celso Luiz de Aquino Santos<sup>1</sup>, JOÃO PAULO ALVES SILVA<sup>1</sup>, Leyvison Rafael Vieira da Conceição<sup>1</sup>, Heizir Ferreira de Castro<sup>1</sup>, Livia Melo Carneiro<sup>1</sup>; <sup>1</sup>Universidade de São Paulo - Escola Engenharia Lorena
- 17:45 Synthesis and characterization of titania nanotubes and gold nanoparticles nanocomposites for hydrogen production improvement** P.P1.33  
Rhauane Almeida Galvão<sup>1,2</sup>, Germana Michelle Medeiros e Silva<sup>2</sup>, Giovanna Machado<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro de Tecnologias Estratégicas do Nordeste
- 17:45 Effect of VO<sub>x</sub> on Pt/Al<sub>2</sub>O<sub>3</sub> catalysts for hydrogen production** P.P1.34  
Tathiana Midori Kokumai<sup>1</sup>, Daniel Augusto Cantane<sup>1</sup>, Guilherme Tavares de Melo<sup>1</sup>, Luigi Baldini Paulucci<sup>1</sup>, Daniela Zanchet<sup>1</sup>; <sup>1</sup>University of Campinas
- 17:45 A seed-based synthesis of Au-Cu nanoparticles for catalytic production of H<sub>2</sub>** P.P1.35  
Tanna Elyn Rodrigues Fiuza<sup>1</sup>, Danielle Santos Gonçalves<sup>1</sup>, Luelc Sousa da Costa<sup>1</sup>, Diego Rodrigues de Carvalho<sup>1</sup>, Daniela Zanchet<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 PtNi nanoparticles as catalysts for hydrogen production** P.P1.36  
Danielle Santos Gonçalves<sup>1</sup>, Daniela Zanchet<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Synthesis of PtCo/ZSM-5-C catalysts for methanol electrooxidation** P.P1.37  
Karen Vieira Melo<sup>1,2</sup>, Ana Maria Rocco<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto Federal Fluminense
- 17:45 Carbon Dioxide Electrochemical Reduction on Ni and Sn-modified Cu Electrocatalysts: Product Distribution Investigated by on-line Mass Spectrometry** P.P1.38  
Fabio H.B. Lima<sup>1</sup>, Mariana R. Camilo<sup>1</sup>, Wanderson O. Silva<sup>1</sup>, Ricardo S. de Moraes<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos
- 17:45 Crystal size effect on the electrochemical oxidation of formate on carbon-supported palladium nanoparticles** P.P1.39  
Rayana Marcela Izidoro da Silva Santos<sup>1</sup>, Roberto Zenhei Nakazato<sup>1</sup>, Eduardo Gonçalves Ciapina<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá

- 17:45 Palladium-based Electrocatalysts for Ethanol Oxidation Reaction in Alkaline Direct Ethanol Fuel Cell** **P.P1.40**  
Leticia Poras Reis de Moraes<sup>1,2</sup>, Bruno R. Matos<sup>2</sup>, Elisabete Inácio Santiago<sup>2</sup>, Fabio Coral Fonseca<sup>2</sup>, Sandro Campos Amico<sup>1</sup>, Celia de Fraga Malfatti<sup>1</sup>;  
<sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Pt and PtRu nanoparticles supported on N-doped carbons as electrocatalysts for methanol electro-oxidation** **P.P1.41**  
Viviane Santos Pereira<sup>1</sup>, Júlio César Martins Silva<sup>1</sup>, Almir Oliveira Neto<sup>1</sup>, Estevam Vitorio Spinacé<sup>1</sup>; <sup>1</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 17:45 Effect of transition metal oxides as supports on the electrocatalysis of oxygen reduction on Pt nanoparticles** **P.P1.42**  
Felipe Berto Ometto<sup>1</sup>, Hebe Mercedes Villullas<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Carbon-supported PdAu catalysts with different nanostructures and their activity towards oxygen reduction** **P.P1.43**  
Irã Borges Coutinho Gallo<sup>1</sup>, Hebe Mercedes Villullas<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Synthesis and characterization of carbon-supported PdNi nanocatalysts for electroreduction of oxygen** **P.P1.44**  
Muhammad Sufaid Khan<sup>1</sup>, Rosendo Parra Milian<sup>1</sup>, Irã Borges Coutinho Gallo<sup>2</sup>, Hebe Mercedes Villullas<sup>2</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Instituto de Química - UNESP
- 17:45 Ellipsometry of Cu<sub>2</sub>SnSe<sub>3</sub> films** **P.P1.45**  
Henrique Limborço<sup>1</sup>, Marcus Vinícius Moreira<sup>1</sup>, Alfredo Gontijo de Oliveira<sup>1</sup>, Juan Carlos González<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Influence of Pt deposition on water splitting hydrogen generation by highly ordered Ta<sub>2</sub>O<sub>5</sub>-TiO<sub>2</sub> freestanding nanotube** **P.P1.46**  
Thiago André Salgueiro Soares<sup>1,2</sup>, Lilian Campelo Holanda<sup>1,2</sup>, Yamê Cavalcanti Bezerra<sup>1,2</sup>, Luciano Costa Almeida<sup>1</sup>, Giovanna Machado<sup>2</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro de Tecnologias Estratégicas do Nordeste
- 17:45 GaSe<sub>9</sub> and Se based solar cells: influence of Ga on morphological, optical and electrical properties** **P.P1.47**  
Anderson Hoff<sup>1</sup>, Isidro Cruz-Cruz<sup>1</sup>, Mariana Couto Siqueira<sup>1</sup>, Kleber Daum Machado<sup>1</sup>, Ivo Alexandre Hümmelgen<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 17:45 WO<sub>3</sub>/TiO<sub>2</sub> porous electrodes: photoelectrochemical properties and photocatalytic activity for ciprofloxacin removal from water** **P.P1.48**  
Natália Sabatini<sup>1</sup>, Caio Rodrigues-Silva<sup>1</sup>, José Roberto Guimarães<sup>2</sup>, Claudia Longo<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP, <sup>2</sup>Faculdade de Engenharia Civil-UNICAMP

**Tuesday, September 27<sup>th</sup>**

## Oral presentations

\* Invited Lecture

**SESSION P.OR4 (09:45 - 10:45) - Room Amoreiras I**

- 09:45 Enhancement of first hydrogenation in TiFe alloy by addition of transition elements** P.OR4.11\*  
Jacques Huot<sup>1</sup>, Pragma Jain<sup>1</sup>, Catherine Gosselin<sup>1</sup>; <sup>1</sup>Université du Quebec Trois-Rivieres
- 10:15 Palladium-based electrocatalysts for electrochemical energy conversion** P.OR4.12\*  
Eduardo G. Ciapina<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá

**SESSION P.OR5 (11:15 - 12:00) - Room Amoreiras I**

- 11:15 Isostructural Al-based metal-organic frameworks for adsorption driven heat pumps** P.OR5.13  
Daiane Damasceno Borges<sup>1</sup>, Guillaume Maurin<sup>2</sup>, Douglas Soares Galvão<sup>1</sup>; <sup>1</sup>Universidade de Campinas, <sup>2</sup>Institut Charles Gerhardt Montpellier
- 11:30 Fabrication of Si and Ag nanoparticles by the anodizing of valve metals** P.OR5.14  
Luis Frederico P. Dick<sup>1</sup>, RENATO DE VALENTE VALENTE<sup>1</sup>, Isaac Rodrigues Perez<sup>1</sup>, Sabrina Luiza Zordan<sup>1</sup>, Caroline Barros<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 11:45 Optical analysis of cobalt oxide thin films deposited by reactive sputtering** P.OR5.15  
José Humberto Dias da Silva<sup>1</sup>, Antonio Ricardo Zanatta<sup>2</sup>, Nilton Francelosi Azevedo Neto<sup>1</sup>, André Luis de Jesus Pereira<sup>3</sup>, Kleper de Oliveira Rocha<sup>1</sup>, João Carlos Angélico<sup>1</sup>, Paulo Noronha Lisboa-Filho<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>Instituto de Física de São Carlos, <sup>3</sup>Universidade Federal da Grande Dourados

**SESSION P.OR6 (14:00 - 16:15) - Room Amoreiras I**

- 14:00 Energy Materials Research with Synchrotron Radiation: present and future** P.OR6.16\*  
Tulio Rocha<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 14:30 Well-dispersed CeO<sub>2</sub> nanoparticles in Pt/SiO<sub>2</sub> catalysts for H<sub>2</sub> production** P.OR6.17  
Tathiana Midori Kokumai<sup>1</sup>, Daniela Zanchet<sup>1</sup>; <sup>1</sup>University of Campinas
- 14:45 Combining Molecular Dynamics Simulations and First-principles Calculations to Understand the Structural and Spectroscopy Properties of Ru-based CO<sub>2</sub> Reduction Electrocatalyst in Aqueous Environment** P.OR6.18  
Luciano Tavares Costa<sup>1,2</sup>, Rócio Sánchez-de-Armas<sup>3</sup>, Giane B Damas<sup>2</sup>, José Luis Lima de Jesus Silva<sup>2</sup>, Barbara Brena<sup>2</sup>, C. Moyses Araujo<sup>2</sup>; <sup>1</sup>Universidade Federal Fluminense, <sup>2</sup>Uppsala University / Uppsala Universitet, <sup>3</sup>Universidad de Sevilla
- 15:00 Self-assembled Films of conducting polymers, Carbon Nanotubes and Graphene oxide: their use as transparent electrodes in OPVs.** P.OR6.19\*  
Lucimara Stolz Roman<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná
- 15:30 Conducting Polymers-Based Functional Materials** P.OR6.20  
Everaldo Carlos Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 15:45 Mesoporous zirconia-ceria for anodes of SOFC and catalyser** P.OR6.21  
Marcia Carvalho de Abreu Fantini<sup>1</sup>, Vinicius Roberto de Sylos Cassimiro<sup>1</sup>, Rafael Cartoni Monteiro<sup>1</sup>; <sup>1</sup>Instituto de Física-USP

- 16:00 Structural Features and Proton Conductivity of Nafion-CsHSO<sub>4</sub> Composite Membranes P.OR6.22**  
Bruno R. Matos<sup>1</sup>, Leticia Poras Reis de Moraes<sup>1</sup>, Elisabete Inácio Santiago<sup>1</sup>,  
 Fábio Coral Fonseca<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares

## Poster presentations

### SESSION P.P2 (17:45 - 19:30)

- 17:45 Synthesis and Characterization of Polyaniline/Carbon Black Nanocomposites P.P2.49**  
Luis Marcelo G da Silva<sup>1</sup>, Nathalia Barone Oliveira<sup>1</sup>, Gerson Luiz Mantovani<sup>1</sup>,  
 Sydney Ferreira Santos<sup>1</sup>, Renato Altobelli Antunes<sup>1</sup>, Everaldo Carlos  
 Venancio<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Synthesis of binary composites formed by graphene oxide and polyaniline for application as low cost, high efficiency supercapacitor electrodes P.P2.50**  
Ariane Silva Ribas<sup>1</sup>, Gustavo Marciniuk<sup>1</sup>, Jarem Raul Garcia Garcia<sup>1</sup>, Rodolfo  
 Thiago Ferreira<sup>1</sup>, Rodolfo Bonoto Estevam<sup>1</sup>, Felipe Tadashi Kasuga<sup>1</sup>, Andressa  
 Oliveira Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Evaluation of temperature and current density in the electrochemical synthesis of PANI/Carbon fiber composites P.P2.51**  
Andre Ferreira Sardinha<sup>1</sup>, Andrea Boldarini Couto<sup>1</sup>, Dalva Alves de Lima  
 Almeida<sup>1</sup>, Neidenei Gomes Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Effect of the substrate annealing treatment in the electrochemical performance of the PANi/CF binary composites P.P2.52**  
Andrea Boldarini Couto<sup>1</sup>, Dalva Alves de Lima Almeida<sup>1</sup>, Neidenei Gomes  
 Ferreira<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Potentiostatic Synthesis of PANI for Application in Energy Storage Devices P.P2.53**  
João Carlos Martins<sup>1</sup>, Raimundo Ribeiro Passos<sup>1</sup>, Leandro Aparecido Pocrifka<sup>1</sup>;  
<sup>1</sup>Universidade Federal do Amazonas
- 17:45 Polyaniline synthesized in pilot scale: structural and morphological characteristics P.P2.54**  
 Maria Alice Carvalho Mazzeu<sup>1,2</sup>, Emerson Sarmiento Gonçalves<sup>1,3</sup>, Maurício  
 Ribeiro Baldan<sup>4</sup>, Adriana Medeiros Gama<sup>3</sup>, Lohana Komorek Faria<sup>5</sup>; <sup>1</sup>Instituto  
 Tecnológico da Aeronáutica, <sup>2</sup>Instituto de Fomento e Coordenação Industrial,  
<sup>3</sup>Instituto de Aeronáutica e Espaço, <sup>4</sup>Instituto Nacional de Pesquisas Espaciais,  
<sup>5</sup>Universidade do Vale do Paraíba
- 17:45 3D-Ternary electrode based on zirconia nanoparticles, reduced graphene oxide and polypyrrole for supercapacitor application P.P2.55**  
Ana Paula Pereira Alves<sup>1,2</sup>, Ryota Koizumi<sup>2</sup>, Chandra S Tiwary<sup>2</sup>, Pulickel  
 Ajayan<sup>2</sup>, Glaura Goulart Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Rice  
 University
- 17:45 Influence of the crosslinking agent on the properties of proton conductive membranes based on SIPN P.P2.56**  
Alexandre S. M. Galvão Carvalho<sup>1</sup>, Felipe A. Moro Loureiro<sup>1</sup>, Ana Maria  
 Rocco<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro - EQ
- 17:45 Structure and Transport Properties of Annealed Nafion Membranes P.P2.57**  
Bruno R. Matos<sup>1</sup>, Jaqueline de Souza da Silva<sup>1</sup>, Fábio Coral Fonseca<sup>1</sup>; <sup>1</sup>Instituto  
 de Pesquisas Energéticas e Nucleares

- 17:45 COMPOSITE SPEEK/ZEOLITE/IONIC LIQUID POLYMER MEMBRANES FOR FUEL CELL APPLICATIONS** **P.P2.58**  
Letícia Guerreiro da Trindade<sup>1</sup>, Ernesto Chaves Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 17:45 Solid polymeric electrolyte for Fuel Cell based on a nanostructured SIPN system** **P.P2.59**  
Alexandre S. M. Galvão Carvalho<sup>1</sup>, Ana Maria Rocco<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro - EQ
- 17:45 Preparation and characterization of radiation-grafted poly(ethylene-co-tetrafluoroethylene) films as electrolyte for alkaline fuel cells** **P.P2.60**  
Clotilde Coppini Pereira<sup>1</sup>, Orlando Rodrigues Jr.<sup>1</sup>, Leonardo Gondim de Andrade Silva<sup>1</sup>, Elisabete Inácio Santiago<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Eletrospun poly(acrylonitrile-co-vinyl acetate) (PANVA) copolymer nanofibers: thermal treatment and characterization** **P.P2.61**  
Giulia Maria Rodrigues Alvares<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>, Márcia Tsuyama Escote<sup>1</sup>, Juliane Carla Bernardi<sup>1</sup>, Gerson Luiz Mantovani<sup>1</sup>, Paula Maria Gabriela Leal Ferreira<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Polyether-block-polyamide copolymer -ionic liquids films as polymeric solid electrolytes** **P.P2.62**  
 Sinval Braz Silva Filho<sup>1</sup>, Fernanda Ferraz Camilo<sup>1</sup>, Roselena Faez<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Study of the capacitance as a function of bend angle of flexible supercapacitors prepared with MWCNT and gel polymer electrolyte** **P.P2.63**  
Sandra Aparecida Alexandre<sup>1</sup>, João Paulo Campos Trigueiro<sup>2</sup>, Glaura Goulart Silva<sup>1</sup>, Rodrigo Lassarote Lavall<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia de Minas Gerais
- 17:45 Energy harvesting by neutralization pseudocapacitor obtained from phosphomolybdic acid and poly(3,4-ethylenedioxythiophene)** **P.P2.64**  
Wellington José Alves Santos Gomes<sup>1</sup>, Bruno Bravin<sup>1</sup>, Fritz Huguenin<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Investigation of the electrochromic properties of poly(o-methoxyaniline)-poly(3-thiophene acetic acid) layer-by-layer films** **P.P2.65**  
Wania Aparecida Christinelli<sup>1</sup>, Aline Barrios Trench<sup>1</sup>, Ernesto Chaves Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Activated Carbon Fiber obtained from textile PAN fiber to electrodes for supercapacitor** **P.P2.66**  
 Elen Leal da Silva<sup>1</sup>, Jossano Saldanha Marcuzzo<sup>1,2</sup>, Andres Cuña<sup>3</sup>, Aline Castilho Rodrigues<sup>4</sup>, Emerson Sarmiento Gonçalves<sup>4</sup>, Maurício Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de pesquisas espaciais, <sup>2</sup>Faculdade de Tecnologia de São Jose dos Campos, <sup>3</sup>Faculdade de Química, Universidad de la Republica, <sup>4</sup>Instituto Tecnológico de Aeronáutica
- 17:45 Cloud point enhancement profile of libraries of modified Poly(N-isopropylmethacrylamide)** **P.P2.67**  
Alexandre Guilherme Silva Tavares<sup>1</sup>, Kelly Cristine da Silveira<sup>1</sup>, Elizabete Fernandes Lucas<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro

- 17:45 Metal adsorption Process in Activated Carbon Fiber from textile PAN Fiber aim electrode Production** **P.P2.68**  
Aline Castilho Rodrigues<sup>1</sup>, Elen Leal da Silva<sup>2</sup>, Jossano Saldanha Marcuzzo<sup>2</sup>, Andres Cuña<sup>3</sup>, Emerson Sarmiento Gonçalves<sup>1</sup>, Mauricio Ribeiro Baldan<sup>2</sup>;  
<sup>1</sup>Instituto Tecnológico Aeroespacial, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Faculdade de Química, Universidad de la Republica
- 17:45 Electromagnetic Characteristics of Carbon Fiber Powder Embedded in Epoxy Resin** **P.P2.69**  
Miguel Angelo do Amaral Junior<sup>1</sup>, Sandro Fonseca Quirino<sup>2</sup>, Jossano Saldanha Marcuzzo<sup>1</sup>, Newton Adriano dos Santos Gomes<sup>3</sup>, Jorge Tadao Matsushima<sup>1,4</sup>, Emerson Sarmiento Gonçalves<sup>5</sup>, Mauricio Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Instituto Nacional de pesquisas espaciais, <sup>3</sup>Instituto Tecnológico de Aeronáutica, <sup>4</sup>ETEP Faculdades, <sup>5</sup>Ciência e Tecnologia Espacial
- 17:45 Visualizing cellulase action on cellulose substrates** **P.P2.70**  
Marina Richena<sup>1</sup>, Vanessa de Oliveira Arnoldi Pellegrini<sup>2</sup>, Igor Polikarpov<sup>2</sup>, Camila Alves de Rezende<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP, <sup>2</sup>Institute of Physics of São Carlos - USP
- 17:45 Tungsten-doped BiVO<sub>4</sub>/β-Bi<sub>4</sub>V<sub>2</sub>O<sub>11</sub> photoanodes for the water oxidation under visible light irradiation** **P.P2.71**  
Wayler Silva dos Santos<sup>1</sup>, Reisla Grasielle Gonçalves<sup>1</sup>, Rafael Lemos dos Santos<sup>1</sup>, André Santiago Afonso<sup>1</sup>, Mariandry dell Valle Rodriguez<sup>1</sup>, José Domingos Fabris<sup>1</sup>, Márcio César Pereira<sup>1</sup>; <sup>1</sup>Federal University of the Jequitinhonha and Mucuri Valleys
- 17:45 Charge transfer kinetics of BiVO<sub>4</sub>/β-Bi<sub>4</sub>V<sub>2</sub>O<sub>11</sub> photoanodes during the photoelectrochemical water oxidation** **P.P2.72**  
Wayler Silva dos Santos<sup>1</sup>, Reisla Grasielle Gonçalves<sup>1</sup>, Rafael Lemos dos Santos<sup>1</sup>, André Santiago Afonso<sup>1</sup>, Mariandry dell Valle Rodriguez<sup>1</sup>, José Domingos Fabris<sup>1</sup>, Márcio César Pereira<sup>1</sup>; <sup>1</sup>Federal University of the Jequitinhonha and Mucuri Valleys
- 17:45 Assessment of the crystalline phases evolution in obtaining nano-sized BiTaO<sub>4</sub> by hydrothermal method using in situ X-ray diffraction** **P.P2.73**  
Djalma Lucas Sousa Maia<sup>1</sup>, Márcio Medeiros Soares<sup>2</sup>, Luciana Almeida Silva<sup>1</sup>;  
<sup>1</sup>Universidade Federal da Bahia, <sup>2</sup>Laboratório Nacional de Luz Síncrotron
- 17:45 A facile and cheap method to obtain heterostructures of WO<sub>3</sub>/BiVO<sub>4</sub> and MoO<sub>3</sub>/BiVO<sub>4</sub>** **P.P2.74**  
Dyovani Coelho<sup>1</sup>, Lucia Helena Mascaro<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos
- 17:45 Enhancing Photoanodic Activity of Nano-BiVO<sub>4</sub> Films with a Coating of Microporous Al<sub>2</sub>O<sub>3</sub>** **P.P2.75**  
Murilo Fernando Gromboni<sup>1</sup>, Frank Marken<sup>2</sup>, Lucia Helena Mascaro<sup>1</sup>;  
<sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>University of Bath
- 17:45 Influence of additives Li<sup>+</sup> and tBP on liquid and quasi-solid cobalt electrolytes applied in dye sensitized solar cells** **P.P2.76**  
gabriela sonai sonai<sup>1</sup>, Armi Tiihonen<sup>2</sup>, Kati Miettunen<sup>2</sup>, Peter Lund<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>Aalto University
- 17:45 Photoluminescence and Photocatalytic Properties of Ag<sub>4</sub>P<sub>2</sub>O<sub>7</sub> microcrystals** **P.P2.77**  
Wyllamanney da Silva Pereira<sup>1</sup>, Leandro Silva Matos<sup>1</sup>, Gleice Botelho<sup>1</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Instituto de Química de Araraquara/UNESP

- 17:45 Artificial photosynthesis assisted by N:ZnO nanoparticles P.P2.78**  
Jéssica Ariane Oliveira<sup>1</sup>, Andre Esteves Nogueira<sup>2</sup>, Elaine Cristina Paris<sup>2</sup>, Cauê Ribeiro Oliveira<sup>2</sup>, Gael Yves Poirier<sup>3</sup>, Tania Regina Giraldo<sup>3</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Universidade Federal de Alfenas
- 17:45 SYNTHESIS AND CHARACTERIZATION OF ZNO NANOPARTICLES FOR PHOTOCATALYSIS APPLICATION P.P2.79**  
Tatiana Martelli Mazzo<sup>1</sup>, Gabriela Bosco Minervino<sup>1</sup>, Carlos Alberto Medalha Filho<sup>1</sup>, Regiane Cristina Oliveira<sup>2</sup>, Elson Longo<sup>2</sup>; <sup>1</sup>UNIVERSIDADE FEDERAL DE SÃO PAULO - Campus Baixada Santista, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Enhancing hematite photoanode activity for water splitting by incorporation of reduced graphene oxide P.P2.80**  
Saulo Amaral Carminati<sup>1</sup>, Flavio Leandro Souza<sup>2</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP, <sup>2</sup>Universidade Federal do ABC
- 17:45 Up and downconversion from double and simultaneous excitation of Y<sub>2</sub>O<sub>3</sub>:Er<sup>3+</sup>/Yb<sup>3+</sup>/Eu<sup>3+</sup> possible application in device for energy conversion P.P2.81**  
Caroline de Mayrinck<sup>1</sup>, Renato Luiz Siqueira<sup>2</sup>, Marco Antonio Schiavon<sup>1</sup>, Sidney José Lima Ribeiro<sup>3</sup>, Jefferson Luis Ferrari<sup>1</sup>; <sup>1</sup>Universidade Federal de São João del-Rei, <sup>2</sup>Universidade Federal de São Carlos, <sup>3</sup>Instituto de Química - IQ - Unesp - Araraquara
- 17:45 Optical processes in hybrid semiconductor nanowires formed by heterostructures of GaAs/AlGaAs/GaAs and conjugated polymer with potential application in photovoltaic devices P.P2.82**  
Raphael Antonio Caface<sup>1</sup>, Yuri Pussep<sup>1</sup>, Francisco E.G. Guimaraes<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos
- 17:45 Switching processes and energy-storage characteristics in PLZT 2/95/5 antiferroelectric ceramic system P.P2.83**  
Aimé Peláiz Barranco<sup>1</sup>, Yanela Méndez González<sup>1</sup>, José de los Santos Guerra<sup>2</sup>, Marco Aurélio de Oliveira<sup>3</sup>, Xiucai Wang<sup>4</sup>, Tongqing Yang<sup>4</sup>; <sup>1</sup>Universidad de la Habana, <sup>2</sup>Universidade Federal de Uberlândia, <sup>3</sup>Faculdade de Engenharia/UNESP-IS, <sup>4</sup>Tongji University
- 17:45 Obtaining solid electrolytes sodium beta alumina via conversion in solid state. P.P2.84**  
Samuel Silveira Martins<sup>1</sup>, Vera Lúcia Arantes<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Heteropolyacid supported on alumina and niobia for biodiesel production via simultaneous esterification and transesterification of macaw palm oil P.P2.85**  
Leyvison Rafael Vieira da Conceição<sup>1</sup>, Flávia Danielle Santos<sup>1</sup>, Livia Melo Carneiro<sup>1</sup>, Heizir Ferreira de Castro<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Structuring peroxotungstic acid in aqueous medium with sodium dodecyl sulfate P.P2.86**  
Julia Cristina Oliveira Pazinato<sup>1</sup>, Marcos Antonio Villetti<sup>2</sup>, Diego Soares de Moura<sup>1</sup>, IRENE TERESINHA SANTOS GARCIA<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul, <sup>2</sup>Universidade Federal de Santa Maria
- 17:45 Tungsten oxide films obtained from sodium tungstate/sodium dodecyl sulfate by sol-gel method P.P2.87**  
Diego Soares de Moura<sup>1</sup>, Julia Cristina Oliveira Pazinato<sup>1</sup>, IRENE TERESINHA SANTOS GARCIA<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

- 17:45 Effect of layer thickness on photoactivity of tungsten oxide electrodes** **P.P2.88**  
Ivaldete da Silva Dupim<sup>1</sup>, Vinicius Sousa<sup>1</sup>, Sydney Ferreira Santos<sup>2,1</sup>, Jean-Louis Bobet<sup>3</sup>, Flavio Leandro Souza<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>Fundação Universidade Federal do Abc, <sup>3</sup>Université de Bordeaux
- 17:45 Correlation between Film Pumping Speed and Stoichiometry in Titanium Oxides thin films growth by DC Reactive Sputtering** **P.P2.89**  
Roberto Villarroel<sup>1</sup>, Rodrigo A. Espinoza-González<sup>1</sup>, Guillermo Gonzalez-Moraga<sup>1</sup>; <sup>1</sup>Universidad de Chile
- 17:45 Nanocrystalline anatase TiO<sub>2</sub>/reduced graphene oxide composite films as photoanodes for photoelectrochemical water splitting studies: the role of reduced graphene oxide** **P.P2.90**  
Andreia de Morais<sup>1</sup>, Claudia Longo<sup>1</sup>, Joyce Rodrigues Araujo<sup>2</sup>, Monica Barroso<sup>3</sup>, James Durrant<sup>4</sup>, Ana Flávia Nogueira<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Instituto Nacional de Metrologia, Qualidade e Tecnologia, <sup>3</sup>Utrecht University / Universiteit Utrecht, <sup>4</sup>Imperial College
- 17:45 Preparation of TiO<sub>2</sub> Nanofibers by Electrospinning from Poly(butylene adipate co-terephthalate)/TiO<sub>2</sub> Nanoparticules Composite** **P.P2.91**  
 Guilherme Kretzmann Belmonte<sup>1</sup>, Andressa Peyrot<sup>1</sup>, Cesar Bergamin Duarte<sup>1</sup>, Daniel Eduardo Weibel<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Synthesis and Structural Characterization of Ca<sub>3</sub>Co<sub>4</sub>O<sub>9</sub> based Thermoelectric Oxide** **P.P2.92**  
Paulo Henrique Xavier<sup>1</sup>, Elio Thizay Magnavita<sup>1</sup>, Person Pereira Neves<sup>1</sup>, Hugo Bonette de Carvalho<sup>1</sup>, Niko Churata Mamani<sup>1</sup>, Antonio Carlos Doriguetto<sup>1</sup>, Ângela Ortiz Zevallos<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas
- 17:45 Preliminary results on thermoluminescence and kinetic parameters in CaO-Li<sub>2</sub>O-B<sub>2</sub>O<sub>3</sub> glass system** **P.P2.93**  
 Enderson Sergio Bannwart<sup>1</sup>, Nicele Brito Pimentel<sup>1</sup>, Seila Rojas de Souza<sup>1</sup>, José Ezequiel De Souza<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal da Grande Dourados
- 17:45 Effect of Ti substitution by Cr and Ge in lithium ion-conducting glass-ceramics of the Li<sub>1+x</sub>Cr<sub>x</sub>(Ge<sub>y</sub>Ti<sub>1-y</sub>)<sub>2-x</sub>(PO<sub>4</sub>)<sub>3</sub> system.** **P.P2.94**  
Rafael Bianchini Nuernberg<sup>1</sup>, Ana Candida Martins Rodrigues<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Pyrite: a solid residue of the coal mining with potential for solar energy conversion** **P.P2.95**  
 Camila Machado de Oliveira<sup>1</sup>, Roselane Cesconeto<sup>2</sup>, Adenilson José Chiquito<sup>3</sup>, Tiago Elias Allievi Frizon<sup>2</sup>, Michael Peterson<sup>2</sup>, Carolina Milcharek Machado<sup>2</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade do Extremo Sul Catarinense, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Energy storage capacity of blends of coals pre and post compression process** **P.P2.96**  
João Lúcio Barros<sup>1,2</sup>, Alessandra Luzia Da Róz<sup>1</sup>, Fábio Minoru Yamaji<sup>3</sup>, Leandro Cardoso Morais<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, <sup>2</sup>UNESP - Campus Sorocaba, <sup>3</sup>Universidade Federal de São Carlos - Campus Sorocaba

# **SYMPOSIUM Q - Nanotoxicology and Nanoregulation - the safe use of manufactured nanomaterials and 2nd Nanoreg Brazil Meeting**

## **Symposium organizers:**

Valtencir Zucolotto (*USP*)  
Nelson Durán (*Unicamp*)  
Wagner José Favaro (*Unicamp*)  
Juliana Cancino Bernardi (*USP*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION Q.OR1 (09:45 - 10:45) - Room Amoreiras II*

- 09:45 Nanotoxicological studies indicate that lipid-core nanocapsules are a safe formulation for drug delivery** **Q.OR1.1\***  
Silvia Guterres<sup>1</sup>; <sup>1</sup>Programa de Pos-Graduação em Ciências Farmacêuticas, Universidade Federal do Rio Grande do Sul (UFRGS)
- 10:15 Preparation, structural and magnetic investigation, and toxicity assays of SPIONs as carriers of nitric oxide** **Q.OR1.2**  
Luana Caroline Gonçalves<sup>1</sup>, Amedea Barozzi Seabra<sup>1,2</sup>, Paula Silvia Haddad<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do ABC
- 10:30 Mesoporous silica particles modified with graphitic carbon: interaction with human red blood cells and plasma proteins** **Q.OR1.3**  
Diego Stefani Teodoro Martinez<sup>1</sup>, João Paulo Vita Damasceno<sup>2</sup>, Lidiane Silva Franqui<sup>1</sup>, Jefferson Bettini<sup>1</sup>, Italo Odone Mazali<sup>2</sup>, Mathias Strauss<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Universidade Estadual de Campinas

### *SESSION Q.OR2 (11:15 - 12:00) - Room Amoreiras II*

- 11:15 Nanoecotoxicity assessment of activated carbon from sugarcane bagasse modified with silver nanoparticles** **Q.OR2.4**  
Suely Patrícia Costa Gonçalves<sup>1</sup>, Mathias Strauss<sup>1</sup>, Fabrício Souza Delite<sup>1</sup>, Zaira Clemente<sup>2</sup>, Vera Lúcia Scherholz Salgado Castro<sup>2</sup>, Diego Stefani Teodoro Martinez<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária
- 11:30 Interaction of single and multi-layer graphene oxide with fetal bovine serum: assessing the protein corona formation** **Q.OR2.5**  
Lidiane Silva Franqui<sup>1,2</sup>, Marcelo Alexandre De Farias<sup>1</sup>, Rodrigo Villares Portugal<sup>1</sup>, Carlos Alberto Costa<sup>1</sup>, Vitor Rafael Coluci<sup>2</sup>, Adriana Franco Paes Leme<sup>1</sup>, Diego Stefani Teodoro Martinez<sup>1,2</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>University of Campinas
- 11:45 Characterization of sugarcane bagasse ash for application in agriculture** **Q.OR2.6**  
Laís Luz Rodrigues Neto<sup>1,2</sup>, Mathias Strauss<sup>1</sup>, Fabrício Souza Delite<sup>1</sup>, Diego Stefani Teodoro Martinez<sup>1,2</sup>; <sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>University of Campinas

### **SESSION Q.OR3 (14:00 - 16:15) - Room Amoreiras II**

- 14:00 POTENTIAL THERAPEUTIC STRATEGIES FOR BLADDER CANCER: CHEMOTHERAPY ASSOCIATED WITH GRAPHENE OXIDE** **Q.OR3.7\***  
Wagner José Fávaro<sup>1,2</sup>, Nelson Durán<sup>1,2</sup>; <sup>1</sup>Laboratory of Urogenital Carcinogenesis and Immunotherapy, Department of Structural and Functional Biology, University of Campinas (UNICAMP), <sup>2</sup>NanoBioss, Institute of Chemistry, University of Campinas (UNICAMP)
- 14:30 Size and morphology dependence of gold nanorods and gold nanospheres in the nanotoxicological process: in vitro, in vivo and membrane models studies** **Q.OR3.8**  
Juliana Cancino Bernardi<sup>1</sup>, Paula Lins<sup>1</sup>, Valeria Spolon Marangoni<sup>2</sup>, Jean Besson<sup>3</sup>, Maria Euride Cancino<sup>3</sup>, Maria Raquel Natali<sup>3</sup>, Valtencir Zucolotto<sup>2</sup>; <sup>1</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Universidade Estadual de Maringá
- 14:45 Acute toxicity of two metallic nanoparticles to zebrafish (*Danio rerio*)** **Q.OR3.9**  
Francine Perri Venturini<sup>1</sup>, Jaqueline Pérola Souza<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP
- 15:15 HSEnano a web-based platform to assist the risk assessment of carbon nanomaterials** **Q.OR3.10**  
Guilherme Frederico Bernardo Lenz e Silva<sup>1</sup>; <sup>1</sup>Escola Politécnica da Universidade de São Paulo
- 15:30 Use of multicriteria methods to improve risk assessment of carbon nanomaterials** **Q.OR3.11**  
Guilherme Frederico Bernardo Lenz e Silva<sup>1</sup>, Robert Hurt<sup>2</sup>; <sup>1</sup>Escola Politecnica da USP, <sup>2</sup>Brown University
- 15:45 SYNTHESIS AND CHARACTERIZATION OF METAL NANOPARTICLES OF GOLD, SILVER, COPPER AND SILVER-PALLADIUM ALLOY STABILIZED IN HYALURONIC ACID** **Q.OR3.12**  
GALO CARDENAS<sup>1</sup>, Macarena p Ruiz<sup>2</sup>, Luis Vergara González<sup>3</sup>, Javier Ojeda<sup>4</sup>, Guillermo Solorzano<sup>5</sup>; <sup>1</sup>UNIVERSIDAD DEL BIOBIO, <sup>2</sup>UNIVERSIDAD SAN SEBASTIAN, <sup>3</sup>Universidad San Sebastián, <sup>4</sup>UNIVERSIDAD AUSTRAL DE CHILE, <sup>5</sup>UNIVERSIDAD CATOLICA DE RIO DE JANEIRO

## **Poster presentations**

### **SESSION Q.P1 (17:45 - 19:30)**

- 17:45 Zein nanoparticles loaded eugenol for diseases control in fishes: Preparation and Characterization** **Q.P1.1**  
Angelica Irasema Sibaja Luis<sup>1</sup>, Jhones Luis Oliveira<sup>1</sup>, Leonardo Fernandes Fraceto<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho
- 17:45 Enhanced photoactivity of chlorin-conjugated gold nanoparticles** **Q.P1.2**  
Thaís Ayumi Fukuda Cursino<sup>1</sup>, Dayane Batista Tada<sup>1</sup>, Daniela Formaggio<sup>1</sup>, Alexandre Martins Santos<sup>1</sup>, Adjaci Fernandes Uchoa<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade de São Paulo

- 17:45 Nanostructured lipid carrier loaded with flavonoid: Production, characterization and evaluation of its potential against skin cancer** **Q.P1.3**  
Amanda Ferreira Costa<sup>1</sup>, Paula Aragão Lima<sup>1</sup>, Ljubica Tasic<sup>1</sup>, Tiago Rodrigues<sup>2</sup>, Nelson Durán<sup>1,3</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do ABC, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 17:45 Phytotoxicity of solid lipid and polymeric chitosan/tripolyphosphate nanoparticles in three plants species** **Q.P1.4**  
Anderson Espirito Santo Pereira<sup>1</sup>, Daniela Yurie Nakasato<sup>2</sup>, Halley Caixeta de Oliveira<sup>3</sup>, Leonardo Fernandes Fraceto<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>3</sup>Universidade Estadual de Londrina
- 17:45 Toxicity of Ti-6Al-4V debris and vanadium ions** **Q.P1.5**  
Bruna Carolina Costa<sup>1,2</sup>, Cintia Kazuko Tokuhara<sup>3</sup>, Rodrigo Cardoso de Oliveira<sup>3</sup>, Luís Augusto Rocha<sup>1,2</sup>, Paulo Noronha Lisboa-Filho<sup>1,2</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>2</sup>Instituto de Biomateriais, Tribocorrosão e Nanomedicina, <sup>3</sup>Universidade de São Paulo
- 17:45 Nanostructured lipid carriers containing benzophenone-3: In vitro cytotoxicity assays** **Q.P1.6**  
Paula Aragão Lima<sup>1</sup>, Carolina Moreira Watashi<sup>2</sup>, Tiago Rodrigues<sup>2</sup>, Nelson Durán<sup>1,3</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do ABC, <sup>3</sup>Brazilian Nanotechnology National Laboratory
- 17:45 Nanostructured lipid carriers containing natural lipids: *in vitro* cytotoxicity assays** **Q.P1.7**  
Caroline Aparecida Dalben Rampazo<sup>1</sup>, Paula Aragão Lima<sup>1</sup>, Nelson Durán<sup>1</sup>, Tiago Rodrigues<sup>2</sup>, Carolina Moreira Watashi<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Universidade Federal do ABC
- 17:45 Characterization of nanomaterials using FESEM Microscopy** **Q.P1.8**  
Anny Manrich<sup>1</sup>, Ana Carolina Corrêa<sup>1</sup>, Letícia Vitorazi<sup>1</sup>, Francys Kley Vieira Moreira<sup>1</sup>, Fabio Plotegher<sup>1</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>, Elaine Cristina Paris<sup>1</sup>, Cauê Ribeiro Oliveira<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação
- 17:45 NANoREG evaluation: Fish acute exposure to TiO<sub>2</sub>, ZnO and SiO<sub>2</sub>** **Q.P1.9**  
Vera Lúcia Scherholz Salgado Castro<sup>1</sup>, Jose Henrique Vallim<sup>1</sup>, Zaira Clemente<sup>1</sup>; <sup>1</sup>Embrapa Environment
- 17:45 Evaluation of NANoREG TiO<sub>2</sub> toxicity in Caenorhabditis elegans** **Q.P1.10**  
Vera Lúcia Scherholz Salgado Castro<sup>1</sup>, Rodrigo Castanha<sup>1</sup>, Jose Henrique Vallim<sup>1</sup>; <sup>1</sup>Embrapa Environment
- 17:45 RISK INDICATORS OF THE NANOPARTICLES-A DECISION MAKING PROCESS AIMING TO SUPPORT THE NANOMATERIALS DEVELOPMENT** **Q.P1.11**  
Katia Regina Evaristo de Jesus<sup>1</sup>, Karen Cristina Massini<sup>1</sup>; <sup>1</sup>Embrapa Environment
- 17:45 Consultation of scientific experts as a preliminary approach aiming to contribute with the discussion of nanotechnology regulation** **Q.P1.12**  
Katia Regina Evaristo de Jesus<sup>1</sup>, Karen Cristina Massini<sup>1</sup>; <sup>1</sup>Embrapa Environment
- 17:45 Oxidative stress and genotoxicity of adult of zebrafish (Danio rerio) after graphene oxide exposure** **Q.P1.13**  
Jaqueline Pérola Souza<sup>1</sup>, Jéssica Fernanda Baretta<sup>1</sup>, Fabrício A. dos Santos<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos

- 17:45 Evaluating the graphene oxide dispersions for Fish Embryo Toxicity (FET) test** **Q.P1.14**  
Zaira Clemente<sup>1,2</sup>, Vera Lúcia Scherholz Salgado Castro<sup>2</sup>, Lidiane Franqui<sup>1</sup>, Cristiane A Silva<sup>1</sup>, Diego Stefani Teodoro Martinez<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Improving dispersion of zinc oxide nanoparticles with biomolecules** **Q.P1.15**  
Letícia Vitorazi<sup>1</sup>, Fabio Plotegher<sup>1</sup>, Francys Kley Vieira Moreira<sup>1</sup>, Anny Manrich<sup>1</sup>, Ana Carolina Corrêa<sup>1</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>, Elaine Cristina Paris<sup>1</sup>, Cauê Ribeiro Oliveira<sup>1</sup>; <sup>1</sup>Embrapa Instrumentação
- 17:45 Green mecanochemical process for carbon nanotubes coating with humic acid: application and ecotoxicity evaluation** **Q.P1.16**  
Francine Coa<sup>1,2</sup>, Zaira Clemente<sup>3</sup>, Josias Rogerio Lopes<sup>4,1</sup>, Laís Luz Rodrigues Neto<sup>4,1</sup>, Osvaldo L Alves<sup>4</sup>, Vera Lúcia Scherholz Salgado Castro<sup>3</sup>, Edison Barbieri<sup>2</sup>, Diego Stefani Teodoro Martinez<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Instituto de Pesca, <sup>3</sup>Empresa Brasileira de Pesquisa Agropecuária, <sup>4</sup>Universidade Estadual de Campinas
- 17:45 Verteporfin based silica nanoparticle for selective inhibition of human highly invasive melanoma cell proliferation.** **Q.P1.17**  
Bianca Martins Estevão<sup>1,2,3</sup>, Manuela Rizzi<sup>3</sup>, Stelvio Tonello<sup>3</sup>, Enrica Gianotti<sup>3</sup>, Leonardo Marchese<sup>3</sup>, Filippo Renò<sup>3</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Instituto de Física de São Carlos - USP, <sup>3</sup>Università del Piemonte Orientale
- 17:45 Chemically reduced graphene functionalized with L-glutamine for applications in photohyperthermia** **Q.P1.18**  
Fabricio Aparecido dos Santos<sup>1</sup>, Catarina Brunhara Batista<sup>1</sup>, Ieda Maria Martinez Paino<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Institute of Physics of São Carlos - USP
- 17:45 Viability and ROS production of two human thyroid cell lines after exposure to reduced and oxidized graphene.** **Q.P1.19**  
William Waissmann Waissmann<sup>1,2</sup>, Ieda Maria Martinez Paino<sup>2</sup>, Fabrício A. dos Santos<sup>2</sup>, Valtencir Zucolotto<sup>2</sup>; <sup>1</sup>Escola Nacional de Saúde Pública Sérgio Arouca/Fundação Oswaldo Cruz, <sup>2</sup>Instituto de Física de São Carlos/Universidade de São Paulo
- 17:45 Collagen-based silver nanoparticles exhibit toxicology effects in cancer cells** **Q.P1.20**  
Ieda Maria Martinez Paino<sup>1</sup>, Vinicius Sara Cardoso<sup>2</sup>, José Roberto Souza Almeida Leite<sup>3</sup>, Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Institute of Physics of São Carlos - USP, <sup>2</sup>Federal University of Piauí, <sup>3</sup>University of Brasília
- 17:45 Synthesis and characterization of hydrophilic magnetic nanocomposites** **Q.P1.21**  
Adriel Bortolin<sup>1,2</sup>, Fauze Ahmad Aouada<sup>3</sup>, Luiz Henrique Capparelli Mattoso<sup>2</sup>, Cauê Ribeiro Oliveira<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Campus de Ilha Solteira
- 17:45 Morphology of gold nanorods induces defects in membrane models** **Q.P1.22**  
Paula Lins<sup>1</sup>, Valeria Spolon Marangoni<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>, Juliana Cancino Bernardi<sup>1</sup>; <sup>1</sup>Institute of Physics of São Carlos - USP
- 17:45 Cytotoxicity evaluation of magnetic iron oxide nanoparticles in liver cells** **Q.P1.23**  
Cristiane Casonato Melo<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>, Juliana Cancino Bernardi<sup>1</sup>; <sup>1</sup>Institute of Physics of São Carlos - USP

- 17:45 Toxicity evaluation of gelatin-silver nanoparticles to microorganisms and fish embryos** **Q.P1.24**  
Gabriela Helena Da Silva<sup>1,2</sup>, Josias Rogerio Lopes<sup>3</sup>, Leandro de Sá Bortolozzo<sup>1</sup>, Francine Coa<sup>1</sup>, Regina Teresa Rosim Monteiro<sup>2</sup>, Oswaldo Luiz Alves<sup>3</sup>, Diego Stefani Teodoro Martinez<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais, <sup>2</sup>Centro de Energia Nuclear na Agricultura, <sup>3</sup>Universidade de Campinas
- 17:45 Dynamic light scattering: a simple and efficient technique for characterizing nanoparticles** **Q.P1.25**  
Fabio Plotegher<sup>1</sup>, Francys Kley Vieira Moreira<sup>1</sup>, Letícia Vitorazi<sup>1</sup>, Anny Manrich<sup>1</sup>, Ana Carolina Corrêa<sup>1</sup>, Luiz Henrique Capparelli Mattoso<sup>1</sup>, Elaine Cristina Paris<sup>1</sup>, Cauê Ribeiro Oliveira<sup>1</sup>; <sup>1</sup>Empresa Brasileira de Pesquisa Agropecuária - Embrapa Instrumentação São Carlos
- 17:45 Study of the oral acute toxicity of titanium dioxide nanoparticule** **Q.P1.26**  
Humberto de Melo Brandão<sup>1</sup>, Catiúscia Padilha Oliveira<sup>1</sup>, Patricia Vilhena Dias Andrade<sup>1</sup>, Cynthia Penoni Volpi Abreu<sup>2</sup>, Flademir Wouters<sup>2</sup>, Raimundo Vicente de Sousa<sup>2</sup>, Michele Munk Pereira<sup>3</sup>, Saulo R Silva<sup>1</sup>; <sup>1</sup>Embrapa Gado de Leite, <sup>2</sup>Universidade Federal de Lavras, <sup>3</sup>Universidade Federal de Juiz de Fora
- 17:45 Study of the oral acute toxicity of ZnO nanoparticles** **Q.P1.27**  
Humberto de Melo Brandão<sup>1</sup>, Cynthia Penoni Volpi Abreu<sup>2</sup>, Catiúscia Padilha Oliveira<sup>1</sup>, Patricia Vilhena Dias Andrade<sup>1</sup>, Juliana Carine Gern<sup>1</sup>, Raimundo Vicente de Sousa<sup>2</sup>, Flademir Wouters<sup>2</sup>, Saulo R Silva<sup>1</sup>, Michele Munk Pereira<sup>3</sup>; <sup>1</sup>Embrapa Gado de Leite, <sup>2</sup>Universidade Federal de Lavras, <sup>3</sup>Universidade Federal de Juiz de Fora



# **SYMPOSIUM R - Surfaces and Interfaces for Medical Applications, Biomaterials and Health**

**Symposium organizers:**

Diego Mantovani, PhD, FBSE (*Laval University*)

Marisa Beppu, PhD (*Unicamp*)

Victor M. Castaño, PhD (*Universidad Nacional Autonoma de Mexico*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION R.OR1 (09:45 - 10:45) - Room Carvalho II*

- 09:45** **Developing human cell models to study interface reactions with biomaterials** **R.OR1.1\***  
James Kirkpatrick
- 10:15** **Electrospun multilayer chitosan scaffolds as potential wound dressings for skin lesions** **R.OR1.2**  
Rafael Bergamo Trinca<sup>1</sup>, José Alberto Fracassi da Silva<sup>1</sup>, Ângela Maria Moraes<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 10:30** **Nitric oxide-releasing nanosystems for topical applications: Synthesis, characterization and kinetics studies** **R.OR1.3**  
Milena T. Pelegrino<sup>1</sup>, Paula Silvia Haddad<sup>1</sup>, Daniele Ribeiro de Araujo<sup>2</sup>, Amedea Barozzi Seabra<sup>1,2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade Federal do ABC

### *SESSION R.OR2 (11:15 - 12:00) - Room Carvalho II*

- 11:15** **Sweet surfaces: glycoconjugates tunes cell behavior and surface phenomena** **R.OR2.4\***  
Guilherme Oliveira Barbosa<sup>1</sup>, Hernandes F. Carvalho<sup>1</sup>; <sup>1</sup>UNICAMP

### *SESSION R.OR3 (14:00 - 16:15) - Room Carvalho II*

- 14:00** **Protein adsorption on polymer films and its relationship with hydration** **R.OR3.6\***  
Loreto Margarita Valenzuela<sup>1</sup>, Min Bag<sup>1</sup>; <sup>1</sup>Pontificia Universidad Católica de Chile
- 14:30** **Electrochemical Platform for MicroRNAs detection** **R.OR3.7**  
Pawan Jolly<sup>1</sup>, Marina Ribeiro Batistuti<sup>2</sup>, Anna Miodek, Marcelo Mulato<sup>2</sup>, Mark Lindsay<sup>1</sup>, Pedro Estrela<sup>1</sup>; <sup>1</sup>University of Bath, <sup>2</sup>Universidade de São Paulo
- 14:45** **Cell membrane models for the analysis of bactericide effects of peptides, chitosans and metallic complexes** **R.OR3.8\***  
Oswaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Instituto de Física de São Carlos - USP
- 15:15** **Multi-scale Modeling and Simulation of Tissue Spheroids Encaged by Microscaffolds (Lockyballs) for improving the microenvironment conditions** **R.OR3.9**  
Janaína A. Dernowsek<sup>1</sup>, Rodrigo Alvarenga Rezende<sup>1</sup>, Pedro Yoshito Noritomi<sup>1</sup>, Daniel Takanori Kemmoku<sup>1</sup>, Júlia Adami Nogueira<sup>1</sup>, Jorge Vicente Lopes da Silva<sup>1</sup>; <sup>1</sup>Center for Information Technology Renato Archer

- 15:30 Wettability of Biodegradable Electrospun Scaffolds with Different Thicknesses for Tissue Engineering Application** **R.OR3.10**  
Vanessa Tiemi Kimura<sup>1,2</sup>, Carolina Fracalossi Redigueri<sup>1,3</sup>, Maria Helena Ambrosio Zanin<sup>2</sup>, Shu Hui Wang<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Pesquisas Tecnológicas do Estado de São Paulo, <sup>3</sup>Agência Nacional de Vigilância Sanitária
- 15:45 Thermal Stability of Dicationic Ionic Liquids: A Deep Study Regarding ILs Properties** **R.OR3.11**  
Clarissa Piccinin Frizzo<sup>1</sup>, Carla Andressa Almeida Farias<sup>1</sup>, Caroline Raquel Bender<sup>1</sup>, Paulo Roberto dos Santos Salbego<sup>1</sup>, Marcos Antonio Villetti<sup>1</sup>, Marcos Antonio Pinto Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Maria

## Poster presentations

### *SESSION R.P1 (17:45 - 19:30)*

- 17:45 Deposition and functionalization of TiO<sub>2</sub> thin films surface** **R.P1.1**  
Leonardo Francisco Gonçalves Dias<sup>1</sup>, Erika Soares Bronze-Uhle<sup>2</sup>, Luciana Daniele Trino<sup>2</sup>, Paulo Noronha Lisboa-Filho<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>2</sup>Universidade Estadual Paulista - Campus Bauru
- 17:45 Design and Synthesis of Hybrid Mesoporous Materials as "Smart" System for Anticancer Drug Delivery** **R.P1.2**  
Heveline Dal Magro Follmann<sup>1,2</sup>, Osvaldo Novais Oliveira Jr<sup>2</sup>, Rafael Silva<sup>3</sup>, Tewodros Asefa<sup>1</sup>; <sup>1</sup>Rutgers University, <sup>2</sup>Instituto de Física de São Carlos, <sup>3</sup>Universidade Estadual de Maringá
- 17:45 Formation of TiO<sub>2</sub> by using pulsed current anodization on polished and electropolished titanium substrates** **R.P1.3**  
Heloisa Andréa Acciari<sup>1,2,3,4</sup>, Victória da Costa Marba<sup>2,4</sup>, Natal Nerímio Regone<sup>3</sup>, Eduardo Norberto Codaro<sup>4</sup>; <sup>1</sup>UNIVERSIDADE ESTADUAL PAULISTA "JÚLIO DE MESQUITA FILHO", <sup>2</sup>FEG, <sup>3</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>4</sup>Faculdade de Engenharia
- 17:45 Cell viability evaluation in contact with compositions based on calcium aluminate cement** **R.P1.4**  
Ivone Regina de Oliveira<sup>1</sup>, Renata Martins Parreira<sup>1</sup>, Cristina Pacheco-Soares<sup>1</sup>, Larissa M. S. de Castro<sup>2</sup>, Paulo Tambasco Oliveira<sup>2</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Universidade de São Paulo
- 17:45 In vitro properties of compositions based on calcium aluminate cement** **R.P1.5**  
Larissa Santos Reis<sup>1</sup>, Renata Martins Parreira<sup>1</sup>, Newton Soares Silva<sup>1</sup>, Ivone Regina de Oliveira<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba
- 17:45 Study of the interaction of polygodial with membrane models of microorganisms** **R.P1.6**  
Giulia Elisa Guimarães Gonçalves<sup>1</sup>, Kaidu Hanashiro Barrosa<sup>1</sup>, João Henrique Ghilardi Lago<sup>1</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 VIOLACEIN INTERACTION STUDY ON MEMBRANE MODELS** **R.P1.7**  
Karine Damaceno Souza<sup>1</sup>, Giselle Justo Zenker<sup>1</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

- 17:45 Raman spectroscopy to identify active flavonoids against malaria and leishmaniasis** **R.P1.8**  
Renata Cristina de Paula<sup>1</sup>, Adriano Luiz de Queiroz<sup>1</sup>, Diego Mendes dos Santos<sup>1</sup>, Karen Ferraz Faria<sup>1</sup>, Iasmin Cunha Araujo<sup>1</sup>, Alexandre Marletta<sup>1</sup>, Alaide Braga de Oliveira<sup>2,3</sup>, Sydnei Magno da Silva<sup>1</sup>, Raigna Augusta da Silva Zadra Armond<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Universidade Federal do Pará
- 17:45 Magnesium alloy: evaluation of biodegradability** **R.P1.9**  
 Ronaldo Veronês do Nascimento<sup>1</sup>, Angela Beatriz Coelho Arnt<sup>1</sup>, Marcio Roberto da Rocha<sup>2</sup>, Steferson Luiz Stares<sup>1</sup>, Jamile Thön Langbehn<sup>1</sup>, Fábio Antonio Xavier<sup>2</sup>, Hector Amaro Virginia<sup>1</sup>; <sup>1</sup>Universidade do Extremo Sul Catarinense, <sup>2</sup>Universidade Federal de Santa Catarina
- 17:45 Alloy evaluation Ti-35Nb-7Zr and its basic elements of osteoblastic activity: in vitro study** **R.P1.10**  
Daphne de Camargo Reis Mello<sup>1</sup>, Fabia Zampieri D'Antola de Mello<sup>2</sup>, Bento Ferreira<sup>2</sup>, Luana Marotta de Vasconcellos<sup>1</sup>, Sandra Giacomini Schneider<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>2</sup>Escola de Engenharia de Lorena/USP
- 17:45 Ti alloys may induce modulatory cytokines profiles on macrophages RAW 264.7.** **R.P1.11**  
 Lais Siebra de Brito Ramos<sup>1</sup>, Felipe Oliveira<sup>1</sup>, Daphne de Camargo Reis Mello<sup>1</sup>, Carlos Alberto Alves Cairo<sup>2</sup>, Luis Gustavo Oliveira de Vasconcellos<sup>1</sup>, Luciane Dias Oliveira<sup>1</sup>, Luana Marotta de Vasconcellos<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho, <sup>2</sup>Ciência e Tecnologia Espacial
- 17:45 Flutamide Nanocrystals as an Alternative for Prostate Cancer Treatment** **R.P1.12**  
Letícia Paifer Marques<sup>1</sup>, Francisco Benedito Teixeira Pessine<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Magnetic nanoparticles surface modified with thermoresponsive P(NIPAAm-co-DMAAm) copolymers for methotrexate delivery.** **R.P1.13**  
Anna Carolina Telatin Tognolo<sup>1</sup>, Jaime Ricardo Vega Chacon<sup>1</sup>, Juliana Cristina Freitas<sup>2</sup>, Maria Gabriela Nogueira Campos<sup>2</sup>, Miguel Jafelicci Júnior<sup>1</sup>, Rodrigo Fernando Costa Marques<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Universidade Federal de Alfenas
- 17:45 Characterization of carboxymethyl chitosan hydrogel prepared in [DBU][Ac] and their potential application for the removal of lead ions from water** **R.P1.14**  
Kessily Barbosa Rufato<sup>1</sup>, Cátia Santos Nunes<sup>1</sup>, Gabriela Maria Matos Demiti<sup>1</sup>, Diego Alberto dos Santos Yamazaki<sup>1</sup>, Gisele de Freitas Gauze Bandoch<sup>1</sup>, Pedro Vinicius de Assis Bueno<sup>2</sup>, Edvani Curti Muniz<sup>1,3,4</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Instituto de Química - USP, <sup>3</sup>Universidade Paranaense, <sup>4</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Mesoporous silica modified with Flufenamic acid for non-targeted cells protection prior radiation therapy** **R.P1.15**  
Giovanna Lara<sup>1</sup>, Alexandre Alberto Chaves Cotta<sup>1</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear

- 17:45 Production of FA/HA(<sup>64</sup>Cu-<sup>32</sup>P) nanorods as theranostics nanoagents for osteosarcoma** **R.P1.16**  
Marcelo Fernandes Cipreste<sup>1</sup>, Michele Rocha Rezende<sup>1</sup>, Alexandre Alberto Chaves Cotta<sup>1</sup>, Alexandre Soares Leal<sup>1</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Synthesis and characterization of Cu-doped hydroxyapatite nanorods for cancer diagnosis** **R.P1.17**  
Michele Rocha Rezende<sup>1</sup>, Marcelo Fernandes Cipreste<sup>1</sup>, Fermin Herrera Aragón<sup>1</sup>, Alexandre Soares Leal<sup>1</sup>, Waldemar Augusto de Almeida Macedo<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Nanocomposites of boron nitride nanotubes and copper nanoparticles for diagnostics and cancer therapy** **R.P1.18**  
Diego Santos Oliveira<sup>1</sup>, Tiago Hilário Ferreira<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Improvement of bone healing process by association of a carbon biomaterial to lasertherapy** **R.P1.19**  
Gisele Amaral-Labat<sup>1</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>1</sup>, Patrícia Almeida<sup>2</sup>, Rodney Capp Pallotta<sup>2</sup>, Jossano Saldanha Marcuzzo<sup>3</sup>, Romildo Torres da Silva<sup>2</sup>, Rachel Bharbara Maccheronio Dalmaso<sup>2</sup>, Rodrigo Labat Marcos<sup>2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Nove de Julho, <sup>3</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Nanofibers with magnetic hydroxyapatite nanoparticles as dual treatment for cancer** **R.P1.20**  
Ana Paula Figueiredo Monteiro<sup>1</sup>, Rubén Dario Sinisterra<sup>1</sup>, María Esperanza Cortés<sup>2</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Universidade Federal De Minas Gerais
- 17:45 Biocompatibility evaluation of the Ti-35Nb-7Zr compared to Ti-Cp.** **R.P1.21**  
Fabia Zampieri D'Antola de Mello<sup>1</sup>, Daphne de Camargo Reis Mello<sup>2</sup>, Beatriz Zuleika de Macedo<sup>1</sup>, Luana Marotta Vasconcellos<sup>2</sup>, Sandra Giacomini Schneider<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP, <sup>2</sup>Universidade Júlio de Mesquita Filho
- 17:45 Coating nanostructured lipid carriers with hyaluronic acid for modified release of local anesthetic: Preparation and characterization** **R.P1.22**  
Renato Grillo<sup>1</sup>, Leonardo Fernandes Fraceto<sup>2</sup>, Eneida de Paula<sup>3</sup>, Daniele Ribeiro de Araujo<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC, <sup>2</sup>UNESP - Campus Sorocaba, <sup>3</sup>Universidade Estadual de Campinas
- 17:45 Evaluation of cytotoxicity and genotoxicity of polyetheramines and polyethylenimine in CHO-K1 cells.** **R.P1.23**  
Eduardo F Molina<sup>1</sup>, Leniher Castan<sup>1</sup>, Cristiano José da Silva<sup>1</sup>, Raquel Alves Santos<sup>1</sup>; <sup>1</sup>Universidade de Franca
- 17:45 Medical device based-polymer conjugated in natural rubber matrix to application in neonatal phototherapy** **R.P1.24**  
Nathália Oliveira Braga<sup>1</sup>, Dalita G. S. M. Cavalcante<sup>1</sup>, Andressa Silva Gomes<sup>1</sup>, Rodrigo Fernando Bianchi<sup>2</sup>, Aldo Eloizo Job<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Universidade Federal de Ouro Preto

- 17:45 3D structuring of PEEK by means of Additive Manufacturing SLS process R.P1.26**  
 Cristiane Agra Pimentel<sup>1</sup>, Rodrigo Alvarenga Rezende<sup>1,2</sup>, Marcelo Fernandes Oliveira<sup>2</sup>, Paulo Inforcatti Neto<sup>2</sup>, Flavia Suzany Ferreira dos Santos<sup>1</sup>, Mayelli Dantas de Sá<sup>1</sup>, Valéria Pereira Ferreira<sup>1</sup>, Jorge Vicente Lopes da Silva<sup>2</sup>, Marcus Vinicius de Lia Fook<sup>1</sup>; <sup>1</sup>Universidade Federal de Campina Grande, <sup>2</sup>Centro de Tecnologia da Informação Renato Archer
- 17:45 A biomimetic urethanesil multifunctional adhesive for medical and dental implants R.P1.27**  
Taína Zampieri Fermino<sup>1</sup>, Ubirajara Pereira Rodrigues Filho<sup>2</sup>, Klaus Rischka<sup>3</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP, <sup>2</sup>Instituto de Química de São Carlos, <sup>3</sup>Fraunhofer Institute for Manufacturing Technology and Advanced Materials
- 17:45 Characterization of lyophilized bentonitic clays for cosmetics application R.P1.28**  
Jamile Thön Langbehn<sup>1</sup>, Maciele Cristina Pegoretti Machado<sup>1</sup>, Camila Machado de Oliveira<sup>2</sup>, Tiago Elias Allievi Frizon<sup>1</sup>, Michael Peterson<sup>1</sup>; <sup>1</sup>Universidade do Extremo Sul Catarinense, <sup>2</sup>Universidade Federal de Santa Catarina
- 17:45 Optimization of oxide materials synthesis employing microwave radiation as heating source and the application of these materials as hemostatic coagulation agents. R.P1.29**  
 Gabriel Zazeri<sup>1</sup>, Ana Paula Ribeiro Povinelli<sup>1</sup>, Juliana Bergamasco<sup>1</sup>, Vinicius Litrenta Medeiros<sup>1</sup>, Alex Silva Paula<sup>1</sup>, José Geraldo Nery<sup>1</sup>; <sup>1</sup>UNESP - Instituto de Biologia, Letras e Ciências Exatas de São José do Rio Preto
- 17:45 Optimized Rhodamine B labeled mesoporous silica nanoparticles as fluorescent scaffolds for the immobilization of photosensitizers: a theranostic platform for optical imaging and photodynamic therapy R.P1.30**  
Bianca Martins Estevão<sup>1,2,3</sup>, Ivana Miletto<sup>3</sup>, Noboru Hioka<sup>1</sup>, Leonardo Marchese<sup>3</sup>, Enrica Gianotti<sup>3</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Instituto de Física de São Carlos - Universidade de São Paulo, <sup>3</sup>Università del Piemonte Orientale
- 17:45 Bio-corrosion of orthodontics appliances: The case of short face patients R.P1.31**  
Rene Pfeifer<sup>1</sup>, Marcelo Huguenin Maia da Costa<sup>2</sup>, Leonardo Drumond da Silva<sup>3</sup>, Priscila Tamiasso Martinhon<sup>1</sup>, Célia Regina Sousa da Silva<sup>1</sup>, Marco Antônio Chaer Nascimento<sup>1</sup>; <sup>1</sup>Instituto de Química / UFRJ, <sup>2</sup>Pontifícia Universidade Católica do Rio de Janeiro, <sup>3</sup>Universidade do Grande Rio Professor José de Souza Herdy
- 17:45 Hybrid BNNT/NiFe<sub>2</sub>O<sub>4</sub> as an innovative system for magnetohyperthermia R.P1.32**  
Thaylice Cristina Sampaio Cabral<sup>1</sup>, Patrícia Mariana Alves Caetano<sup>1</sup>, Adriana Silva de Albuquerque<sup>1</sup>, José Domingos Ardisson<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>, Tiago Hilário Ferreira<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Addition of chlorhexidine microparticles improves resin dental sealants properties R.P1.33**  
Monica Yamauti<sup>1</sup>, Jacqueline Santiago Nojosa<sup>2</sup>, Juliano Sartori Mendonça<sup>2</sup>, Carolina Alexandrino Alencar<sup>2</sup>, Rinaldo dos Santos Araújo<sup>3</sup>, Amanda P. M. P. Alcantara<sup>3</sup>, Lidiany Karla Rodrigues<sup>2</sup>, Jacqueline Santiago Nojosa<sup>4</sup>; <sup>1</sup>Universidade Federal de Minas Gerais, <sup>2</sup>Universidade Federal do Ceará, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia do Ceará, <sup>4</sup>Universidade Federal do Amapá
- 17:45 Hesperidin nanocrystals: a natural support for reconstruction and maintenance of healthy capillaries in the skin under the eyes R.P1.34**  
Danijela Stanisic<sup>1</sup>, Ljubica Tasic<sup>1</sup>, Leticia Liu<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP

- 17:45 Highly efficient treatment of breast cancer based on photodynamic effects of nanophotosensitizer R.P1.35**  
Leonardo Barcelos de Paula<sup>1</sup>, Maryanne Trafani de Melo<sup>1</sup>, Antonio Claudio Tedesco<sup>1</sup>; <sup>1</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto - USP
- 17:45 Crystal structure dependence of titania microspheres upon bioactivity R.P1.36**  
Camila Bussola Tovani<sup>1</sup>, Osvaldo Antonio Serra<sup>2</sup>, Ana Paula Ramos<sup>2</sup>;  
<sup>1</sup>Universidade de São Paulo, <sup>2</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto - USP
- 17:45 Folic acid-ferrocene materials for application in targeted chemotherapy. R.P1.37**  
Diego Luan Bertuzzi<sup>1</sup>, Tiago Branco Becher<sup>1</sup>, Catia C. C. Ornelas Megiatto<sup>1</sup>;  
<sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Carbon Nanohybrid to Application in Biosensors Platform R.P1.38**  
Priscila Dias Mendonça<sup>1</sup>, Elaine Cavalcanti Rodrigues Vaz<sup>1</sup>, Reiga Ramalho Ribeiro<sup>1</sup>, Rosa Fireman Dutra<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 17:45 Fibrin fiber interfaces for proliferation of mesenchymal stem cells R.P1.39**  
Amanda Gomes Marcelino Perez<sup>1</sup>, Ana Amélia Rodrigues<sup>2</sup>, Andréa Arruda Martins Shimojo<sup>1</sup>, Bruna Alice Gomes de Melo<sup>1</sup>, Willian Dias Belangero<sup>2</sup>, Maria Helena Andrade Santana<sup>1</sup>; <sup>1</sup>School of Chemical Engineering, University of Campinas, <sup>2</sup>Faculty of Medical Sciences, University of Campinas
- 17:45 Distribution of gold nanoparticles on biomimetic membranes R.P1.40**  
Nivia Salles Santos, Antonio C. C. Migliano, Dayane Batista Tada
- 17:45 Comparative study of bone tissue accelerated regeneration by latex membranes from Hevea brasiliensis and Hancornia speciosa R.P1.41**  
Juliana Ferreira Floriano<sup>1</sup>, Fausto Capuano Neto<sup>2</sup>, Carlos F. O. Graeff<sup>1</sup>;  
<sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>Universidade Júlio de Mesquita Filho
- 17:45 Poly(vinylidene-trifluoroethylene)/barium titanate composite scaffolds for healing of bone defects of rabbit tibiae. R.P1.42**  
Rossano Gimenes<sup>1</sup>, Luziane Rosa Simões<sup>1</sup>, Melina Espanhol Silva<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Itajubá
- 17:45 A new setup for the electrospinning of meniscus-like polymeric scaffolds for applications in regenerative medicine R.P1.43**  
Thiago Domingues Stocco<sup>1</sup>, Bruno Vinícius Manzolli Rodrigues<sup>1</sup>, Fernanda Roberta Marciano<sup>1</sup>, Anderson Oliveira Lobo<sup>1</sup>; <sup>1</sup>Laboratory of Biomedical Nanotechnology, Institute of Research and Development, University of Vale do Paraiba, Sao Jose dos Campos, SP, Brazil
- 17:45 Cancer cell membrane-coated gold nanorods: multifunctional systems for cancer therapy R.P1.44**  
Valeria Spolon Marangoni<sup>1</sup>, Juliana Cancino Bernardi<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>;  
<sup>1</sup>University of Sao Paulo
- 17:45 Papain immobilization by covalent bond with hybrid support containing zinc oxide nanoparticles and chitosan R.P1.45**  
Thayllan Teixeira Bezerra<sup>1</sup>, Aurileide Maria Bispo Frazão Soares<sup>1</sup>, Lízia Maria Oliveira Gonçalves<sup>1</sup>, Lia Raquel Moura Silva<sup>1</sup>, Ruanna Dátila Silva Ferreira<sup>1</sup>, Anderson Nogueira Mendes<sup>1</sup>, Welter Cantanhêde<sup>1</sup>; <sup>1</sup>Federal University of Piauí
- 17:45 Synthesis of NaX and NaA zeolites employing conventional and microwave heating sources and their application as hemostatic coagulation agent. R.P1.46**  
Ana Paula Ribeiro Povinelli<sup>1</sup>, Gabriel Zazeri<sup>1</sup>, Juliana Bergamasco<sup>1</sup>, José Geraldo Nery<sup>1</sup>; <sup>1</sup>UNESP - Instituto de Biologia, Letras e Ciências Exatas de São José do Rio Preto

- 17:45 Ellagic acid modified by magnesium oxide nanoparticles: characterization and antileishmania activity towards Leishmania amazonensis promastigotes** **R.P1.47**  
Wallonilson Veras Rodrigues<sup>1</sup>, Lia Raquel Moura Silva<sup>1</sup>, Thayllan Teixeira Bezerra<sup>1</sup>, Michel Muálem de Moraes Alves<sup>1</sup>, Fernando Aécio de Amorim Carvalho<sup>1</sup>, Mariana Helena Chaves<sup>1</sup>, Welter Cantanhêde<sup>1</sup>; <sup>1</sup>Federal University of Piauí
- 17:45 PLA nanoparticles containing dapson: a novel controlled release formulation for the treatment of Hansen's disease** **R.P1.48**  
Vananélia Pereira Nunes Geraldo<sup>1</sup>, Ieda Maria Martinez Paino<sup>1</sup>, Valtencir Zucolotto<sup>1</sup>, Osvaldo Novais Oliveira Jr<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Cell response on the Ti15Zr alloy surface after TiO<sub>2</sub> nanotubes growth** **R.P1.49**  
Reginaldo Toshihiro Konatu<sup>1</sup>, reginaldo konatu<sup>2</sup>, Reginaldo T Konatu<sup>2</sup>, Carlos Roberto Grandini<sup>3</sup>, Ketul C Popat<sup>4</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá, <sup>2</sup>Pontifícia Universidade Católica do Paraná, <sup>3</sup>Faculdade de Ciências/Bauru, <sup>4</sup>Colorado State University
- 17:45 Cytocompatibility evaluation of Ti-Nb and Ti-Nb-Cu alloys produced by laser on Ticp surfaces.** **R.P1.50**  
Lisiane Rocha Azevedo de Carvalho<sup>1</sup>, Adriana da Silva Santos Duarte<sup>1</sup>, Sara Teresinha Olalla Saad<sup>1</sup>, Ângela Cristina Malheiros Luzo<sup>1</sup>, João Batista Fogagnolo<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Effect of TiO<sub>2</sub> nanoporous size on cell viability** **R.P1.51**  
Elisa Marchezini Rodrigues<sup>1</sup>, Ana Paula dos Reis Weitzel<sup>1</sup>, Camila Jaques Rosário<sup>1</sup>, Larissa Mara Batista Duarte<sup>1</sup>, Maximiliano Delany Martins<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Synthesis of nanozeolites using microwave radiation as source of heat and their topographic analyses by Atomic Force Microscopy**  
 Vinicius Litrenta Medeiros<sup>1</sup>, Gabriel Zazeri<sup>1</sup>, Ana Paula Ribeiro Povinelli<sup>1</sup>, Juliana Bergamasco<sup>1</sup>, José Geraldo Nery<sup>1</sup>; <sup>1</sup>UNESP - Instituto de Biologia, Letras e Ciências Exatas de São José do Rio Preto

## Tuesday, September 27<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION R.OR4 (09:45 - 10:45) - Room Carvalho II*

- 09:45 Enriched biological matrices for tissue engineering applications** **R.OR4.12\***  
Francesca Boccafoschi<sup>1</sup>, Luca Fusaro<sup>1</sup>, Martina Ramella<sup>1</sup>, Mario Cannas<sup>2</sup>;  
<sup>1</sup>University of Piemonte Orientale, <sup>2</sup>Università del Piemonte Orientale
- 10:15 Poly(acrylic acid)/pluronic F127 double network hydrogels for tunable nitric oxide delivery** **R.OR4.13**  
Mathilde Champeau<sup>1</sup>, Lucas Militão<sup>1</sup>, Marcelo Ganzarolli de Oliveira<sup>1</sup>;  
<sup>1</sup>Institute of Chemistry-UNICAMP

- 10:30 Effect of alignment on PCL/gelatin electrospun nanofibers** **R.OR4.14**  
Felipe Castro Menezes<sup>1</sup>, Rosane Michele Duarte Soares<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul

**SESSION R.OR5 (11:15 - 12:00) - Room Carvalho II**

- 11:15 Evaluation of mechanical properties of colored dental zirconia after accelerated aging** **R.OR5.15**  
Madalena Pinheiro Dias Engler<sup>1</sup>, Caroline Freitas Rafael<sup>1</sup>, Bruno Alexandre Henriques<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>, Cláudia Angela Maziero Volpato<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina
- 11:30 Influence of the Ultraviolet-Light Irradiation on Antifungal Properties of  $\alpha$ -Ag<sub>2</sub>WO<sub>4</sub> Crystals** **R.OR5.16**  
Murilo Pires de Lima<sup>1</sup>, Isabela Rosado Belê<sup>1</sup>, Mateus Vinicius de Paiva<sup>1</sup>, Rodrigo Furquim Ghiraldi<sup>1</sup>, Juliana Feijó de Souza Daniel<sup>1</sup>, Walmir Eno Pöttker<sup>1</sup>, Elson Longo<sup>2</sup>, Felipe Almeida La Porta<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 11:45 Construction and characterization of non-enzymatic glucose sensor from recycling of Co, Cu and Mn from spent batteries.** **R.OR5.17**  
Livia Serra Selvatici<sup>1</sup>, Luiza Botan Favaleza<sup>1</sup>, Eduardo dos Santos Loureiro<sup>1</sup>, Pedro Vitor Morbach Dixini<sup>1</sup>, Marcos Benedito Jose de Freitas<sup>1</sup>, Vinicius Guilherme Celante<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo

**SESSION R.OR6 (14:00 - 16:15) - Room Carvalho II**

- 14:00 Innovative biomaterials for drug delivery applications based on dendrimers, polymer nanoparticles and hydrogels** **R.OR6.18\***  
Catia C. C. Ornelas Megiatto<sup>1</sup>, Tiago Branco Becher<sup>1</sup>, Diego Luan Bertuzzi<sup>1</sup>, Miguel Ramos Jr.<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 14:30 Evaluation of Phase Separation Mechanism in Blends of Fibroin and Alginate** **R.OR6.19**  
Laise Maia Lopes<sup>1</sup>, Mariana Agostini de Moraes<sup>1,2</sup>, Marisa Masumi Beppu<sup>1</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>Federal University of São Paulo
- 14:45 Tensile Testing of PCL/Gelatin Electrospun Scaffolds with Different Thicknesses** **R.OR6.20**  
Vanessa Tiemi Kimura<sup>1,2</sup>, Carolina Fracalossi Redigueri<sup>1,3</sup>, Maria Helena Ambrosio Zanin<sup>2</sup>, Shu Hui Wang<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Pesquisas Tecnológicas do Estado de São Paulo, <sup>3</sup>Agência Nacional de Vigilância Sanitária
- 15:00 Tracking SPS diffusion in a chitosan/carboxymethyl cellulose (Chi/CMC) LbL coating** **R.OR6.21**  
Thiago Bezerra Taketa<sup>1</sup>, Danilo Martins dos Santos<sup>2</sup>, Anderson Fiamingo<sup>2</sup>, Marisa Masumi Beppu<sup>1</sup>, Sérgio Paulo Campana Filho<sup>2</sup>, Robert E Cohen<sup>3</sup>, Michael F Rubner<sup>3</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>University of Sao Paulo, <sup>3</sup>Massachusetts Institute of Technology
- 15:15 Immobilization of silver nanoparticles on non-modified cellulose films using room-temperature ionic liquid** **R.OR6.22**  
Arthur Matsudo Garcia<sup>1</sup>, Ana M. A. Lieberatore<sup>1</sup>, Ivan H. J. Koh<sup>1</sup>, Fernanda Ferraz Camilo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo

- 15:30 ON SPIN HAMILTONIAN FITS TO MÖSSBAUER SPECTRA OF  $\text{CoFe}_2\text{O}_4$  MAGNETIC FLUID FUNCTIONALIZED WITH MAURITIA FLEXUOSA OIL** **R.OR6.23**  
Jose Higino Dias Filho<sup>1</sup>, Jorge Luis Lopez Aguilar<sup>2</sup>, Roberto Magalhães Paniago<sup>3</sup>, Renato Dourado Maia<sup>1</sup>, Wesley de Oliveira Barobosa<sup>1</sup>; <sup>1</sup>Universidade Estadual de Montes Claros, <sup>2</sup>Universidade Federal do Acre, <sup>3</sup>Universidade Federal de Minas Gerais

## Poster presentations

### SESSION R.P2 (17:45 - 19:30)

- 17:45 Ketoconazole nanoemulsion for topical delivery: Development and in vitro release** **R.P2.52**  
Vania Emerich Bucco de Campos<sup>1</sup>, Vivian Saez Martínez<sup>1</sup>, Cristal Cerqueira-Coutinho<sup>1</sup>, Igor Tenório Soares<sup>1</sup>, Claudia Regina Elias Mansur<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 17:45 Synthesis and characterization of starch, cellulose and chondroitin sulfate membranes and studies of controlled release** **R.P2.53**  
Bárbara Fornaciari<sup>1</sup>, Gizilene Maria de Carvalho<sup>1</sup>, Paula Cristina Faria-Tischer<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Biobased Hydrogels** **R.P2.54**  
Rafael Natal L de Menezes<sup>1</sup>, Giovanni Bortoloni Perin<sup>1</sup>, Guilherme Lopes do Lago<sup>1</sup>, Ricardo Santiago de Oliveira Gouvea<sup>1</sup>, Maria Isabel Felisberti<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Influence of the Reuse of the Electrolytic Solution on the Properties of Hydroxyapatite Coatings Produced by Plasma Electrolytic Oxidation of Grade 4 Titanium** **R.P2.55**  
César A Antonio<sup>1,2</sup>, Elidiane Cipriano Rangel<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>; <sup>1</sup>UNESP - Campus Sorocaba, <sup>2</sup>FATEC - SO. Faculdade de Tecnologia de Sorocaba
- 17:45 Growth and surface characterization of TiNb nanostructured thin films** **R.P2.56**  
Denise A. Tallarico<sup>1</sup>, Nilson T. C. Oliveira<sup>2</sup>, Angelo Luiz Gobbi<sup>3</sup>, Pedro I. Paulin Filho<sup>2</sup>, Pedro A. P. Nascente<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>3</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 17:45 RETICULATED VITREOUS CARBON DOPED WITH NANO SILVER METALLIC PARTICLES FOR ANTIMICROBIAL INHIBITORY APPLICATION** **R.P2.57**  
Ana Paula Silva Oliveira<sup>1</sup>, Silvia Oishi<sup>1</sup>, Cristiane Yoga Ito<sup>2</sup>, Jossano Saldanha Marcuzzo<sup>1</sup>, Emerson Sarmento Gonçalves<sup>3</sup>, Mauricio Ribeiro Baldan<sup>1</sup>; <sup>1</sup>Instituto Nacional de Pesquisas Espaciais, <sup>2</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho", <sup>3</sup>Divisão de Materiais
- 17:45 Silver nanoparticles in recoating for biomaterials** **R.P2.58**  
Neide Aparecida Mariano<sup>1</sup>, Virgílio Pereira Ricci<sup>1</sup>, Guilherme Vilela Ferreira<sup>1</sup>, Luci Cristina de Oliveira Vercik<sup>2</sup>, Eliana Cristina da Silva Rigo<sup>2</sup>, Maria Gabriela Nogueira Campos<sup>2</sup>, Mérilin Cristina dos Santos Fernandes<sup>1</sup>, Lucíola Lucena de Sousa<sup>1</sup>; <sup>1</sup>Universidade Federal de Alfenas, <sup>2</sup>Universidade de São Paulo

- 17:45 Thermal-pH magnetic Pectin derivative microgels for controlled release of curcumin** **R.P2.59**  
Elizangela Messias Almeida<sup>1</sup>, Maroanne Farinácio Dos Santos<sup>1</sup>, Alessandro Francisco Martins<sup>2</sup>, Ismael Casagrande Bellettini<sup>3</sup>, Edvani Curti Muniz<sup>1,4,2</sup>;  
<sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Tecnológica Federal do Paraná, <sup>3</sup>Universidade Federal de Santa Catarina, <sup>4</sup>Universidade Paranaense
- 17:45 Nano suspensions: a modern strategy for delivery of modified drugs for intravenous use (Warfarin and Atorvastatin)** **R.P2.60**  
Francieli Crivellaro<sup>1</sup>, Francisco Benedito Teixeira Pessine<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Comparison of two MCM-41 silica particles for the controlled release of semiochemicals** **R.P2.61**  
Magali Aparecida Rodrigues<sup>1</sup>, Márcia Aparecida da Silva<sup>2</sup>, Márcio Wandré Morais de Oliveira<sup>3</sup>, Luciano Paulino Silva<sup>3</sup>, Iolanda Midea Cuccovia<sup>2</sup>, Marcia Carvalho de Abreu Fantini<sup>4</sup>, Maria Carolina Blassioli Moraes<sup>3</sup>, Marcelo Porto Bemquerer<sup>3</sup>; <sup>1</sup>Centro Universitário Planalto do Distrito Federal, <sup>2</sup>Instituto de Química - USP, <sup>3</sup>Empresa Brasileira de Pesquisa Agropecuária, <sup>4</sup>Instituto de Física-USP
- 17:45 Multifunctional Mesoporous Silica Nanoparticles (MCM-41) for Targeted Drug Delivery** **R.P2.62**  
Laura de Melo Corgosinho<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>, Luiza Baptista de Oliveira Freitas<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Thermo- and pH-responsive polyelectrolyte complex from quaternized poly[(2-dimethylamino)ethyl methacrylate] and pectin for colon-specific delivery of curcumin** **R.P2.63**  
Maroanne Farinácio Dos Santos<sup>1</sup>, Elizangela Messias Almeida<sup>1</sup>, Edvani Curti Muniz<sup>1,2,3</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Paranaense, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 17:45 The in vitro evaluation of natural rubber with silver nanoparticles films** **R.P2.64**  
Caroline Silva Danna<sup>1,2</sup>, Dalita G. S. M. Cavalcante<sup>2</sup>, Andressa Silva Gomes<sup>2</sup>, Leandra Ernst Kerche-Silva<sup>3,2</sup>, Eidi Yoshihara<sup>4</sup>, Igor Osorio Roman<sup>2</sup>, Ricardo Flávio Aroca<sup>5</sup>, Aldo Eloizo Job<sup>2</sup>; <sup>1</sup>Faculdade de Presidente Prudente, <sup>2</sup>FCT-UNESP Campus de Presidente Prudente, <sup>3</sup>Universidade do Oeste Paulista, <sup>4</sup>Agência Paulista de Tecnologia de Agronegócios-Polo Regional Alta Sorocabana, <sup>5</sup>University of Windsor
- 17:45 Functionalization of Gold Nanoparticles with bioactive peptide** **R.P2.65**  
Alexandre Martins Santos<sup>1</sup>, Dayane Batista Tada<sup>1</sup>, Daniela Formaggio<sup>1</sup>, Denise Arruda<sup>2</sup>, Luiz Travassos<sup>3</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Universidade de Mogi das Cruzes, <sup>3</sup>Universidade de São Paulo
- 17:45 Influence of synthesis parameters of HA-Gd nanorods on the structural and morphological characteristics of the nanoparticles** **R.P2.66**  
Alan de Melo Antunes<sup>1</sup>, Marcelo Fernandes Cipreste<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Production study of chitosan microspheres for potential application as controlled drug delivery systems in medical textiles.** **R.P2.67**  
Caroline Santos Alves de Lima<sup>1</sup>, Sirlene Maria da Costa<sup>1</sup>, Humberto Gomes Ferraz<sup>1</sup>, Rita de Cássia Lacerda Brambilla Rodrigues<sup>1</sup>, Silgia Aparecida Costa<sup>1</sup>;  
<sup>1</sup>Universidade de São Paulo

- 17:45 Mesoporous Silica Nanoparticles functionalized with Poly-(ε-Caprotactone) as a strategy for gene delivery R.P2.68**  
Egídio Paulo Nhavene<sup>1</sup>, Gracielle Ferreira Andrade<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Morphological, physical and chemical evaluation of boron nitride nanotubes for boron neutron capture therapy R.P2.69**  
Amanda de Jesus Clemente<sup>1</sup>, Alexandre Soares Leal<sup>1</sup>, Edésia Martins Barros de Sousa<sup>1</sup>, Tiago Hilário Ferreira<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 DEVELOPMENT OF NEW DEVICE FOR MOLECULAR DIAGNOSTICS BASED ON NANOSTRUCTURED POLYANILINE FILMS DEPOSITED ON POLYESTER SUBSTRATES R.P2.70**  
Graciela da Costa Pedro<sup>1</sup>, Filipe Dione Souza Gorza<sup>1</sup>, Romario justino da silva<sup>1</sup>, Alicia Elizabeth Chávez Guajardo<sup>1</sup>, Juan Carlos Medina Llamas<sup>1</sup>, José Jarib Alcaraz Espinoza<sup>1</sup>, Celso Pinto de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 17:45 Immobilization of Emodin in Layer-by-Layer films for drug delivery systems R.P2.71**  
Paula Pereira Campos<sup>1</sup>, Marli Leite de Moraes<sup>2</sup>, Leonardo Fernandes Fraceto<sup>1</sup>, Marystela Ferreira<sup>3</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Sorocaba, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>3</sup>Universidade Federal de São Carlos - campus Sorocaba
- 17:45 The influence of the TiO<sub>2</sub> nanotubes diameter on the bacteria adhesion R.P2.72**  
Liliane Lelis Oliveira<sup>1</sup>, Ana lucia do Amaral Escada<sup>1</sup>, Cristiane Aparecida Pereira<sup>2</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá, <sup>2</sup>UNIVERSIDADE ESTADUAL PAULISTA "JÚLIO DE MESQUITA FILHO"
- 17:45 Nanostructuring of pva coating with metallic oxides of 3D printed scaffolds for bone tissue engineering R.P2.73**  
Raquel Couto de Azevedo Gonçalves Mota<sup>1,2</sup>, Lívia Rodrigues Menezes<sup>2</sup>, Emerson Oliveira da Silva<sup>2</sup>, Felipe Fortes Lima<sup>2</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas
- 17:45 Oxytocin release using natural rubber latex as support R.P2.74**  
Natan Roberto de Barros<sup>1</sup>, Matheus Carlos Romeiro Miranda<sup>1</sup>, Felipe Azevedo Borges<sup>1</sup>, Ricardo José de Mendonça<sup>2</sup>, Eduardo Maffud Cilli<sup>1</sup>, Rondinelli Donizetti Herculano<sup>3</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Universidade Federal do Triângulo Mineiro, <sup>3</sup>Faculdade de Ciências Farmacêuticas de Araraquara
- 17:45 New drug delivery system for oxytetracycline based on nanofibers of biodegradable polymers R.P2.75**  
Flávia Gontijo da Silva<sup>1</sup>, Alinne Damasia Martins Gomes<sup>1</sup>, Rubén Dario Sinisterra<sup>1</sup>, María Esperanza Cortés<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Mucoadherent PVA/HPMC hydrogel for topical nitric oxide release R.P2.76**  
Vicente Gomes Oliveira<sup>1</sup>, Marcelo Ganzarolli de Oliveira<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP
- 17:45 Composition-dependent osteoblast behavior on hybrid CaCO<sub>3</sub>/SrCO<sub>3</sub> coatings deposited on Ti surfaces R.P2.77**  
Marcos Antonio Eufrásio Cruz<sup>1</sup>, Amanda Natalina de Faria<sup>1</sup>, Pietro Ciancaglini<sup>1</sup>, Ana Paula Ramos<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Biofilm formed from organic-inorganic hybrid tri-ureasil PPO for transdermal drug delivery system. R.P2.78**  
Eduardo F Molina<sup>1</sup>, Natana Aparecida Jesus<sup>1</sup>, Pollyana Francielli Oliveira<sup>1</sup>, Ricardo A Furtado<sup>1</sup>, Denise Crispim Tavares<sup>1</sup>; <sup>1</sup>Universidade de Franca

- 17:45 Selective Laser Sintering of poly(vinyl alcohol) for the fabrication of scaffolds for *in vitro* studies** **R.P2.79**  
Camila Fernandes Higa<sup>1</sup>, Michelle Sostag Meruvia<sup>1</sup>, Fred Lacerda Amorim<sup>1</sup>, Marcelo Fernandes Oliveira<sup>2</sup>, Paulo Inforcatti Neto<sup>2</sup>, Jorge Vicente Lopes da Silva<sup>2</sup>; <sup>1</sup>Pontifícia Universidade Católica do Paraná, <sup>2</sup>Centro de Tecnologia da Informação Renato Archer
- 17:45 Antimicrobial application of PAN (polyacrylonitrile) derived activated carbon fibers fabric** **R.P2.80**  
 Gabriela de Moraes Gouvêa Lima, Gabriela dos Santos Simões, Isabela Maria Martins, Aline Chiodi Borges<sup>1</sup>, Jossano Saldanha Marcuzzo, Mauricio Ribeiro Baldan, Cristiane Yumi Koga-Ito; <sup>1</sup>ICT-Unesp de São José dos Campos
- 17:45 Development of parenteral nanoemulsion formulation of cyclosporine A** **R.P2.81**  
Daniela Kubota<sup>1</sup>, Francisco Benedito Teixeira Pessine<sup>1</sup>; <sup>1</sup>Instituto de Química - UNICAMP
- 17:45 CHEMICAL MODIFICATION AND IONIZING IRRADIATION OF POLY (BUTYLENE SUCCINATE) (PBS) USEFUL FOR CONTROLLED RELEASE OF SILYBIN** **R.P2.82**  
Letícia Pedretti Ferreira<sup>1</sup>, Fabio Cerdeira Lírio<sup>1</sup>, Marcio Nele de Souza<sup>1</sup>, José Carlos Pinto<sup>1</sup>, Fernando Gomes de Souza Junior<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 17:45 Microfluidic platforms for complexation of cationic liposome and small interfering RNA for application in gene therapy** **R.P2.83**  
 Ismail Es<sup>1</sup>, Meryem Tyrrasch Ok<sup>2</sup>, Marianna Teixeira de Pinho Favaro<sup>1</sup>, Marcelo Szymanski<sup>1</sup>, Adriano Rodrigues Azzoni<sup>3</sup>, Lucimara de La Torre<sup>1</sup>, Thays França Naves<sup>4</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>Massachusetts Institute of Technology, <sup>3</sup>São Paulo University, <sup>4</sup>Faculdade de Engenharia Química - UNICAMP
- 17:45 Effect of titanium with nanotopography on osteoblast differentiation and integrin expression in mesenchymal stem cells and calvarial cells** **R.P2.84**  
Pedro Flório<sup>1</sup>, Helena Bacha Lopes<sup>1</sup>, Paulo Tambasco Oliveira<sup>1</sup>, Adalberto Luiz Rosa<sup>1</sup>, Marcio Mateus Beloti<sup>1</sup>; <sup>1</sup>School of Dentistry of Ribeirão Preto, University of São Paulo
- 17:45 Functionalized titanium dioxide films prepared by sputtering for biomedical application** **R.P2.85**  
Orisson Ponce Gomes<sup>1</sup>, Erika Soares Bronze-Uhle<sup>2</sup>, José Humberto Dias da Silva<sup>1</sup>, Nilton Francelosi Azevedo Neto<sup>2</sup>, Paulo Noronha Lisboa-Filho<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>Programa de Pós-Graduação em Ciência e Tecnologia de Materiais
- 17:45 Non-covalent functionalization of carbon nanotubes with antitumoral aptamer: a preliminary physicochemical investigation** **R.P2.86**  
Mariana Botelho Barbosa<sup>1</sup>, Estefânia Mara do Nascimento Martins<sup>1</sup>, Thayana Furtado Teixeira<sup>1</sup>, Estér Figueiredo Oliveira<sup>1</sup>, Adelina Pinheiro Santos<sup>1</sup>, Antero Silva Ribeiro Andrade<sup>1</sup>, Clascídia A. Furtado<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 17:45 Ca/P rich nanostructured titania surface coating produced by anodic oxidation of titanium** **R.P2.87**  
Ana Paula dos Reis Weitzel<sup>1</sup>, Elisa Marchezini Rodrigues<sup>1</sup>, Camila Jaques Rosário<sup>1</sup>, Larissa Mara Batista Duarte<sup>1</sup>, Maximiliano Delany Martins<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear

- 17:45 PRELIMINARY ANALYSIS OF CORROSION RESISTANCE OF NEWLY DEVELOPED BETA TITANIUM ALLOYS** **R.P2.88**  
Júlia Frasnelli Matias Fernandes<sup>1</sup>, Nilson T. C. Oliveira<sup>2</sup>, Leonardo Contri Campanelli<sup>1</sup>, Claudemiro Bolfarini<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Mesoporous silica nanoparticles as vectors for gene therapy** **R.P2.89**  
Laura Cipriano Crapina<sup>1</sup>, Marcos Bizeto<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 Synthesis silver nanoparticles and antimicrobial activities** **R.P2.90**  
Lidiane Gonçalves Gonçalves<sup>1</sup>, Luiz Fernando Gorup<sup>1</sup>, Renan Aparecido Fernandes<sup>2</sup>, José Antônio Santos Souza<sup>2</sup>, Francisco Nunes de Souza Neto<sup>1</sup>, Andressa Mayumi Kubo<sup>1</sup>, Débora Barros Barbosa<sup>2</sup>, Elson Longo<sup>1</sup>, Emerson Rodrigues Camargo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Estadual Paulista
- 17:45 Corrosion resistance of Diamond-Like Carbon Films** **R.P2.91**  
Mário Almeida Araújo<sup>1</sup>, Taise Matte Manhabosco<sup>1</sup>, Jaqueline dos Santos Soares<sup>1</sup>, Ronaldo Junio Campos Batista<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto
- 17:45 Microfluidic Production of Chitosan Nanoparticles for Drug and Gene delivery** **R.P2.92**  
Amanda da Costa e Silva de Noronha Pessoa<sup>1</sup>, Caroline Casagrande Sipoli<sup>1</sup>, Lucimara Gaziola de la Torre<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química - UNICAMP
- 17:45 Hydrothermal Synthesis of hydroxyapatite nanoparticles decorated with silver nanoparticles for application in biomaterials** **R.P2.93**  
Jordanna Fernandes Assis<sup>1</sup>, F. H. Cristovan<sup>2</sup>, Dayane Batista Tada<sup>2</sup>, Tatiane Moraes Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás, <sup>2</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Characterization of the Ti10Mo8Nb alloy surface after TiO<sub>2</sub> nanotubes growth** **R.P2.94**  
João Pedro Aquiles Carobolante<sup>1</sup>, Roberto Zenhei Nakazato<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista-Campus de Guaratinguetá
- 17:45 Antimicrobial effects of zinc oxide nanoparticles modified with silver** **R.P2.95**  
Rayssa de Souza Lopes<sup>1</sup>, Tatiane Moraes Arantes<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 17:45 Chlorhexidine coating on TiO<sub>2</sub> nanotubes** **R.P2.96**  
Patricia Capellato<sup>1</sup>, Cecilia A. C. Zavaglia<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>UNESP Guaratinguetá
- 17:45 Novel cobalt releasing sol-gel derived bioactive glass for bone tissue engineering** **R.P2.97**  
Ana Celeste Ximenes Oliveira<sup>1</sup>, Breno Rocha Barrioni<sup>1</sup>, Maria de Fátima Leite<sup>1</sup>, Marivalda Magalhães Pereira<sup>1</sup>; <sup>1</sup>Universidade Federal de Minas Gerais
- 17:45 Calcium phosphate coated on Natural rubber latex for biological application** **R.P2.98**  
Rondinelli Donizetti Herculano<sup>1</sup>, Antonio Carlos Gustaldi<sup>2</sup>, Felipe Azevedo Borges<sup>2</sup>, Márcio Luiz dos Santos<sup>2</sup>, Edson Almeida Filho<sup>2</sup>, Matheus Carlos Romeiro Miranda<sup>2</sup>; <sup>1</sup>Faculdade de Ciências Farmacêuticas de Araraquara/UNESP, <sup>2</sup>Instituto de Química de Araraquara/UNESP
- 17:45 Development of an in vitro equivalent skin model to evaluate the penetration of hypericin** **R.P2.99**  
Thayz Ferreira Lima Morais<sup>1</sup>, Hui Ling Ma<sup>1</sup>, Claudia Bernal<sup>1,2</sup>, Virginia da Conceição Amaro Martins<sup>1,2</sup>, Ana Maria de Guzzi Plepis<sup>1,2</sup>, Janice Rodrigues Perussi<sup>1,2</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Instituto de Química de São Carlos

- 17:45 Study of the corrosion resistance of oxides obtained on Ti-30Ta alloy by anodization** **R.P2.100**  
Lai Kuan Yu<sup>1</sup>, Conceição Aparecida Matsumoto Dutra<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>, Roberto Zenhei Nakazato<sup>1</sup>; <sup>1</sup>UNESP Guaratinguetá
- 17:45 Analysis of annealing effects on osseointegration in vitro of TiO<sub>2</sub> coatings formed from Ti ATSM F67 e Ti ATSM F67** **R.P2.101**  
Anna Paulla Simon<sup>1</sup>, Amanda Santos de Lima<sup>1</sup>, Mariana de Souza Sikora<sup>1</sup>;  
<sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Influence of diffusional parameters on morphology of TiO<sub>2</sub> coatings and in its application as biomaterial** **R.P2.102**  
Anna Paulla Simon<sup>1</sup>, Amanda Santos de Lima<sup>1</sup>, Mariana de Souza Sikora<sup>1</sup>;  
<sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Coating Containing Mg-Doped Hydroxyapatite Produced using Plasma Electrolytic Oxidation Process** **R.P2.103**  
César A Antonio<sup>1,2</sup>, Elidiane Cipriano Rangel<sup>1</sup>, Nilson Cristino Cruz<sup>1</sup>, Manfredo Harri Tabacniks<sup>3</sup>, Adriana Oliveira Delgado-Silva<sup>4</sup>; <sup>1</sup>UNESP - Campus Sorocaba, <sup>2</sup>Faculdade de Tecnologia de Sorocaba, <sup>3</sup>Universidade de São Paulo, <sup>4</sup>Universidade Federal de São Carlos - Campus Sorocaba
- 17:45 Exposure Fungicide Cerconil WP®: effects on the chemical structure latex of rubber tree EXPOSURE FUNGICIDE CERCONIL WP®: EFFECTS ON THE CHEMICAL STRUCTURE OF RUBBER TREE** **R.P2.104**  
Jaqueline Nascimento Silva<sup>1</sup>, Carlos José Leopoldo Constantino<sup>2</sup>, Ana Paula Alves Favareto<sup>1</sup>, Patricia Alexandra Antunes<sup>1</sup>; <sup>1</sup>Universidade do Oeste Paulista, <sup>2</sup>Universidade Estadual Paulista - Campus de Presidente Prudente
- 17:45 Heat treatment of the Ti<sub>25</sub>Ta<sub>25</sub>Nb<sub>3</sub>Sn experimental alloy after rotatory swaging for biomedical applications** **R.P2.105**  
Celso Bortolini Júnior<sup>1</sup>, Reginaldo Toshihiro Konatu<sup>1</sup>, Victor Massaru Onoda<sup>1</sup>, Angelo Caporalli Filho<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista-Campus de Guaratinguetá
- 17:45 Influence of fluoride concentration in the osseointegration capacity of TiO<sub>2</sub> films grown from Ti ATSM F67 and Ti ATSM F67 by anodization** **R.P2.106**  
Mariana de Souza Sikora<sup>1</sup>, Anna Paulla Simon<sup>1</sup>, Amanda Santos de Lima<sup>1</sup>;  
<sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Nanofiber polycaprolactone / hydroxyapatite for bone tissue engineering synthesized via rotary jet spinning** **R.P2.107**  
TELMO MACEDO ANDRADE<sup>1</sup>, Telmo Macedo de Andrade<sup>1</sup>, Luana Marotta Reis de Vasconcellos<sup>2</sup>, Daphne de Camargo Reis Mello<sup>2</sup>, Lívia Aparecida Procópio<sup>2</sup>, Samira Esteves Afonso Camargo<sup>2</sup>, Anderson Oliveira Lobo<sup>1</sup>, Fernanda Roberta Marciano<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>ICT-Unesp de São José dos Campos
- 17:45 Production and characterization of poly(lactic acid)/carboapatite nanostructured and printing of potentially bioactive 3D scaffolds** **R.P2.108**  
Thiago Nunes Palhares<sup>1</sup>, Lívia Rodrigues Menezes<sup>1</sup>, Lia Souza Coelho<sup>2</sup>, Alexandre Malta Rossi<sup>3</sup>, Emerson Oliveira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro, <sup>2</sup>Universidade Federal Rural do Rio de Janeiro, <sup>3</sup>Centro Brasileiro de Pesquisas Físicas
- 17:45 Electrospun Fibers of Nanocomposites based on Poly(vinyl alcohol) and Zinc Oxide Nanoparticles** **R.P2.109**  
Daniel Ayarroio Seixas<sup>1</sup>, Yasmin Montero Quispe<sup>1</sup>, Everaldo Carlos Venancio<sup>1</sup>, José Carlos Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC

- 17:45 Study the influence of plastic deformation on the corrosion resistance of Ti30Ta alloy for biomedical applications. R.P2.110**  
Kerolene Barboza da Silva<sup>1</sup>, Reginaldo T Konatu<sup>1</sup>, Roberto Zenhei Nakazato<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista-Campus de Guaratinguetá
- 17:45 Injectable hydrogels for biomedical applications R.P2.111**  
Tiago Branco Becher<sup>1</sup>, Diego Luan Bertuzzi<sup>1</sup>, Miguel Ramos Jr.<sup>1</sup>, Catia C. C. Ornelas Megiato<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Antimicrobial Activity of Silver Nanoparticles Synthesized by Gamma Radiation R.P2.112**  
Andressa Mayumi Kubo<sup>1</sup>, Luiz Fernando Gorup<sup>1</sup>, Renan Aparecido Fernandes<sup>2</sup>, José Antônio Santos Souza<sup>2</sup>, Francisco Nunes de Souza Neto<sup>1</sup>, Débora Barros Barbosa<sup>2</sup>, Edson Roberto Leite<sup>1</sup>, Elson Longo<sup>1</sup>, Emerson Rodrigues Camargo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Estadual Paulista - Campus: Araçatuba
- 17:45 Controlled release of non-steroidal anti-inflammatory and anticancer drugs from hybrid materials. R.P2.113**  
Beatriz Bernardes Caravieri<sup>1</sup>, Eduardo Ferreira Molina<sup>1</sup>; <sup>1</sup>Universidade de Franca
- 17:45 Hydroxyapatites coating on Ti-7.5Mo alloy after TiO<sub>2</sub> nanotubes growth R.P2.114**  
Ana lucia do Amaral Escada<sup>1</sup>, Roberto Zenhei Nakazato<sup>1</sup>, Ana Paula Rosifini Alves Claro<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista-Campus de Guaratinguetá
- 17:45 Colloidal stability of silica nanoparticles with different functionalized surfaces prior to biological tests R.P2.115**  
Larissa Fernanda Ferreira<sup>1</sup>, Agustin Silvio Picco<sup>1</sup>, Mateus Borba Cardoso<sup>1</sup>; <sup>1</sup>Centro Nacional de Pesquisa em Energia e Materiais
- 17:45 Microfibre of PCL and PBAT used for Controlled Release Drug R.P2.116**  
Janice Caroline Hardt<sup>1</sup>, Andressa Giombelli Rosenberger<sup>1</sup>, Josiane Caetano<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 17:45 EFFECT OF IRRADIATION- $\gamma$  IN MICROSPHERES OF POLY (BUTYLENE SUCCINATE) AND EVALUATION OF THE MICROBIAL LOAD AFTER STERILIZATION. R.P2.117**  
Renata Cerruti da Costa<sup>1</sup>, Letícia Pedretti Ferreira<sup>1</sup>, Fernando Gomes de Souza Junior<sup>1</sup>, Priscilla Braga Bedor<sup>2</sup>; <sup>1</sup>Instituto de Macromoléculas Eloisa Mano/ Universidade Federal do Rio de Janeiro, <sup>2</sup>Departamento de Engenharia Química, Escola de Química, Universidade Federal do Rio de Janeiro
- 17:45 Impedance Evaluation Aluminum Cans with Diamond-like Carbon with Embedded TiO<sub>2</sub> Nanoparticles R.P2.118**  
Vinie Abreu Christino<sup>1</sup>, Vladimir Jesus Trava-Airoldi<sup>2</sup>, João Paulo Machado<sup>2</sup>, Anderson Oliveira Lobo<sup>1</sup>, Fernanda Roberta Marciano<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Use of microfibers Ecovio® for controlled release of ibuprofen R.P2.119**  
Janice Caroline Hardt<sup>1</sup>, Jorge William Engelmann<sup>1</sup>, Andressa Giombelli Rosenberger<sup>1</sup>, Josiane Caetano<sup>1</sup>, Douglas Cardoso Dragunski<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 17:45 Hybrid Scaffold of Poly (butylene succinate) and Gelatin for Cartilage Tissue Engineering R.P2.120**  
Roberta Viana Ferreira<sup>1</sup>, Danielle Marra Freitas Silva Azevedo<sup>1</sup>, Leon Miranda Costa<sup>1</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica de Minas Gerais

- 17:45 Nanoporous carboxylated polystyrene electrospun membranes for protein adsorption R.P2.121**  
RUBENIA SILVEIRA MONTE<sup>1</sup>, Alicia Elizabeth Chávez Guajardo<sup>1</sup>, Juan Carlos Medina Llamas<sup>1</sup>, José Jarib Alcaraz Espinoza<sup>1</sup>, Sandro Vagner de Lima<sup>2</sup>, Celso Pinto de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Universidade Federal do Ceará
- 17:45 New methodology to recovered Ti biomedical alloys using nanohydroxyapatite and carbon nanotubes for bone tissue regeneration R.P2.122**  
Natália Marassi Martinelli<sup>1</sup>, Maria Julia Galera Ribeiro<sup>1</sup>, Ritchelli Ricci<sup>1</sup>, João Paulo Machado<sup>2</sup>, Anderson Oliveira Lobo<sup>1</sup>, Fernanda Roberta Marciano<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Enhancement of Corrosion Resistance of Magnesium Alloy by Plasma Electrolytic Oxidation Using Bipolar and Unipolar Voltage. R.P2.123**  
Thaís Matiello Gonçalves<sup>1</sup>, Nilson Cristino Cruz<sup>2</sup>, Elidiane Cipriano Rangel<sup>1</sup>, Rafael Parra Ribeiro<sup>3</sup>, Livia Sottovia<sup>1</sup>, Fabio Rodrigues Orsetti<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Sorocaba, <sup>2</sup>UNESP - Campus Sorocaba, <sup>3</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Influence of sample preparation on the biaxial flexural strength test of a dental glass-ceramic R.P2.124**  
Anelise Simões Sampaio<sup>1</sup>, Edgar Dutra Zanotto<sup>1</sup>, Mariana de Oliveira Carlos Villas Boas<sup>1</sup>, Francisco Carlos Serbena<sup>2</sup>, Gelson Luís Adabo<sup>3</sup>, Diogo Longhini<sup>4</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Estadual de Ponta Grossa, <sup>3</sup>Faculdade de Odontologia de Araraquara/UNESP, <sup>4</sup>Faculdade de Odontologia de Araraquara
- 17:45 MICROFLUIDIC DEVICE BASED ON CONVECTIVE CONCENTRATION GRADIENT FOR DETERMINATION OF BACTERIAL CELL GROWTH R.P2.125**  
Franciele Flores Vit<sup>1</sup>, Aline Furtado Oliveira<sup>1</sup>, Marcelo Lancellotti<sup>2</sup>, Lucimara Gaziola de la Torre<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Surfaces of hyaluronic acid microparticles for interaction with the fibrin network from platelet-rich plasma and proliferation of mesenchymal stem cells R.P2.126**  
Andréa Arruda Martins Shimojo<sup>1</sup>, Bruna Alice Gomes de Melo<sup>1</sup>, Amanda Gomes Marcelino Perez<sup>1</sup>, Ângela Luzo<sup>2</sup>, Maria Helena Andrade Santana<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química-FEQ-UNICAMP, <sup>2</sup>Centro de Hematologia e Hemoterapia - Cordão umbilical
- 17:45 DIAMOND LIKE CARBON COATING IN VENTRICULAR ASSIST DEVICE R.P2.127**  
Rosa Corrêa Leoncio de Sá<sup>1</sup>, Marco Ramirez<sup>2</sup>, Evandro Drigo<sup>1</sup>, Vladimir Jesús Trava-Airoldi<sup>2</sup>, Tarcísio Leão<sup>3</sup>, Jeison Fonseca<sup>1</sup>, Bruno Utiyama<sup>1</sup>, Edir Leal<sup>1</sup>, Juliana Leme<sup>1</sup>, Aron Pazzin Andrade<sup>1</sup>, João Roberto Moro<sup>3</sup>, Eduardo Guy Perpétuo Bock<sup>3</sup>; <sup>1</sup>Instituto Dante Pazzanese de Cardiologia, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais, <sup>3</sup>Instituto Federal de Educação, Ciência e Tecnologia de São Paulo

- 17:45 Physicochemical stability of optimized Nanostructured Lipid Carriers for lidocaine-prilocaine release R.P2.128**  
Lígia Nunes de Moraes Ribeiro<sup>1</sup>, Michelle Franz-Montan<sup>2</sup>, Ana Clecia Santos de Alcântara<sup>3</sup>, Viviane Aparecida Guilherme<sup>4</sup>, Simone Ramos de Castro<sup>4</sup>, Márcia Cristina Breitzkreitz<sup>5</sup>, Eneida de Paula<sup>4</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>Department of Physiological Science, Piracicaba Dentistry University, State University of Campinas - UNICAMP, Piracicaba - São Paulo, Brazil, <sup>3</sup>Department of Chemistry, Federal University of Maranhão- UFMA, São Luís- Maranhão, Brazil, <sup>4</sup>Department of Biochemistry and Tissue Biology, Institute of Biology, State University of Campinas - UNICAMP, Campinas - São Paulo, Brazil, <sup>5</sup>Department of Analytical Chemistry, Institute of Chemistry, State University of Campinas - UNICAMP, Campinas - São Paulo, Brazil
- 17:45 Characterization of a Nanostructured Lipid Carrier for the delivery of Lidocaine and toxicity studies in Zebrafish R.P2.129**  
Gustavo Henrique Rodrigues da Silva<sup>1</sup>, Lígia Nunes de Moraes Ribeiro<sup>1</sup>, Viviane Aparecida Guilherme<sup>2</sup>, Simone Ramos de Castro<sup>2</sup>, Veronica Muniz Couto<sup>2</sup>, Bárbara O. De Paula<sup>2</sup>, Eneida de Paula<sup>2</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>Department of Biochemistry and Tissue Biology, Institute of Biology, State University of Campinas (UNICAMP), Campinas - São Paulo, Brazil

## Wednesday, September 28<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION R.OR7 (09:45 - 10:45) - Room Carvalho II*

- 09:45 The Potential of Additive Manufacturing (3D Printing) for Biomaterial Engineered Surfaces and Interfaces for Medical Implants R.OR7.24\***  
Jorge Vicente Lopes da Silva
- 10:15 Immobilization of Tet-124 peptides and their antibacterial effect against Staphylococcus epidermidis R.OR7.25**  
Jesús Jacobo Hernández-Montelongo<sup>1</sup>, Yendry Corrales Urena<sup>2</sup>, Daisy Machado<sup>3</sup>, Marcelo Lancellotti<sup>3</sup>, Klaus Rischka<sup>4</sup>, Paulo Noronha Lisboa-Filho<sup>5</sup>, Mônica Alonso Cotta<sup>3</sup>; <sup>1</sup>Instituto de Física "Gleb Wataghin"-UNICAMP, <sup>2</sup>Centro Nacional de Alta Tecnologia, <sup>3</sup>Universidade Estadual de Campinas, <sup>4</sup>Fraunhofer Institute for Manufacturing Technology and Advanced Materials, <sup>5</sup>Faculdade de Ciências/Bauru
- 10:30 Synthesis of Bone-like Structured and Calcium Phosphate doped TiO<sub>2</sub> nanotubes by 2-step anodization R.OR7.26**  
 Sofia Afonso Alves, Sweetu Patel, Cortino Sukotjo, Jean-Pierre Celis, Luís Augusto Rocha, Tolou Shokuhfar

**SESSION R.OR8 (11:15 - 12:00) - Room Carvalho II**

- 11:15 Ti-25Ta-Zr alloys for biomedical applications** **R.OR8.27**  
Pedro Akira Bazaglia Kuroda<sup>1,2</sup>, Fernanda Freitas Quadros<sup>1,2</sup>, Carlos Roberto Grandini<sup>1,3</sup>; <sup>1</sup>Faculdade de Ciências/Bauru, <sup>2</sup>Institute of Biomaterials Tribocorrosion and Nanomedicine, <sup>3</sup>Institute of Biomaterials, Tribocorrosion and Nanomedicine
- 11:30 Varying the amount of rutile on titanium oxide thin films produced on commercial titanium by sputtering.** **R.OR8.28**  
Patrícia Corrêa<sup>1</sup>, Nilton Francelosi Azevedo Neto<sup>2</sup>, José Humberto Dias da Silva<sup>1</sup>, Luís Augusto Rocha<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Bauru, <sup>2</sup>Faculdade de Ciências/Bauru
- 11:45 SYNTHESIS AND CHARACTERIZATION OF MAGNETIC NANOPARTICLES NiFe<sub>2</sub>O<sub>4</sub> AND CoFe<sub>2</sub>O<sub>4</sub> FOR BIOMEDICAL APPLICATIONS** **R.OR8.29**  
Alexandre Pancotti<sup>1</sup>, Débora Rodrigues Lima<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás

**SESSION R.OR9 (14:00 - 16:15) - Room Carvalho II**

- 14:00 Bone, time and rate dependency and validity of researches; what can be done ?** **R.OR9.30\***  
AHMET HIKMET UCISIK
- 14:30 Behavior of Ti-Nb Coatings Exposed to Different Environments** **R.OR9.31**  
Ernesto David Gonzalez<sup>1</sup>, Pedro A. P. Nascente<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 14:45 Wet-chemical synthesis of biological and synthetic hydroxyapatite: Raman spectroscopy and DRX study** **R.OR9.32**  
Victor Raúl Jauja Ccana<sup>1</sup>, Adolfo La Rosa-Toro Gómez<sup>1</sup>, Golfer Muedas Taipe<sup>1</sup>; <sup>1</sup>Universidad Nacional de Ingeniería
- 15:00 Micro-arc oxidation of Ti-15Zr-based alloys for osseointegrative implants** **R.OR9.33**  
Diego Rafael Nespeque Correa<sup>1</sup>, Luís Augusto Rocha<sup>1</sup>, Hisashi Doi<sup>2</sup>, Yusuke Tsutsumi<sup>2</sup>, Takao Hanawa<sup>2</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus Bauru, <sup>2</sup>Tokyo Medical and Dental University
- 15:15 INVESTIGATION OF STRUCTURAL, MAGNETIC AND THERMAL PROPERTIES OF NATURAL MAGNETITE FROM IRON ORE TAILING FOR CANCER TREATMENT APPLICATION** **R.OR9.34**  
Sidney Nicodemos da Silva<sup>1</sup>, Gabriela Moreira Lana<sup>1</sup>, Mariela Alves e Silva<sup>1</sup>, Roberta Viana Ferreira<sup>1</sup>, Luis Eugenio Fernandez-Outon<sup>2,3</sup>, José Domingos Ardisson<sup>3</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica de Minas Gerais, <sup>2</sup>Universidade Federal de Minas Gerais, <sup>3</sup>Centro de Desenvolvimento da Tecnologia Nuclear
- 15:30 Electrochemical Platform for MicroRNAs detection** **R.OR9.35**  
Pawan Jolly<sup>1</sup>, Marina Ribeiro Batistuti<sup>2,3</sup>, Anna Miodek<sup>1</sup>, Pavel Zhurauski<sup>1</sup>, Marcelo Mulato<sup>2</sup>, Mark Lindsay<sup>1</sup>, Pedro Estrela<sup>1</sup>; <sup>1</sup>University of Bath, <sup>2</sup>Universidade de São Paulo, <sup>3</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto - USP
- 15:45 Structure and Properties of Microcrystalline Chitosan**  
Luciano Pighinelli<sup>1</sup>, Fernando Machado Guimarães<sup>1</sup>, Luan Rios Paz<sup>1</sup>, Cristiane Miotto Becker<sup>2</sup>, Gislene Zehetmeyer<sup>2</sup>, Gisele Rasia<sup>2</sup>, Gabrielle Brehm Zanin<sup>1</sup>, Marzena Kmiec<sup>1</sup>, Felipe Melleu Tedesco<sup>1</sup>, Victoria Oliva Dos Reis<sup>1</sup>, Matheus Machado Silva<sup>1</sup>; <sup>1</sup>Lutheran University of Brazil, <sup>2</sup>SENAI Institute of Polymers Engineering

## Poster presentations

### SESSION R.P3 (17:45 - 19:30)

- 17:45 Development of an induced circular dichroism-based probe for determination of binding sites in albumin** **R.P3.130**  
Diego Venturini<sup>1</sup>, Valdecir Farias Ximenes<sup>1</sup>, Aguinaldo Robinson de Souza<sup>1</sup>;  
<sup>1</sup>Universidade Estadual Paulista Júlio de Mesquita Filho
- 17:45 Polyol synthesis and surface functionalization of cobalt ferrite nanoparticles** **R.P3.131**  
Lilium Viana Leone<sup>1</sup>, João Batista Santos Barbosa<sup>1</sup>, Estér Figueiredo Oliveira<sup>1</sup>,  
Fernanda de Paula Oliveira<sup>2</sup>, Douglas Miquita<sup>3</sup>; <sup>1</sup>Comissão Nacional de Energia Nuclear, <sup>2</sup>UNI BH, <sup>3</sup>Universidade Federal De Minas Gerais
- 17:45 Linear and cross-linked biocompatible amphiphilic copolymers based on polyester and polyether blocks** **R.P3.132**  
Lívia Mesquita Dias Loiola<sup>1</sup>, Lucas Polo Fonseca<sup>1</sup>, Rafael Bergamo Trinca<sup>1</sup>,  
Maria Isabel Felisberti<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 RAMAN OPTICAL ACTIVITY APPLIED TO BIOLOGICAL SYSTEMS** **R.P3.133**  
Diego Mendes dos Santos<sup>1</sup>, Adriano Luiz de Queiroz<sup>1</sup>, Marcella Cogo Muniz<sup>1</sup>,  
Fernando Costa Basilio<sup>1</sup>, Gustavo Gonçalves Dalkirani<sup>1</sup>, Sydnei Magno da Silva<sup>1</sup>,  
Renata Cristina de Paula<sup>1</sup>, Alexandre Marletta<sup>1</sup>, Raigna Augusta da Silva Zadra Armond<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia
- 17:45 Interaction of Metronidazole in models for cell membranes at the air-water interface** **R.P3.134**  
Jefferson Carnevalle Rodrigues<sup>1</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 Acetylated starch-based nanoparticles incorporated with butylated hydroxytoluene and gallic acid** **R.P3.135**  
Natalia Romero de Oliveira<sup>1</sup>, Suzana Mali<sup>1</sup>, Gizilene Maria de Carvalho<sup>1</sup>;  
<sup>1</sup>Universidade Estadual de Londrina
- 17:45 Ab-initio study of ciprofloxacin** **R.P3.136**  
Arthur Prado Camargo<sup>1</sup>, Vanessa Yumi Sakai<sup>2</sup>, Vera Regina Leopoldo Constantino<sup>2</sup>,  
Helena Maria Petrilli<sup>1</sup>; <sup>1</sup>Instituto de Física-USP, <sup>2</sup>Instituto de Química - USP
- 17:45 Properties of compositions based on calcia-alumina (CA) system** **R.P3.137**  
Vitoria Marques Cesar Leite<sup>1</sup>, Mariana Cuba Faraco<sup>1</sup>, Ivy Turci Aoke<sup>1</sup>, Ivone Regina de Oliveira<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba
- 17:45 On the photo-induced modifications of lipid monolayers induced by erythrosin** **R.P3.138**  
Pedro Henrique Benites Aoki<sup>1</sup>, Luis F. C. Morato<sup>2</sup>, Felipe Jose Pavinatto<sup>3</sup>,  
Thatyane Morimoto Nobre<sup>3</sup>, Carlos José Leopoldo Constantino<sup>2</sup>, Osvaldo Novais Oliveira Jr<sup>3</sup>;  
<sup>1</sup>Faculdade de Ciências e Letras, UNESP, Assis, <sup>2</sup>FCT-UNESP Campus de Presidente Prudente, <sup>3</sup>Instituto de Física de São Carlos

- 17:45 Effect of hydrophilic chain length on the characteristics of PBS-PEG block copolymers R.P3.139**  
Jose Angel Ramon Hernández<sup>1</sup>, Vivian Saez Martínez<sup>2</sup>, Fernando Gomes de Souza Junior<sup>2</sup>, Claudia Regina Elias Mansur<sup>2</sup>, José Carlos Pinto<sup>1</sup>, Marcio Nele de Souza<sup>1</sup>; <sup>1</sup>Departamento de Engenharia Química, Escola de Química, Universidade Federal do Rio de Janeiro, <sup>2</sup>Instituto de Macromoléculas
- 17:45 Chitosan nanoparticles for ketoconazole delivery: exploring the experimental conditions for particle formation R.P3.140**  
Vivian Saez Martínez<sup>1</sup>, Vania Emerich Bucco de Campos<sup>1</sup>, Cristal Cerqueira-Coutinho<sup>1</sup>, Camila Elia<sup>1</sup>, Fernanda Franco Massante<sup>1</sup>, Claudia Regina Elias Mansur<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 17:45 Raman sign of *Leishmania* species R.P3.141**  
Adriano Luiz de Queiroz<sup>1</sup>, Diego Mendes dos Santos<sup>1</sup>, Fernando Costa Basilio<sup>1</sup>, Alexandre Marletta<sup>1</sup>, Renata Cristina de Paula<sup>1</sup>, Sydnei Magno da Silva<sup>1</sup>, Raigna Augusta da Silva Zadra Armond<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia
- 17:45 Low content of superhydrophilic carbon nanotubes (MWCNT-O<sub>2</sub>) in Poly(lactic acid) (PLA) nanofibers produced by RJS for biological applications R.P3.142**  
Patrícia Oliveira de Andrade<sup>1</sup>, Ana Maria do Espirito Santo<sup>1</sup>, Maira Costa Maftoum<sup>2</sup>, Marco Antonio Grinet<sup>2</sup>, Anderson Oliveira Lobo<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade do Vale do Paraíba
- 17:45 Influence of composition and morphology on the behavior of PDMAEMA-co-PMMA nano-aggregates R.P3.143**  
Lívia Terezinha Pimentel Branco<sup>1</sup>, Júlia Siqueira Silva<sup>1</sup>, Fábio Herbst Florenzano<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Synthesis and Characterization of new xanthates for the RAFT/MADIX polymerization of unconjugated N-vinyl monomers R.P3.144**  
Rodolfo Minto de Moraes<sup>1</sup>, Simone de Fátima Medeiros<sup>1</sup>, Amilton Martins Santos<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Synthesis of amphiphilic poly(N-vinylcaprolactam)-b-poly(ε-caprolactone) block copolymers via the combination of RAFT/MADIX and ROP techniques R.P3.145**  
Rodolfo Minto de Moraes<sup>1</sup>, Amilton Martins Santos<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Nanoparticles influence in thermosensitive nanocomposite transition temperature R.P3.146**  
Igor Silva<sup>1</sup>, Renata Lang Sala<sup>1</sup>, Emerson Rodrigues Camargo<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos
- 17:45 Synthesis of amphiphilic poly(ε-caprolactone)-b-poly(N-vinylcaprolactam) block copolymers via the combination of RAFT polymerization and click chemistry R.P3.147**  
Paulo Henrique Assis<sup>1</sup>, Grazielle Aparecida de Jesus Aguiar<sup>1</sup>, Rodolfo Minto de Moraes<sup>1</sup>, Simone de Fátima Medeiros<sup>1</sup>, Amilton Martins Santos<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Microhardness Measurements of Hydroxyapatite Sintered Using Chicken Eggs Shell Precursors R.P3.148**  
Marcelo Vitor Ferreira Machado<sup>1,2</sup>, José Brant Campos<sup>2</sup>, MARILZA SAMPAIO AGUILAR<sup>3</sup>, Nataly Cristine Campos<sup>4</sup>, Bruno Cavalcanti Di Lello<sup>3</sup>, Vitor Santos Ramos<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia Fluminense, <sup>2</sup>Universidade do Estado do Rio de Janeiro, <sup>3</sup>Universidade Estácio de Sá, <sup>4</sup>Pontifícia Universidade Católica do Rio de Janeiro

- 17:45 Surface morphology of polyelectrolyte complexes prepared in presence of [Bmim][BF<sub>4</sub>] and [HMim][HSO<sub>4</sub>] ionic liquids R.P3.149**  
Letícia Caroline Bonkovoski<sup>1</sup>, Cátia Santos Nunes<sup>1</sup>, Michael Jackson Vieira da Silva<sup>1</sup>, Fernanda Andréia Rosa<sup>1</sup>, Edvani Curti Muniz<sup>1,2,3</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Universidade Paranaense, <sup>3</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Preparation and evaluation of chitosan films containing plasticizers R.P3.151**  
Letícia Pereira Almeida<sup>1</sup>, Jacqueline Santiago Nojosa<sup>2</sup>, Francisco Fábio Oliveira de Sousa<sup>3</sup>; <sup>1</sup>Universidade do Estado do Amapá, <sup>2</sup>Universidade Federal do Ceará, <sup>3</sup>Universidade Federal do Amapá
- 17:45 Interaction of thymol with Langmuir monolayers studied with surface chemistry and Molecular Simulation R.P3.152**  
João Victor Narducci Ferreira<sup>1</sup>, Leonardo José Amaral Siqueira<sup>1</sup>, João Henrique Ghilardi Lago<sup>1</sup>, Luciano Caseli<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema
- 17:45 Preparation of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) - TiO<sub>2</sub> nanocomposites thin films by spin coating technique R.P3.153**  
Natália Ferreira Braga<sup>1</sup>, F. H. Cristovan<sup>1</sup>, Tatiane Moraes Arantes<sup>2</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos, <sup>2</sup>Universidade Federal de Goiás
- 17:45 Synthesis and characterization of superparamagnetic polymeric nanocapsules R.P3.154**  
Renato Grillo<sup>1,2</sup>, Juan Gallo<sup>2</sup>, Daniel Grando Stroppa<sup>2</sup>, Enrique Carbo-Argibay<sup>2</sup>, Renata de Lima<sup>3</sup>, Leonardo Fernandes Fraceto<sup>1</sup>, Manuel Banõbre-Lopez<sup>2</sup>; <sup>1</sup>UNESP - Campus Sorocaba, <sup>2</sup>International Iberian Nanotechnology Laboratory, <sup>3</sup>Universidade de Sorocaba
- 17:45 SYNTHESIS AND CHARACTERIZATION OF HYBRID SYSTEM: MESOPOROUS SILICA - THERMO AND PH SENSITIVE HYDROGEL R.P3.155**  
Gabriel Augusto Alemão Monteiro<sup>1</sup>, Ricardo Geraldo Sousa<sup>2</sup>, Edésia Martins Barros de Sousa<sup>1</sup>; <sup>1</sup>Centro de Desenvolvimento da Tecnologia Nuclear, <sup>2</sup>Universidade Federal de Minas Gerais
- 17:45 Potential application of PAN (polyacrylonitrile) derived activated carbon fibers for water decontamination R.P3.156**  
Gabriela de Moraes Gouvêa Lima<sup>1</sup>, Isabela Maria Martins<sup>1</sup>, Gabriela dos Santos Simões<sup>1</sup>, Aline Chiodi Borges<sup>1</sup>, Jossano Saldanha Marcuzzo<sup>2</sup>, Mauricio Ribeiro Baldan<sup>2</sup>, Cristiane Yumi Koga-Ito<sup>1</sup>; <sup>1</sup>ICT-Unesp de São José dos Campos, <sup>2</sup>Instituto Nacional de Pesquisas Espaciais
- 17:45 Photodegradation study of photoluminescent polymer blends for the development of blue light dosimeters R.P3.157**  
Adryelle do Nascimento Arantes<sup>1</sup>, Luana Rodrigues<sup>1</sup>, Alexandre Marletta<sup>1</sup>, Lennon Dias<sup>1</sup>, José Roberto Tozoni<sup>1</sup>; <sup>1</sup>Universidade Federal de Uberlândia
- 17:45 Influence of crystallography on reactivity, selectivity and sensitivity of cuprous oxide nanoparticles. R.P3.158**  
Fabián Andree Cerda Pastrían<sup>1</sup>, Susana Ines Cordoba de Torresí<sup>1</sup>, Anderson Gabriel Marques da Silva<sup>1</sup>, Pedro Henrique Cury Camargo<sup>1</sup>; <sup>1</sup>Instituto de Química - USP
- 17:45 Preparation of chitosan nanoparticles containing sodium diclofenac using the ion-gelation method R.P3.159**  
Julia Natália Mazoni El Kadri<sup>1</sup>, Paulo de Tarso Vieira Rosa<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP

- 17:45 Nanostructured polysaccharides thin films with structural and dye release properties mediated by pH and ionic strength** **R.P3.160**  
Rogério Bataglioli Bataglioli<sup>1</sup>, João Batista Neto<sup>1</sup>, Thiago Bezerra Taketa<sup>1</sup>, Roberta Polak<sup>2</sup>, Marisa Masumi Beppu<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química - UNICAMP, <sup>2</sup>Massachusetts Institute of Technology
- 17:45 Magnetic cellulose as support for  $\beta$ -galactosidase immobilization: Matrix characterization and application on galacto-oligosaccharides production** **R.P3.161**  
Mariana Rodrigues Xavier<sup>1</sup>, Mariana Paola Cabrera<sup>1</sup>, Esteban Espinosa Vidal<sup>2</sup>, David Fernando de Morais Neri<sup>3</sup>; <sup>1</sup>Universidade Federal de Pernambuco, <sup>2</sup>Centro de Tecnologias Estratégicas do Nordeste, <sup>3</sup>Fundação Universidade Federal do Vale do São Francisco
- 17:45 Analysis of residual thermal stress in layered zirconia/porcelain discs for dental applications** **R.P3.162**  
Douglas Fabris<sup>1</sup>, Júlio César Matias Souza<sup>1</sup>, Filipe Samuel Silva<sup>2</sup>, Marcio Celso Fredel<sup>1</sup>, Joana Mesquita Guimarães<sup>1</sup>, Bruno Alexandre Henriques<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade do Minho
- 17:45 Electrospayed micro or nanoparticles incorporating a phytoextract directed towards the protection of seeds in organic farm programmes** **R.P3.163**  
Lenise Muller Ricciardi
- 17:45 PLA fibers application obtained by electrospinning in tissue engineering** **R.P3.164**  
Talita Nascimento Da Silva<sup>1</sup>, Paulo Henrique de Sousa Picciani<sup>1</sup>, Haroldo Gurgel Mota Filho<sup>2</sup>, Carlos Augusto Galvão Barboza<sup>2</sup>; <sup>1</sup>Instituto de Macromoléculas Professora Eloisa Mano, <sup>2</sup>Universidade Federal do Rio Grande do Norte
- 17:45 Non-Linear Spectroscopy Investigations of Langmuir Monolayers of Lipopolysaccharides Extracted from Salmonella sp.** **R.P3.165**  
Diogo Volpati<sup>1</sup>, Thatyane Morimoto Nobre<sup>2,3,4</sup>, Paulo Barbeitas Miranda<sup>5</sup>, Osvaldo Novais Oliveira Jr<sup>5</sup>; <sup>1</sup>Mid Sweden University - Mittuniversitetet, <sup>2</sup>Instituto de Física de São Carlos, <sup>3</sup>CNPq, <sup>4</sup>University of California, Berkeley, <sup>5</sup>Instituto de Física de São Carlos - Universidade de São Paulo
- 17:45 Production of zirconia porous structures by dip coating method** **R.P3.166**  
Stephanie Roedel<sup>1</sup>, Joana Mesquita Guimarães<sup>1</sup>, Júlio César Matias Souza<sup>1</sup>, Filipe Samuel Silva<sup>2</sup>, Douglas Fabris<sup>1</sup>, Marcio Celso Fredel<sup>1</sup>, Bruno Alexandre Henriques<sup>1</sup>; <sup>1</sup>Universidade Federal de Santa Catarina, <sup>2</sup>Universidade do Minho
- 17:45 Microfluidic processes for the synthesis of aminoacid-based nanoparticles** **R.P3.167**  
Thays França Naves<sup>1</sup>, Tiago Albertini Balbino<sup>1</sup>, Lucimara de La Torre<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química - UNICAMP
- 17:45 The role played by the unsaturation of the hydrophobic chain on the interaction between a xanthene derivative and cell membrane models based on zwitterionic phospholipids** **R.P3.168**  
Luis F. C. Morato<sup>1</sup>, Pedro Henrique Benites Aoki<sup>2</sup>, Carlos José Leopoldo Constantino<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Faculdade de Ciências e Letras, UNESP, Assis
- 17:45 Natural rubber latex/sodium alginate blend: enhancement of the properties of the single membranes** **R.P3.169**  
Felipe Azevedo Borges<sup>1</sup>, Ana Maria Minarelli Gaspar<sup>2</sup>, Rondinelli Donizetti Herculano<sup>1</sup>; <sup>1</sup>Instituto de Química de Araraquara/UNESP, <sup>2</sup>Faculdade de Odontologia de Araraquara

- 17:45 Natural rubber latex/sodium alginate blend: swelling and degradation study** **R.P3.170**  
Felipe Azevedo Borges<sup>1</sup>, Ana Maria Minarelli Gaspar<sup>2</sup>, Rondinelli Donizetti Herculano<sup>1</sup>; <sup>1</sup>Instituto de Química - UNESP, <sup>2</sup>Faculdade de Odontologia de Araraquara
- 17:45 Investigation of the isothermal crystallization of PLA/PCL blends** **R.P3.171**  
Fabiana Massarente Pereira<sup>1</sup>, Marcelo Aparecido Chinelatto<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos- Universidade de São Paulo
- 17:45 Amoxicilin and Methylene Blue as emerging polutants: interaction with membrane models formed by DPPC Langmuir films** **R.P3.172**  
Mateus Dassie Maximino<sup>1</sup>, Priscila Alessio<sup>1</sup>, Carlos José Leopoldo Constantino<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente
- 17:45 Nanoparticles formed by soy lecithin – caseinate interactions** **R.P3.173**  
 Antônio Matias Navarrete Toledo<sup>1</sup>, Camila Gonçalves Rodrigues<sup>1</sup>, Ana Carla Kawazoe Sato<sup>1</sup>, Carolina Siqueira Franco Picone<sup>1</sup>; <sup>1</sup>University of Campinas
- 17:45 Study of wetting behavior of glasses of the system SiO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub>-La<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub>-CaO-CeO<sub>2</sub> on alumina substrate** **R.P3.174**  
Henrique Takaaki Tamoto<sup>1</sup>, Daniel Ayarroio Seixas<sup>1</sup>, Tiago Schiller dos Reis<sup>1</sup>, Afonso Chimanski<sup>1</sup>, Humberto Naoyuki Yoshimura<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 Morphology and mechanical properties of nanofibers made of poly[(2-dimethylamino) ethyl methacrylate] and polycaprolactone** **R.P3.175**  
 Fernanda Grandizoli Santos<sup>1</sup>, Letícia Caroline Bonkovoski<sup>1</sup>, Maria Alice Witt<sup>2,1</sup>, Edvani Curti Muniz<sup>1,3,4</sup>; <sup>1</sup>Universidade Estadual de Maringá, <sup>2</sup>Pontifícia Universidade Católica do Paraná, <sup>3</sup>Universidade Paranaense, <sup>4</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Effect of magnetite nanoparticles on the electron transfer kinetics of Cobalt Prussian blue analogue** **R.P3.176**  
Welter Cantanhêde<sup>1</sup>, Roberto Alves de Sousa Luz<sup>2</sup>, Anna Thaise Bandeira Silva<sup>1</sup>, Caio Lenon Chaves Carvalho<sup>1</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Estadual do Piauí
- 17:45 Interaction between a synthetic steroid hormone and mixed DPPC–cholesterol forming Langmuir films as biomembrane models** **R.P3.177**  
Gilia Cristine Marques Ruiz<sup>1</sup>, Pedro Henrique Benites Aoki<sup>2</sup>, Carlos José Leopoldo Constantino<sup>1,2</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>Faculdade de Ciências e Letras, UNESP, Assis
- 17:45 Hybrid nanomaterial composed of cobalt Prussian blue analogue and zinc oxide nanoparticles: structure, supramolecular arrangement and electrochemical properties** **R.P3.178**  
 Welter Cantanhêde<sup>1</sup>, Katharinne Sabrina Nascimento Teixeira<sup>1</sup>, Roberto Alves de Sousa Luz<sup>2</sup>, Viviane Gomes Pereira Ribeiro<sup>3</sup>, Selma Elaine Mazzetto<sup>3</sup>, Giuseppe Mele<sup>4</sup>; <sup>1</sup>Universidade Federal do Piauí, <sup>2</sup>Universidade Estadual do Piauí, <sup>3</sup>Universidade Federal do Ceará, <sup>4</sup>Università del Salento (ex-Lecce)
- 17:45 MULTIPLE EMULSION FOR GELS PRODUCTION** **R.P3.179**  
Camila Gonçalves Rodrigues<sup>1</sup>, Tatiana Porto Santos<sup>1</sup>, Antônio Matias Navarrete Toledo<sup>1</sup>, Fabiana Perrechil Bonsanto<sup>2</sup>, Ana Carla Kawazoe Sato<sup>1</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>Federal University of São Paulo

- 17:45 Kinetic Release Evaluation of Casearia Sylvestris Swartz loaded Natural Rubber Latex Membranes R.P3.180**  
Rondinelli Donizetti Herculano<sup>1</sup>, Flávio Alexandre Carvalho<sup>1</sup>, André Gonzaga Santos<sup>1</sup>, Felipe Azevedo Borges<sup>1</sup>, Rosângela Gonçalves Silva<sup>2</sup>, José Lúcio Pádua Gemeinder<sup>3</sup>; <sup>1</sup>Faculdade de Ciências Farmacêuticas de Araraquara/UNESP, <sup>2</sup>Instituto de Química de Araraquara/UNESP, <sup>3</sup>Faculdades Integradas de Ourinhos
- 17:45 Synthesis of nanohydroxyapatite by wet precipitation process with physical interferences R.P3.181**  
Michelle Chizzolini Barbosa<sup>1</sup>, Anderson Oliveira Lobo<sup>1</sup>, Fernanda Roberta Marciano<sup>1</sup>; <sup>1</sup>Universidade do Vale do Paraíba
- 17:45 Removal of antibodies from human plasma using supermacroporous cryogel adsorbents with immobilized phenylalanine R.P3.182**  
Cecília Alves Mourão<sup>1</sup>, Sonia Maria Alves Bueno<sup>2</sup>; <sup>1</sup>Faculdade de Engenharia Química - UNICAMP, <sup>2</sup>Faculdade de Engenharia Química-FEQ-UNICAMP
- 17:45 Layer-by-layer assembly of chitosan/hyaluronan: influence of the degree of acetylation and pH on surface chemistry and morphology R.P3.183**  
João Batista Neto<sup>1</sup>, Rogerio Bataglioli Bataglioli<sup>1</sup>, Thiago Bezerra Taketa<sup>1</sup>, Roberta Polak<sup>2</sup>, Danilo Martins dos Santos<sup>3</sup>, Anderson Fiamingo<sup>3</sup>, Sérgio Paulo Campana Filho<sup>3</sup>, Marisa Masumi Beppu<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química - UNICAMP, <sup>2</sup>Massachusetts Institute of Technology, <sup>3</sup>Universidade de São Paulo
- 17:45 Studies of interaction between xanthan gum and chitosan in mineralized films with calcium phosphates R.P3.184**  
Mariana de Oliveira Silva<sup>1</sup>, Aline Evangelista Aguiar<sup>1</sup>, Celso Aparecido Bertran<sup>1</sup>; <sup>1</sup>Institute of Chemistry-UNICAMP
- 17:45 Rheological characterization of Poly L-co-D, L lactic acid (PLDLA) solutions R.P3.185**  
Rosemeire Santos Almeida<sup>1</sup>, Claudenete Vieira Leal<sup>1</sup>, José Luis Dávila<sup>1</sup>, Eliana A. R. Duek<sup>2,1</sup>, Marcos Akira d'Ávila<sup>1</sup>; <sup>1</sup>Faculty of Mechanical Engineering, University of Campinas, <sup>2</sup>Pontifical Catholic University of São Paulo, Sorocaba,
- 17:45 POLYANILINE/CHITOSAN/  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> HYBRID NANOCOMPOSITE FOR THE NUCLEIC ACID RETRIEVAL R.P3.186**  
Bruna Gomes Maciel<sup>1</sup>, Juan Carlos Medina Llamas<sup>1</sup>, Alicia Elizabeth Chávez Guajardo<sup>1</sup>, José Jarib Alcaraz Espinoza<sup>1</sup>, Celso Pinto de Melo<sup>1</sup>; <sup>1</sup>Universidade Federal de Pernambuco
- 17:45 Droplet microfluidics for biocatalyst immobilization in calcium alginate microparticles R.P3.187**  
Aline Furtado Oliveira<sup>1</sup>, Franciele Flores Vit<sup>2</sup>, Reinaldo Gaspar Bastos<sup>3</sup>, Lucimara Gaziola de la Torre<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química - UNICAMP, <sup>2</sup>Faculdade de Engenharia Química, <sup>3</sup>Universidade Federal de São Carlos
- 17:45 Design and characterization of copaiba oil/alginate films for wound dressings application: Effect of copaiba oil concentration on the film properties R.P3.188**  
Aryane Christine Neves Martins<sup>1</sup>, Classius Ferreira da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus de Diadema

- 17:45 Synthesis of molecular hybrids compounds of the 1,4-dihydroquinoline and azoanalogues ariltetralinic lignans over multicomponent reactions assisted by microwave irradiation. R.P3.189**  
Willian Pereira Gomes<sup>1</sup>, Regiane Godoy Lima<sup>1</sup>, Ana Paula da Rocha Pissurno<sup>1</sup>, Fernanda Amorim Santos<sup>2</sup>, Rosangela Silva Laurentiz<sup>1</sup>; <sup>1</sup>Campus de Ilha Solteira, <sup>2</sup>Faculdade de Engenharia/UNESP-IS
- 17:45 Microfluidic Technique for Glycol chitosan nanoparticles synthesis R.P3.190**  
 Caroline Casagrande Sipoli<sup>1</sup>, Ana Paula Duarte Pereira<sup>1</sup>, Amanda da Costa e Silva de Noronha Pessoa<sup>2</sup>, Lucimara Gaziola de la Torre<sup>1</sup>; <sup>1</sup>Faculdade de Engenharia Química-FEQ-UNICAMP, <sup>2</sup>Faculdade de Engenharia Química - UNICAMP
- 17:45 In vitro degradation of polymer blends scaffolds (poly-epsilon-caprolactone, PCL) of high and low molecular weight associated with tetracycline and hydroxyapatite. R.P3.191**  
 Daniela Sachs<sup>1</sup>, Amanda Carvalho Pereira<sup>2</sup>, Alvaro Alencar Queiroz<sup>1</sup>, Pedro Augusto de Andrade Novaes<sup>1</sup>, Ana Angélica MARTINS COSTA<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Fundação de Ensino e Pesquisa de Itajubá
- 17:45 Chitosan/chondroitin sulfate hydrogels prepared in [Hmim][HSO<sub>4</sub>] ionic liquid R.P3.192**  
Cátia Santos Nunes<sup>1</sup>, Kessily Barbosa Rufato<sup>1</sup>, Elizangela Messias Almeida<sup>1</sup>, Michael Jackson Vieira da Silva<sup>1</sup>, Débora Botura Scariot<sup>1</sup>, Celso Vataru Nakamura<sup>2</sup>, Alessandro Francisco Martins<sup>1,3</sup>, Fernanda Andréia Rosa<sup>1</sup>, Edvani Curti Muniz<sup>1,4,5</sup>; <sup>1</sup>Universidade Estadual de Maringá, Dep. de Química, Maringá, PR, Brazil, <sup>2</sup>Universidade Estadual de Maringá, Dep.de Ciências Básicas da Saúde, Maringá, PR, Brazil, <sup>3</sup>Universidade Tecnológica Federal do Paraná (UTFPR-AP), Dep. de Química, Apucarana, PR, Brazil, <sup>4</sup>Universidade Tecnológica Federal do Paraná (UTFPR-LD), PPGCEM, Londrina, PR, Brazil, <sup>5</sup>Univ. Paranaense (UNIPAR), Progr. de Pós-graduação em Biotecnologia, Umuarama, PR, Brazil
- 17:45 pH-responsive delivery systems for vaginal administration: rheological and morphologic profile**  
 Taciane Alvarenga Perez<sup>1</sup>, Natália Noronha Ferreira<sup>1</sup>, Maria Palmira Daflon Gremião<sup>1</sup>; <sup>1</sup>Faculdade de Ciências Farmacêuticas de Araraquara/UNESP



# **SYMPOSIUM S - Biomaterials and Devices for Neuroscience**

**Symposium organizers:**

Roberto Ricardo Panepucci (*CTI*)  
Roberto Maria Covolan (*Unicamp*)  
Hercules Neves (*Unitec and Uppsala University*)



# Tuesday, September 27<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION S.OR1 (09:45 - 10:45) - Room Jacarandá*

- 09:45 Correlates of learning in neuronal cultures: recording and stimulating in patterns** **S.OR1.1\***  
Nathalia Peixoto<sup>1</sup>, Sharon Jose<sup>2</sup>, Michael Maquera, Robert Graham<sup>2</sup>; <sup>1</sup>Neural Engineering Lab George Mason University, <sup>2</sup>Neural Engineering Lab, George Mason University, VA, USA
- 10:15 Motor cortex and prefrontal cortex stimulation by DBS system attenuates the neuropathic pain in rodents: Electrophysiological and Psychopharmacology approaches** **S.OR1.2\***  
Renato Leonardo De Freitas<sup>1</sup>; <sup>1</sup>Laboratory of Neuroanatomy and Neuropsychobiology, Department of Pharmacology, (FMRP-USP), Ribeirão Preto, São Paulo, Brazil
- 10:30 Microfluidic Actuation of Flexible Carbon Nanotube Fibers for Neural Recording and Stimulation** **S.OR1.3\***  
Daniel Vercosa<sup>1</sup>, Flavia Vitale<sup>2</sup>, Frederik Seibt<sup>3</sup>, Sushma Pamulapati<sup>1</sup>, Jiayi Stephen Yan<sup>1</sup>, Krishna Badhiwala<sup>1</sup>, Michael Beierlein<sup>3</sup>, Matteo Pasquali<sup>1</sup>, Jacob T Robinson<sup>1</sup>; <sup>1</sup>Rice University, <sup>2</sup>University of Pennsylvania, <sup>3</sup>University of Texas Health Science Center at Houston

### *SESSION S.OR2 (11:15 - 12:00) - Room Jacarandá*

- 11:15 Problems and solutions in optogenetic experiments associated with electrophysiology** **S.OR2.4\***  
Richardson Leão, Sanja Mikulovic<sup>2</sup>, Helton Maia Peixoto<sup>3</sup>; <sup>1</sup>Brain Institute, UFRN and Uppsala University, Sweden, <sup>2</sup>Uppsala University, Sweden, <sup>3</sup>Brain Institute, UFRN
- 11:45 Synthesis and Characterization of Hydrogels from the starch of jackfruit prepared with Silver Nanoparticles incorporation** **S.OR2.5**  
JOSÉ FILIPE BACALHAU RODRIGUES<sup>1</sup>, Maria Roberta de Oliveira Pinto<sup>1</sup>, Kleilton Oliveira Santos<sup>1</sup>, Rossemberg Cardoso Barbosa<sup>2</sup>, Marcus Vinicius de Lia Fook<sup>2</sup>, Gislaine Bezerra de Carvalho Barreto<sup>2</sup>; <sup>1</sup>Universidade Estadual da Paraíba, <sup>2</sup>Laboratório de Avaliação e Desenvolvimento de Biomateriais do Nordeste - CERTBIO/UAEMA/CCT

## Poster presentations

## SESSION S.P1 (17:45 - 19:30)

- 17:45 Characterization of commercial collagen sponges** S.P1.1  
Daniel Hideki Oichi<sup>1</sup>, Dámiana Máximo Brandão<sup>2</sup>, Sheyla Maria de Castro Máximo Bicalho<sup>2</sup>, Sergio Akinobu Yoshioka<sup>1</sup>; <sup>1</sup>Instituto de Química de São Carlos, <sup>2</sup>Empresa JHS Biomateriais
- 17:45 Coupling study (molecular docking) of the neuroestimulant baclofen© with the lecithin canavalia brasiliensis (conbr)** S.P1.2  
Gilderlan Almeida Araújo<sup>1</sup>, Eliana Pereira Silva<sup>1</sup>, Felipe Kairo de Sousa Lima<sup>1</sup>, Rondinelle Ribeiro Castro<sup>1</sup>, José Auri Pinheiro<sup>1</sup>, Márcia Machado Marinho<sup>2</sup>, Robson Guimarães Sanabio<sup>1</sup>, Emmanuel Silva Marinho<sup>1</sup>; <sup>1</sup>Universidade Estadual do Ceará, <sup>2</sup>Universidade Federal do Ceará
- 17:45 Blends of polythiophene derivative with poly(N-vinylcaprolactam) for applications in tissue engineering.** S.P1.3  
Sara Robert Nabra<sup>1</sup>, Lara Robert Nabra<sup>1</sup>, Lilia Müller Guerrini<sup>1</sup>, Maurício Pinheiro de Oliveira<sup>1</sup>, F. H. Cristovan<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Hinokinin a loaded Poly(lactic-co-glycolic acid) (PLGA) microparticles: Synthesis and Characterization** S.P1.4  
Regiane Godoy Lima<sup>1</sup>, Marcia Regina de Moura<sup>1</sup>, Rosangela Silva Laurentiz<sup>1</sup>; <sup>1</sup>Campus de Ilha Solteira
- 17:45 Antimicrobial activity and physical characterization of alginate-based nanocomposite films incorporating ZnO nanoparticles** S.P1.5  
Sergio Henrique de Toledo e Silva<sup>1</sup>, Andréa Cristiane Krause Bierhalz<sup>2</sup>, Theo Guenter Kieckbusch<sup>1</sup>, Ângela Maria Moraes<sup>1</sup>; <sup>1</sup>University of Campinas, <sup>2</sup>Universidade Federal de Santa Catarina
- 17:45 Mechanical characterization of glasses of the system SiO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub>-La<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub>** S.P1.6  
Fernando Olmedo Carvalho<sup>1</sup>, Arianne Ritter<sup>1</sup>, Afonso Chimanski<sup>1</sup>, Humberto Naoyuki Yoshimura<sup>1</sup>; <sup>1</sup>Universidade Federal do ABC
- 17:45 NEW STRUCTURE OF SCAFFOLD PRODUCED THROUGH RAPID PROTOTYPING** S.P1.7  
Sidney Nicodemos da Silva<sup>1</sup>, Philipe Pocidonio Silva<sup>1</sup>, Adriana Zatti Lima<sup>1</sup>, Bruno Cordeiro Silva<sup>1</sup>, Felipe de Carvalho Zavaglia<sup>2</sup>; <sup>1</sup>Centro Federal de Educação Tecnológica de Minas Gerais, <sup>2</sup>Universidade Estadual de Campinas
- 17:45 Radiopaque nanoparticles of trifluoride of ytterbium with potential use in dental resins** S.P1.8  
Lucas Henrique Mendes<sup>1</sup>, Emerson Rodrigues Camargo<sup>1</sup>, Francisco Nunes de Souza Neto<sup>2</sup>; <sup>1</sup>Universidade Federal de São Carlos - Campus: São Carlos, <sup>2</sup>Universidade Federal de São Carlos
- 17:45 Formation and characterization of bioactive membranes obtained from natural polymers reinforced with biominerals.** S.P1.9  
Lucas Fabricio Bahia Nogueira<sup>1</sup>, Ana Paula Ramos<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 17:45 Optimization of PEEK Processing by Extrusion and Compression Molding** S.P1.10  
Mayelli Dantas de Sá<sup>1</sup>, Flavia Suzany Ferreira dos Santos<sup>1</sup>, Valéria Pereira Ferreira<sup>1</sup>, Marcus Vinícius Lia Fook<sup>1</sup>, Cristiane Agra Pimentel<sup>1</sup>; <sup>1</sup>Universidade Federal de Campina Grande

- 17:45 Synthesis of mesoporous bioactive glass nanospheres with controllable morphology for bone tissue regeneration** **S.P1.11**  
Dayane Marques Oliveira<sup>1</sup>, Andreza de Sousa Andrada<sup>1</sup>, Daniel Andrada Maria<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Mechanical and microstructural evaluation of CoCr alloys manufactured via selective laser melting (SLM)** **S.P1.12**  
Marcello Vertamatti Mergulhão<sup>1</sup>, Carlos Eduardo Podestá<sup>1</sup>, MAURICIO DAVID MARTINS DAS NEVES<sup>1</sup>; <sup>1</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 17:45 Comparison of mechanical properties and microstructural characterization of CoCrMo alloy obtained via selective laser melting (SLM) and casting techniques** **S.P1.13**  
Marcello Vertamatti Mergulhão<sup>1</sup>, Carlos Eduardo Podestá<sup>1</sup>, MAURICIO DAVID MARTINS DAS NEVES<sup>1</sup>; <sup>1</sup>INSTITUTO DE PESQUISAS ENERGÉTICAS E NUCLEARES
- 17:45 Glass with titanium oxide for resin-modified glass ionomer cement** **S.P1.14**  
Silvia Denofre De Campos<sup>1</sup>, Elvio Antonio de Campos<sup>1</sup>, Caroline Clare<sup>1</sup>, Luana Jacomini<sup>1</sup>, Djéssica Welzel<sup>1</sup>, Miriã Cristina Santos<sup>1</sup>; <sup>1</sup>Universidade Estadual do Oeste do Paraná
- 17:45 Correlations between Physical Properties and Macromolecular Configuration for Chitosan and Oligo(DL-lactic acid) Networks** **S.P1.15**  
Claudio Batista Ciulik<sup>1</sup>, Oigres Daniel Bernardinelli<sup>2</sup>, Eduardo Ribeiro de Azevedo<sup>2</sup>, Leni Akcelrud<sup>1</sup>; <sup>1</sup>Universidade Federal do Paraná, <sup>2</sup>Instituto de Física de São Carlos - USP
- 17:45 Chloroaluminum phthalocyanine-loaded on nanoemulsion-mediated photodynamic therapy to treatment of glioblastoma multiforme** **S.P1.16**  
Leonardo Barcelos de Paula<sup>1</sup>, Fernando Lucas Primo<sup>2</sup>, Maryanne Trafani de Melo<sup>1</sup>, Antonio Claudio Tedesco<sup>1</sup>; <sup>1</sup>Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto - USP, <sup>2</sup>Faculdade de Ciências Farmacêuticas de Araraquara
- 17:45 Templated-assisted synthesis of porous PNIPAAm-co-AAc hydrogels by Pluronic F127** **S.P1.17**  
Flávia Mesquita Cabrini<sup>1</sup>, Mathilde Champeau<sup>1</sup>, Liliane Cristina Battirola<sup>2</sup>, Maria do Carmo Gonçalves<sup>2</sup>, Marcelo Ganzarolli de Oliveira<sup>2</sup>; <sup>1</sup>Universidade Estadual de Campinas, <sup>2</sup>Institute of Chemistry-UNICAMP
- 17:45 Preparation and Characterization of Poly( N isopropylacrylamide)/Chitosan Semi-IPN Hydrogel** **S.P1.18**  
Alexandre Flauzino Junior<sup>1</sup>, Maria Elena Leyva<sup>1</sup>, Alvaro Antonio Alencar de Queiroz<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 Study of the feed slurry parameters in the spray drying process to obtain wollastonite granules** **S.P1.19**  
Gleice Ellen Almeida Verginio<sup>1</sup>, Caroline Oliveira Renó<sup>1</sup>, Luciana Pereira Silva<sup>1</sup>, Eduardo Quinteiro<sup>1</sup>, Mariana Motisuke<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo
- 17:45 Study of Dye Resistance to Solar Radiation for Facial Prosthesis** **S.P1.20**  
Thainá Kelly Silva<sup>1</sup>, Keyte Nayara Da Silva Nascimento<sup>2</sup>, Paloma Bispo Coelho<sup>1</sup>, Thiago André Salgueiro Soares<sup>3</sup>, Eliane Cristina Viana Revoredo<sup>4</sup>, André Galembeck<sup>3</sup>, Walter Raysth Martínez<sup>2</sup>, Débora Carvalho Dos Anjos<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Sertão Pernambucano, <sup>2</sup>Universidade Federal de Pernambuco, <sup>3</sup>Centro de Tecnologias Estratégicas do Nordeste, <sup>4</sup>Hopital de Câncer de Pernambuco

- 17:45 SIMULATION OF ISSUES BETWEEN BIOELECTRIC MEMBRANES GLIAL PLASMA CELL: AN APPROACH IN SILICA** **S.P1.21**  
Emmanuelle Oliveira Sancho<sup>1</sup>, Orleancio Gomes Ripardo Azevedo<sup>2</sup>, Raul Victor Lourenço Penaforte<sup>1</sup>, Juscelino Chaves Sales<sup>3</sup>; <sup>1</sup>Universidade de Fortaleza, <sup>2</sup>Faculdade Nordeste, <sup>3</sup>Universidade Estadual do Vale do Acaraú
- 17:45 Study of phase transformation due heat treatment of Ti-10Nb alloy obtained with electric arc furnace** **S.P1.22**  
Sônia Regina Sales Barbosa<sup>1</sup>, Rafael Pacheco Evangelista<sup>1</sup>, Mirtânia Antunes Leão<sup>1</sup>, Gildo Machado Ribeiro<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia da Bahia
- 17:45 Study of PARK7 gene related to Parkinson's disease in different areas of the human brain using Brain Explorer® 2 software such as computer simulation tool** **S.P1.23**  
Reinaldo Souza Miranda<sup>1</sup>; <sup>1</sup>Universidade Paulista
- 17:45 Electrosynthesis of silver nanoparticles on silica microparticles to inhibit biofilm in silicone rubber** **S.P1.24**  
Livia C. dos Passos Araujo<sup>1</sup>, Maria Elena Leyva<sup>1</sup>, Paulo Sérgio Marques<sup>1</sup>, Estácio Tavares Neto<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá
- 17:45 biocide surfaces for surgical tools obtained by the surface treatments of Ag-Al alloys for obtaining Ag nanoparticles embedded in surface oxides** **S.P1.25**  
Luis Frederico P. Dick<sup>1</sup>, RENATO DE VALENTE VALENTE<sup>1</sup>, Marilene Henning Vainstein<sup>1</sup>, Vanessa Barcellos<sup>1</sup>, Caroline Barros<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Sintering behaviour of hydroxyapatite-zirconia composite synthesized by two chemical methods** **S.P1.26**  
Alejandra Hortencia Miranda González<sup>1</sup>, Ayrton Fernando Gomes de Oliveira<sup>1</sup>, Artur Eduardo Alves Castro<sup>1</sup>, Carlos F. O. Graeff<sup>2</sup>; <sup>1</sup>Universidade Anhanguera de São Paulo, <sup>2</sup>Faculdade de Ciências/Bauru
- 17:45 SU8 neural probe development** **S.P1.27**  
Andre Hernandes Alves Malavazi<sup>1</sup>, Jesus Arbey Benavides<sup>1</sup>, Roberto Maria Covolan<sup>1</sup>, Roberto Ricardo Panepucci<sup>2</sup>; <sup>1</sup>IFGW, Unicamp, <sup>2</sup>Centro de Tecnologia da Informação Renato Archer
- 17:45 Manganese-enhanced MRI (MEMRI) to evaluate the cellular activation and connectivity in vivo after deep brain stimulation** **S.P1.28**  
Jackeline Moraes Malheiros<sup>1</sup>, Alberto Tannús<sup>1</sup>, Luciene Covolan<sup>2</sup>; <sup>1</sup>CIERMag , IFSC , USP, <sup>2</sup>UNIFESP - Departamento de Fisiologia
- 17:45 Mechanisms of deep brain stimulation on restraint stress model** **S.P1.29**  
Karla De Michelis Mograbi<sup>1</sup>, Clement Hamani<sup>2</sup>, Luciene Covolan<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo, <sup>2</sup>Universidade de Toronto - Canadá
- 17:45 Expression of Brain C- Fos after deep brain stimulation ( DBS)** **S.P1.30**  
Christiane Gimenes<sup>1</sup>, Jackeline Moraes Malheiros<sup>1</sup>, Luciene Covolan<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo (UNIFESP)

# **SYMPOSIUM T - Self-Assembled Biological Structures for Electronic and Photonic Devices and Applications**

**Symposium organizers:**

Wendel Andrade Alves (*UFABC*)  
Suchi Guha (*University of Missouri*)  
Susana Inés Córdoba de Torresi (*USP*)  
Luiz Henrique Dall'Antonia (*UEL*)



# Wednesday, September 28<sup>th</sup>

## Poster presentations

### *SESSION T.P1 (17:45 - 19:30)*

- 17:45 X-ray scattering techniques applied to the study of biomaterials at the air/liquid interface** **T.P1.2**  
Antonio Augusto Malfatti Gasperini<sup>1</sup>, Ximena Elizabeth Puentes<sup>1</sup>, Rafael Oliveira<sup>2,3</sup>, Julio Pusterla<sup>2</sup>, Márcio Medeiros Soares<sup>1</sup>, Leide Cavalcanti<sup>4</sup>;  
<sup>1</sup>Brazilian Center for Research in Energy and Materials, <sup>2</sup>Universidad Nacional de Cordoba, <sup>3</sup>Consejo Nacional de Investigaciones Científicas y Técnicas, <sup>4</sup>Faculdade de Engenharia Química - UNICAMP
- 17:45 Inhibition acetylcholinesterase in different drugs used in therapy of alzheimer's evil: biochemical analysis and structural using software rasmol.** **T.P1.3**  
Paula Martins da Silva<sup>1</sup>, Letícia Graziela Costa Santos<sup>1</sup>, Renato Massaharu Hassunuma<sup>1</sup>, Eduardo Nascimbem Turini<sup>1</sup>, Patricia Carvalho Garcia<sup>1</sup>;  
<sup>1</sup>Universidade Paulista
- 17:45 Time-resolved fluorescence study of a self-assembled FF nanotube containing a fluorescent dye** **T.P1.4**  
Geovany Albino de Souza<sup>1</sup>, Tatiana Duque Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de Goiás
- 17:45 Au nanoparticles based catalysts for enzyme mimic: Effect on particle size on catalytic performance** **T.P1.5**  
Larissa Helena de Oliveira<sup>1</sup>, Lidiane Oliveira Pinto<sup>1</sup>, Lauro Tatsuo Kubota<sup>1</sup>, Fernando Aparecido Sigoli<sup>1</sup>, Italo Odone Mazali<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 The theory of molecular watch: a protein comparative study species of different prion using bioinformatics tools.** **T.P1.6**  
Paula Martins da Silva<sup>1</sup>, Eduardo Nascimbem Turini<sup>1</sup>, Renato Massaharu Hassunuma<sup>1</sup>, Patricia Carvalho Garcia<sup>1</sup>, Letícia Graziela Costa Santos<sup>1</sup>;  
<sup>1</sup>Universidade Paulista
- 17:45 L,L-diphenylalanine/zinc phthalocyanine conjugates in photodynamic therapy** **T.P1.1**  
márcia isabel de souza prado<sup>1,2</sup>, Francisco Batista do Nascimento<sup>2</sup>, Tatiana pietro<sup>2</sup>, Emerson Rodrigo da Silva<sup>3,4</sup>, Anderson Orzari Ribeiro<sup>2</sup>, Tiago Rodrigues<sup>2</sup>, Wendel Andrade Alves<sup>2</sup>; <sup>1</sup>Fundação Universidade Federal do Abc, <sup>2</sup>Universidade Federal do ABC, <sup>3</sup>Universidade Federal de Alagoas, <sup>4</sup>Universidade Federal de São Paulo



# SYMPOSIUM U - University Chapter Symposium

## Symposium organizers:

Tiago Carneiro Gomes (*UNESP*)  
Bruna Carolina Costa (*UNESP*)  
João Paulo Almeida de Mendonça (*UFJF*)  
Marcella Rocha Franco (*UFOP*)  
Jefferson da Silva Martins (*UFJF*)



# Monday, September 26<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION U.OR1 (09:45 - 10:45) - Room Cerejeira*

- 09:45 Electronics in Brazil** **U.OR1.1\***  
Roberto Mendonça Faria<sup>1</sup>; <sup>1</sup>Universidade de São Paulo
- 10:15 Electronic structure and dynamic interactions in organic semiconductors as studied by Electronic Magnetic Resonance** **U.OR1.2\***  
Carlos F. O. Graeff<sup>1</sup>; <sup>1</sup>Faculdade de Ciências/Bauru

### *SESSION U.OR2 (11:15 - 12:00) - Room Cerejeira*

- 11:15 Some Practical Aspects of Transmission Electron Microscopy** **U.OR2.3\***  
Carlos Alberto Ospina Ramirez<sup>1</sup>; <sup>1</sup>Electron Microscopy Laboratory, Brazilian Nanotechnology National Laboratory, Campinas, SP, Brazil

### *SESSION U.OR3 (14:00 - 16:15) - Room Cerejeira*

- 14:00 Advances and Perspectives on Single Particles Cryo-EM** **U.OR3.4\***  
Rodrigo Villares Portugal<sup>1</sup>; <sup>1</sup>Electron Microscopy Laboratory, Brazilian Nanotechnology National Laboratory, Campinas, SP, Brazil
- 14:30 Advances in Nanomedicine and Nanotoxicology** **U.OR3.5\***  
Valtencir Zucolotto<sup>1</sup>; <sup>1</sup>Nanomedicine and Nanotoxicology Group, IFSC/USP
- 15:00 Trojan-like internalization of titanium nanoparticles by bone cells: a glance at the nano-biointerface** **U.OR3.6\***  
Ana Rosa Ribeiro<sup>1</sup>, Sara Gemini Piperni<sup>1</sup>, Radovan Borojevic<sup>1</sup>, Luís Augusto Rocha<sup>1</sup>, Jose Mauro Granjeiro<sup>1</sup>; <sup>1</sup>National Institute of Metrology Quality and Technology
- 15:30 From idea to product:organic dosimeter to promote most efficient use of neonatal phototherapy** **U.OR3.7\***  
Rodrigo Fernando Bianchi<sup>1</sup>, Antônio Maurício Tannure Fonseca<sup>1</sup>, Andrea Gomes Campos Bianchi<sup>1</sup>, Giovana Ribeiro Ferreira<sup>2</sup>, Andrea Gomes Campos Bianchi<sup>1</sup>, Melissa F. Siqueira Savedra<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto, <sup>2</sup>Universidade Federal dos Vales do Jequitinhonha E Mucuri

## Poster presentations

### *SESSION U.P1 (17:45 - 19:30)*

- 17:45 The Game of Periodic Table at the Teaching of Materials Science** **U.P1.1**  
Beatriz Antoniassi<sup>1</sup>, Marcia Rodrigues de Moraes Chaves<sup>1</sup>, Marcelo Telascrêa<sup>1</sup>; <sup>1</sup>Universidade do Sagrado Coração

- 17:45 NEW PERSPECTIVES AT UNIVERSITY CHAPTER RIO GRANDE DO SUL U.P1.2**  
Bruna Louise Perotti<sup>1</sup>, Carla Daniela Boeira<sup>1</sup>, Leonardo Mathias Leidens<sup>1</sup>;  
<sup>1</sup>Universidade de Caxias do Sul
- 17:45 ELECTROSPINNING OF PVDF FOR APPLICATION IN PHOTOVOLTAIC DEVICES U.P1.3**  
 Angela Priscila Pelegrini Bolach<sup>1</sup>, Carlos Eduardo Campos Lanzi<sup>1</sup>, Camilla Martins Ruiz<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Bruno Henrique Santana Goís<sup>1</sup>, Jessyka Carolina Bittencourt<sup>2</sup>, Guilherme Dognani<sup>1</sup>, Roger C. Hiorns<sup>3</sup>, Clarissa de Almeida Olivati<sup>1</sup>, Deuber Lincon da Silva Agostini<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente, <sup>2</sup>FCT - Faculdade de Ciências e Tecnologia, Programa de Pós-Graduação em Ciência dos Materiais (POSMAT), Campus de Presidente Prudente - SP, <sup>3</sup>IPREM CNRS-UMR 5254, Pau university
- 17:45 Kinetic study of the curing reaction from polymer formulations used in industrial sensors U.P1.4**  
José Wilson Palma<sup>1</sup>, Maria Elena Leyva<sup>1</sup>, Alvaro Antonio Alencar de Queiroz<sup>1</sup>;  
<sup>1</sup>Universidade Federal de Itajubá
- 17:45 University Chapter NanoMaterials: Researchers in Presidente Prudente - SP U.P1.5**  
Aline Santos<sup>1</sup>, Neri Alves<sup>1</sup>, Ana Maria Pires<sup>1</sup>, Deuber Lincon da Silva Agostini<sup>1</sup>, Clarissa de Almeida Olivati<sup>1</sup>, Agda Eunice de Souza<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista - Campus de Presidente Prudente
- 17:45 Properties analysis of the self-compacting concrete with fly ash U.P1.6**  
Adilson Schackow<sup>1</sup>, Decio Marcon Neto<sup>1</sup>, Daniel Estevão Bonifácio<sup>1</sup>, Carmeane Effting<sup>1</sup>; <sup>1</sup>Fundação Universidade do Estado de Santa Catarina
- 17:45 The solvent polarity dependence of the polymorphism in stearic acid U.P1.7**  
Luiz Fernando Lobato Silva<sup>1</sup>, Francisco Ferreira de Sousa<sup>2</sup>, Gardênia Pinheiro<sup>3</sup>, Waldomiro Paschoal<sup>1</sup>, Paulo de Tarso Cavalcante Freire<sup>4</sup>, Josue Mendes Filho<sup>4</sup>, Sanclayton Moreira<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Universidade Federal do Sul e Sudeste do Pará, <sup>3</sup>Federal University of Piaui, <sup>4</sup>Universidade Federal do Ceará
- 17:45 Study of radial failure mode (birdcaging) on flexible pipes steel layer U.P1.8**  
Lucio Carlos Pinto Rangel<sup>1</sup>, Luiz Carlos da Silva Nunes<sup>1</sup>; <sup>1</sup>Universidade Federal Fluminense
- 17:45 Influence of the simultaneous addition of polypropylene and steel fibers in cementitious composite light permeability. U.P1.9**  
Tarcísio Santiago Gomes Filho<sup>1</sup>, Antônio Eduardo Martinelli<sup>1</sup>, Marcus Antônio de Freitas Melo<sup>1</sup>, Filipe Johnatan Martins Dantas Costa<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio Grande do Norte
- 17:45 Microstructural and mechanical analysis of CA-50 rebars in different heat treatments states. U.P1.10**  
Ana Larissa Melo Feitosa<sup>1</sup>, Marcelo José Gomes da Silva<sup>1</sup>, Emmanuel de Sousa Almeida<sup>1</sup>, Giovani Gonçalves Ribamar<sup>1</sup>; <sup>1</sup>Universidade Federal do Ceará
- 17:45 Electrical properties of nanofibers electrospun of polypyrrole with poly(vinylidene fluoride) U.P1.11**  
André Antunes da Silva<sup>1</sup>, Bruno Henrique Santana Goís<sup>1</sup>, Jessyka Carolina Bittencourt<sup>1</sup>, Guilherme Dognani<sup>1</sup>, Angela Priscila Pelegrini Bolach<sup>1</sup>, Camilla Martins Ruiz<sup>1</sup>, Deuber Lincon da Silva Agostini<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente

- 17:45 Rheology in the undergradaution program: Federal Technological University of Paraná** **U.P1.12**  
Delia do Carmo Vieira<sup>1</sup>, Rebecca Abreu Nascimento<sup>1</sup>, Felipe Ferreira Lopes<sup>1</sup>, Otávio Vilaça Mesquita<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Rheology: an area of interdisciplinary research** **U.P1.13**  
Delia do Carmo Vieira<sup>1</sup>, Otávio Vilaça Mesquita<sup>1</sup>, Rebecca Abreu Nascimento<sup>1</sup>, Felipe Ferreira Lopes<sup>1</sup>, Felipe Barros Laraz<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 The University Chapter of Ouro Preto - UCHOP** **U.P1.14**  
Marcella Rocha Franco<sup>1</sup>, Alana Fernandes Golin<sup>1</sup>, Guilherme Mendes Martins<sup>1</sup>; <sup>1</sup>Universidade Federal de Ouro Preto
- 17:45 Study of morphological and electrical properties of nanofibers PVA/PEDOT:PSS produced by electrospinning** **U.P1.15**  
Bruno Henrique Santana Goís<sup>1</sup>, Jessyka Carolina Bittencourt<sup>1</sup>, André Antunes da Silva<sup>1</sup>, Camilla Martins Ruiz<sup>1</sup>, Guilherme Dognani<sup>1</sup>, Angela Priscila Pelegrini Bolach<sup>1</sup>, Deuber Lincon da Silva Agostini<sup>1</sup>; <sup>1</sup>FCT-UNESP Campus de Presidente Prudente



# **SYMPOSIUM V - Sustainable development of materials for advanced energy and electronics, extractive materials and transportation products**

## **Symposium organizers:**

Peter William Bryant (*IBM*)  
Rodrigo Fernando Bianchi (*UFOP*)  
Rodrigo Neumann Barros Ferreira (*IBM*)  
Roberto Mendonça Faria (*USP*)  
Ronaldo Giro (*IBM*)



# Wednesday, September 28<sup>th</sup>

## Oral presentations

\* Invited Lecture

### *SESSION V.OR1 (14:00 - 16:15) - Room Carvalho III*

- 14:00 Sustainable development of science, technology, and education in materials for regional and global needs** V.OR1.1\*  
Robert P.H. Chang<sup>1</sup>; <sup>1</sup>Northwestern University
- 14:20 Sustainable Materials on the front edge of Innovation** V.OR1.2\*  
Rodrigo Ferrão de Paiva Martins<sup>1,2</sup>, Elvira Maria Correia Fortunato<sup>1,3,2</sup>; <sup>1</sup>Centro de Investigação em Materiais do Instituto de Nanofabricação, Nanomateriais e Nanomodelação, <sup>2</sup>Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, <sup>3</sup>Centro de Excelencia em Microelectrónica e Optoelectrónica de Processos do Instituto de Novas Tecnologias
- 14:40 Projects related to Enviromental Sustentability in devolpment at FIT** V.OR1.3\*  
Paula Ruhnke Valério<sup>1</sup>; <sup>1</sup>Flextronics Instituto de Tecnologia

## Poster presentations

### *SESSION V.P1 (17:45 - 19:30)*

- 17:45 On the assessment of dye retention in quartz-based ceramic porous material by optical fiber sensor** V.P1.1  
Marco César Soares<sup>1</sup>, Murilo Ferreira Marques Santos<sup>1</sup>, Egont Alexandre Schenkel<sup>1</sup>, Antônia Alana Lima Pacheco<sup>1</sup>, Beatriz Ferreira Mendes<sup>1</sup>, Eric Fujiwara<sup>1</sup>, Carlos K. Suzuki<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Study of the partial replacement of stone dust by ballon powder in precast concrete blocks** V.P1.2  
Amanda Martins Fernandes<sup>1</sup>, Jaqueline de Assis Oliveira<sup>2</sup>, Alisson Alves<sup>2</sup>, Leonardo Lúcio de Araújo Gouveia<sup>2</sup>, Carlos Augusto de Souza Oliveira<sup>1</sup>, Ricardo Luiz Perez Teixeira<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Universidade do Estado de Minas Gerais
- 17:45 Development of unburned bricks with additions of rice husk ash and lime** V.P1.3  
Felipe da Silva Barros<sup>1</sup>, Miguel Angel Ramírez Gil<sup>1</sup>; <sup>1</sup>Universidade Estadual Paulista "Júlio de Mesquita Filho"
- 17:45 Effects of Environmental Aging in Polypropylene Obtained by Injection Molding** V.P1.4  
Rebeca da Silva Grecco Romano<sup>1</sup>, Washington Luiz Oliani<sup>1</sup>, Duclerc Fernandes Parra<sup>1</sup>, Ademar Benévolo Lugão<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares

- 17:45 Tensile strength of recycled ABS composite reinforced with jute fiber fabric** **V.P1.5**  
Meire Noriko Hosokawa<sup>1</sup>, Jane Maria Faulstich de Paiva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba
- 17:45 Synthesis of polyurethane composites based on acetylated cellulose and magnetic nanoparticles for sorption of mineral oil** **V.P1.6**  
Mariana Moraes Góes<sup>1</sup>, Gizilene Maria de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Recycling Zinc from spent Zn-MnO<sub>2</sub> batteries as galvanic protection for AISI 1020 carbon steel in chloride solution.** **V.P1.7**  
Pedro Vitor Dixini<sup>1</sup>, Andressa Meireles David<sup>1</sup>, Beatriz Belotti Carvalho<sup>1</sup>, Carlos Eduardo Tartaglia Bruzeguini<sup>1</sup>, Vinicius Guilherme Celante<sup>1</sup>, Vitor Cezar Broetto Pegoretti<sup>2</sup>, Marcos Benedito Jose de Freitas<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo, <sup>2</sup>Universidade Federal do Espírito Santo
- 17:45 Fabrication of microporous films of cellulose triacetate using the breath figure technique** **V.P1.8**  
Fernanda Nardo Cobo<sup>1</sup>, Paula Cristina Faria-Tischer<sup>1</sup>, Gizilene Maria de Carvalho<sup>1</sup>; <sup>1</sup>Universidade Estadual de Londrina
- 17:45 Tensile mechanical behavior of hybrid composites of jute/glass fiber in different ply orientation** **V.P1.9**  
Jose Leandro Alves<sup>1</sup>, Jane Maria Faulstich de Paiva<sup>1</sup>; <sup>1</sup>Universidade Federal de São Carlos - campus Sorocaba
- 17:45 A study on flame retardant polyurethane composites** **V.P1.10**  
Rachel Faverzani Magnago<sup>1</sup>, Heloisa Regina Turatti Silva<sup>1</sup>, Paola Egert Ortiz<sup>1</sup>, Victor Leibnitz Hipólito<sup>1</sup>, Mayara de Brito Dias<sup>1</sup>, Diego Valdevino Marques<sup>1</sup>; <sup>1</sup>Universidade do Sul de Santa Catarina
- 17:45 Comparison of different methods for determining the work hardening coefficient of recycled aluminum cans components** **V.P1.11**  
Daniele dos Reis Soares<sup>1</sup>, Gianfranco de Mello Stieven<sup>1</sup>, José Augusto França Rodrigues<sup>1</sup>, Antonio Luciano Seabra Moreira<sup>1</sup>, Maria Adrina Paixão de Sousa da Silva<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará
- 17:45 Treatment evaluation thermal spheroidizing in steel ASTM A106 submitted to wear tests erosive** **V.P1.12**  
Hector Amaro Virginia<sup>1</sup>, Marcio Roberto da Rocha<sup>2</sup>, Angela Beatriz Coelho Arnt<sup>1</sup>, Gabrieli Borges Ugioni<sup>1</sup>, Ariel Teixeira<sup>1</sup>, Ronaldo Veronês do Nascimento<sup>1</sup>; <sup>1</sup>Universidade do Extremo Sul Catarinense, <sup>2</sup>Universidade Federal de Santa Catarina
- 17:45 Structural Evaluation of Fuller Earth Contaminated With Insulating Oil after photo Fenton Treatment** **V.P1.13**  
Eduardo Oliveira Rodrigues<sup>1</sup>, Milady R. Apolinário Silva<sup>2</sup>, Flávio Soares Silva<sup>2</sup>, Marcia M Kondo<sup>2</sup>, Rossano Gimenes<sup>2</sup>; <sup>1</sup>INSTITUTO FEDERAL DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA DO SUL DE MINAS GERAIS CAMPUS INCONFIDENTES, <sup>2</sup>Universidade Federal de Itajubá
- 17:45 Composite of recycled carbon fiber and polypropylene** **V.P1.14**  
Denise Hirayama<sup>1</sup>, Antônio Carlos Ancelotti<sup>1</sup>, Clodoaldo Saron<sup>2</sup>, Edson Cocchieri Botelho<sup>3</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Escola de Engenharia de Lorena/USP, <sup>3</sup>Universidade Estadual Paulista-Campus de Guaratinguetá

- 17:45 Synthesis and characterization of a derivative of pectin for studies on phenomenon metals sorption** **V.P1.15**  
Ana Paula Reis Santana<sup>1</sup>, Mario Henrique Gonzalez<sup>1</sup>, Marcelo de Freitas Lima<sup>1</sup>;  
<sup>1</sup>UNESP - Instituto de Biologia, Letras e Ciências Exatas de São José do Rio Preto
- 17:45 Influence of the dissolution time of silica from RHA on the mechanical performance of geopolymers** **V.P1.16**  
Conrado Game Saldeira<sup>1</sup>, Luiz Flávio Reis Fernandes<sup>1</sup>, Rodrigo Henrique Geraldo<sup>1</sup>, Felipe Silva Pontes<sup>1</sup>, Aline Souza Souza<sup>1</sup>, Gladis Camarini<sup>1</sup>;  
<sup>1</sup>Universidade Estadual de Campinas
- 17:45 Influence of Ca(OH)<sub>2</sub> on geopolymers properties** **V.P1.17**  
Conrado Game Saldeira<sup>1</sup>, Rodrigo Henrique Geraldo<sup>1</sup>, Luiz Flávio Reis Fernandes<sup>1</sup>, Aline Souza Souza<sup>1</sup>, Gladis Camarini<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Bio-based carbon porous materials from integral use of kraft black liquor** **V.P1.18**  
Gisele Amaral-Labat<sup>1</sup>, Rodrigo Labat Marcos<sup>2</sup>, Guilherme Frederico Bernardo Lenz e Silva<sup>1</sup>; <sup>1</sup>Universidade de São Paulo, <sup>2</sup>Universidade Nove de Julho
- 17:45 Analysis of the addition of a biopolymer in the mechanical properties of concrete** **V.P1.19**  
Aurea Emanuelle Santos<sup>1</sup>, Eder Couto Marinho<sup>1</sup>, Manoel Martins Filho<sup>1</sup>;  
<sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas
- 17:45 Biodegradable blends of Poly(lactic acid) and Poly(ε-caprolactone) toughening by non-reactive compatibilization - the influence of the compatibilizer content** **V.P1.20**  
Paula do Patrocínio Dias<sup>1</sup>, Marcelo Aparecido Chinelatto<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Influence of the citric acid and limonene in the incorporation blende PE / ATP** **V.P1.21**  
Beatriz dos Santos Gonzalez<sup>1</sup>, Larissa Nunes da Silva<sup>1</sup>, Anderson Maia<sup>1</sup>, Rondes Ferreira da Silva Torin<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de Mauá
- 17:45 Comparative analysis of mechanical properties of conventional concrete and concrete with crushed glass replacement** **V.P1.22**  
Eder Couto Marinho<sup>1</sup>, Aurea Emanuelle Santos<sup>2</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia de Alagoas, <sup>2</sup>Instituto Federal De Alagoas
- 17:45 Green Polyethylene Reprocessing** **V.P1.23**  
Juliana Nunes<sup>1</sup>, Thalita Pereira da Silva<sup>1</sup>, Rondes Ferreira da Silva Torin<sup>1</sup>, Anderson Maia<sup>1</sup>; <sup>1</sup>FACULDADE DE TECNOLOGIA
- 17:45 Characterization of the natural rubber from new clones of rubber tree: RRIM 711 and RRIM 937** **V.P1.24**  
MAYCON JHONY SILVA<sup>1,2</sup>, Erivaldo José Scaloppi Jr.<sup>3</sup>, Paulo S. Gonçalves<sup>4,3</sup>, Maria Alice Martins<sup>2</sup>, Luiz Henrique Capparelli Mattoso<sup>2</sup>;  
<sup>1</sup>Universidade Federal de São Carlos, <sup>2</sup>Embrapa Instrumentação, <sup>3</sup>Instituto Agrônômico, <sup>4</sup>Empresa Brasileira de Pesquisa Agropecuária
- 17:45 Composite of Hevea brasiliensis resin reinforced with coir fibre: production raw material for use in building products** **V.P1.25**  
Célia Regina da Costa<sup>1</sup>, Zélia Maria Da Costa Ludwig<sup>2</sup>; <sup>1</sup>Politecnico di Milano, <sup>2</sup>Universidade Federal de Juiz de Fora

- 17:45 Solid waste as an alternative for application in ceramic industry** V.P1.26  
 Gildemberg Pereira de Barros Silva<sup>1</sup>, José Geraldo de Souza Silva<sup>1</sup>, Severino Jackson Guedes<sup>2</sup>, Iêda Maria Garcia Santos<sup>2</sup>, Maria Bandeira Barroso<sup>3</sup>, Silvana Garcia Viana<sup>4</sup>, Rosa Medeiros Marinho<sup>1</sup>; <sup>1</sup>Universidade Regional do Cariri, <sup>2</sup>Universidade Federal da Paraíba, <sup>3</sup>Universidade Federal do Cariri, <sup>4</sup>Instituto Federal da Bahia
- 17:45 Analysis of mechanical behavior and structural features composite polymeric with fiber juta** V.P1.28  
 Tamires Isabela Botelho<sup>1</sup>, Jean Valdir Uchoa Teixeira<sup>1</sup>, Fernanda Malato Praxedes<sup>1</sup>, Vera Dias da Silva<sup>1</sup>, Syme Regina Souza Queiroz<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Influence of temperature in the electrical conductivity of soybean oil, diesel and biodiesel** V.P1.29  
 Simone Dos Santos Bittencourt<sup>1</sup>, Fernanda de Almeida Melo<sup>1</sup>, Anderson Rodrigues Lima Caires<sup>2</sup>, José Ezequiel De Souza<sup>1</sup>; <sup>1</sup>Fundação Universidade Federal da Grande Dourados, <sup>2</sup>Universidade Federal de Mato Grosso do Sul
- 17:45 Poly(vinyl alcohol)-Chitosan blends obtained by different drying methods** V.P1.30  
 Rafael Grande<sup>1</sup>, Antonio Jose Felix Carvalho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Study for the viability of the production of L and U profiles with the use on composites reinforced by natural fibers** V.P1.31  
 Ailton da Silva Nascimento<sup>1</sup>, César Tadeu Nasser Medeiros Branco<sup>1</sup>, Edwillson Gonçalves de Oliveira Filho<sup>2,1</sup>, Fábio Santos de Sousa<sup>2,1</sup>, Jair Francisco Souza Magalhães<sup>1</sup>, José Maria Braga Pinto<sup>1</sup>, Luciano Monteiro Almeida<sup>1</sup>, Roberto Tetsuo Fujiyama<sup>1</sup>; <sup>1</sup>Universidade Federal do Pará, <sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Preparation and mechanical characterization of TPS/Poly(vinyl alcohol)-co-ethylene blends** V.P1.32  
 Ana Clara Lancarovici Alves<sup>1</sup>, Rafael Grande<sup>1</sup>, Antonio Jose Felix Carvalho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Miscibility of poly (hydroxybutyrate)/poly (vinyl alcohol) blends obtained by melt blending** V.P1.33  
 Deliane da Silva Cabral<sup>1</sup>, Rafael Grande<sup>1</sup>, Antonio Jose Felix Carvalho<sup>1</sup>; <sup>1</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Effects of nanoparticles, Al<sub>2</sub>O<sub>3</sub>-NiO, TiO<sub>2</sub> e (Mg,Ni)O, on viscosity of heavy oil during aquathermolysis** V.P1.34  
 Ronal de la Cruz Parejas<sup>1</sup>, Francisco José Moura<sup>1</sup>, Roberto R de Avillez<sup>1</sup>; <sup>1</sup>Pontifícia Universidade Católica do Rio de Janeiro
- 17:45 Development of epoxy/non-woven composites using waste of non-woven industry** V.P1.35  
 José Rodolfo Vieira Leite<sup>1</sup>, Fabio Roberto Passador<sup>1</sup>; <sup>1</sup>Universidade Federal de São Paulo - Campus São José dos Campos
- 17:45 Alkali activated binder made with RHA and concrete production's wastewater** V.P1.36  
 Aline Souza Souza<sup>1</sup>, Conrado Game Saldeira<sup>1</sup>, Luiz Flávio Reis Fernandes<sup>1</sup>, Rodrigo Henrique Geraldo<sup>1</sup>, Gladis Camarini<sup>1</sup>; <sup>1</sup>Universidade Estadual de Campinas
- 17:45 Physical characterization of ecological bricks from the materials recyclable for sustainable structures** V.P1.37  
 Rebeca Delatore Simões<sup>1</sup>, Maria Eunice Carvalho Tosello<sup>1</sup>, Jader Géa Garcia<sup>1</sup>, Patricia Alexandra Antunes<sup>1</sup>; <sup>1</sup>Universidade do Oeste Paulista

- 17:45 Characterization of the addition of rice husk in gypsum plaster matrix via scanning electron microscopy V.P1.38**  
Marcelo Manoel Valentim Bastos<sup>1</sup>, Andreza Toledo<sup>1</sup>, Rosinei Batista Ribeiro<sup>2</sup>, Gilbert Silva<sup>1</sup>, Adilson da Silva Mello<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Faculdades Integradas Teresa D'ávila
- 17:45 Mechanical Characterization of Polystyrene/Pine Wood Waste Composites V.P1.39**  
DIEGO DAVID PINZÓN MORENO<sup>1</sup>, Clodoaldo Saron<sup>1</sup>; <sup>1</sup>Escola de Engenharia de Lorena/USP
- 17:45 Synthesis of alumina nanoparticles via proteic sol-gel using coconut water V.P1.40**  
Danyela Carvalho, Vanessa Duarte Del Cacho<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de São Paulo
- 17:45 Life cycle assessment of fused alumina grains for sustainable grinding tools manufacturing V.P1.41**  
Carlos Yujiro Shigue<sup>1</sup>, Alexandre Dutra Golanda<sup>1</sup>, Luis Henrique Chung Caravante<sup>1</sup>, Katia Cristiane Gandolpho Candioto<sup>1</sup>; <sup>1</sup>Universidade de São Paulo - Escola Engenharia Lorena
- 17:45 Thermal and morphological studies of palm cartridge waste for polymeric thermoset systems V.P1.42**  
Maria Inez Graf de Miranda<sup>1</sup>, Ricardo Martins de Martins<sup>1</sup>, Luiz Carlos Robinson<sup>1</sup>, Guilherme Brum da Luz<sup>1</sup>, Clara Isméria Damiani Bica<sup>2</sup>, Dimitrios Samios<sup>2</sup>; <sup>1</sup>Universidade Feevale, <sup>2</sup>Universidade Federal do Rio Grande do Sul
- 17:45 Microstructural characterization and rheological properties of a clay mineral from southwest region of the Brazilian State of São Paulo for nanocomposites V.P1.43**  
Delia do Carmo Vieira<sup>1</sup>, Felipe Ferreira Lopes<sup>1</sup>, Rebecca Abreu Nascimento<sup>1</sup>; <sup>1</sup>Universidade Tecnológica Federal do Paraná
- 17:45 Influence of silica-magnesia systems synthesis conditions on silicates formation: characterization by thermal analysis and X-ray diffraction V.P1.44**  
Silmara Furtado da Silva<sup>1</sup>, Luiza Cardoso Cintra<sup>1</sup>, Maria Letícia Murta Valle<sup>1</sup>, Jo Dweck<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro - EQ
- 17:45 Fractography and failure mechanisms in CFRP tubes submitted to burst testing V.P1.45**  
Raquel de Moraes Lobo<sup>1</sup>, Aldison Diego Fonseca Dias<sup>1</sup>, Gerson Marinucci<sup>1</sup>, Arnaldo Homobono Paes de Andrade<sup>1</sup>; <sup>1</sup>Instituto de Pesquisas Energéticas e Nucleares
- 17:45 Use of amazon fibers as reinforcement in polymer matrix composite V.P1.46**  
Gabriel Mendes Hirayama Machado<sup>1</sup>, Jean Valdir Uchoa Teixeira<sup>1</sup>, Fernanda Malato Praxedes<sup>1</sup>, Vera Lúcia Dias da Silva<sup>1</sup>, Syme Regina Souza Queiroz<sup>1</sup>; <sup>1</sup>Instituto Federal de Educação, Ciência e Tecnologia do Pará
- 17:45 Synthesis and characterization of 1,3 diethyl imidazole tetrafluoroborate aimed application as ionic liquid. V.P1.47**  
Felipe Tadashi Kasuga<sup>1</sup>, Alex Vieira Pedroso<sup>1</sup>, Rodolfo Thiago Ferreira<sup>1</sup>, Fábio Santana dos Santos<sup>1</sup>, Gustavo Marciniuk<sup>1</sup>, Marco Antonio Voinarovicz<sup>1</sup>, Ariane Silva Ribas<sup>1</sup>, Andressa Oliveira Rodrigues<sup>1</sup>, Rodolfo Bonoto Estevam<sup>1</sup>, Jarem Raul Garcia Garcia<sup>1</sup>; <sup>1</sup>Universidade Estadual de Ponta Grossa
- 17:45 Incorporation of agroindustrial wastes in the fabrication of soda-lime silica glasses V.P1.48**  
João Gustavo Cardoso Semensin<sup>1</sup>, Vanessa Duarte Del Cacho<sup>1</sup>; <sup>1</sup>Faculdade de Tecnologia de São Paulo

- 17:45 Study of rheological properties of blends of poly (vinyl alcohol) and chitosan by solution** **V.P1.49**  
Renan Bovoloni Ruocco<sup>1</sup>, Antonio Jose Felix Carvalho<sup>1</sup>, Rafael Grande<sup>1</sup>;  
<sup>1</sup>Escola de Engenharia de São Carlos/USP
- 17:45 Lignin as a renewable source for carbon fiber** **V.P1.50**  
Kátia Santos Damacena Nunes<sup>1</sup>, Luiz Claudio Pardini<sup>2</sup>, Nilton Alves<sup>3</sup>; <sup>1</sup>Instituto Tecnológico de Aeronáutica, <sup>2</sup>Instituto de Aeronáutica e Espaço, <sup>3</sup>Quimlab Produtos de Química Fina Ltda

## Thursday, September 29<sup>th</sup>

### Oral presentations

\* Invited Lecture

#### *SESSION V.OR2 (08:30 - 10:15) - Room Carvalho III*

- 08:30 More oil out of the ground: insights from multiscale molecular simulations** **V.OR2.5\***  
Caetano Rodrigues Miranda<sup>1</sup>; <sup>1</sup>Instituto de Física-USP
- 09:00 Development of a geopolymer reinforced with amazon natural fiber** **V.OR2.6**  
Paulo Cesar Reis Filho<sup>1</sup>, Kaline Dantas Silva<sup>1</sup>, Renata Lilian Portugal Fagury<sup>1</sup>, Márcio Paulo de Araújo Mafra<sup>1</sup>, Adriano Alves Rabelo<sup>1</sup>, Elias Fagury Neto<sup>1</sup>, Wirland Matheus de Melo Costa<sup>1</sup>; <sup>1</sup>Universidade Federal do Sul e Sudeste do Pará
- 09:15 Appliation of new molecularly imprinted polymers (MIPs) for selective analysis of Ofloxacin** **V.OR2.7**  
Sajjad Hussain<sup>1</sup>, sabir khan<sup>2</sup>; <sup>1</sup>Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, <sup>2</sup>Instituto de Química - IQ - Unesp - Araraquara
- 09:30 Hybrid nanocomposites of recycled polypropilene and nanodebris from construction industry** **V.OR2.8**  
Katharina Rodrigues Malafaia Macedo<sup>1</sup>, Sibeled Piedade Cestari<sup>1</sup>, Luis Claudio Mendes<sup>1</sup>, Léa Maria Lopes de Almeida<sup>1</sup>; <sup>1</sup>Universidade Federal do Rio de Janeiro
- 09:45 Chemical and mechanical plaster characterization with different compositions of diatomaceous earth by electronic scanning microscopy** **V.OR2.9**  
Isabella Batista Graça Grego<sup>1</sup>, Adilson da Silva Mello<sup>1</sup>, Rosinei Batista Ribeiro<sup>2</sup>, Gilbert Silva<sup>1</sup>; <sup>1</sup>Universidade Federal de Itajubá, <sup>2</sup>Faculdades Integradas Teresa D'ávila

# AUTHOR INDEX

<b>A</b>	
Aaron Christian	C.P1.77
Aaron Jackson	M.OR3.8
Abel Hurtado-Macias	F.OR6.19
Abhishek Bhat	N.OR4.14
Abner de Siervo	BATP, I.OR3.10, I.P1.1, I.P1.2
Adalberto Fazio	A.OR3.12, A.OR3.6
Adalberto Luiz Rosa	R.P2.84
Adalberto Rosales Mendoza	J.P1.80
Adalgisa Reis Mesquita	A.P2.100
Adam Pikul	D.P1.1
Adam Sieradzki	D.P1.1
Adeilton Pereira Maciel	N.P1.53, N.P1.58
Adelina Pinheiro Santos	A.OR6.23, A.P1.10, A.P1.14, A.P1.64, A.P2.128, R.P2.86
Adelino de Aguiar Coelho	D.P1.30, D.P1.31, P.P1.1, P.P1.3
Ademar Benévolo Lugão	A.P2.106, F.P1.15, F.P1.70, V.P1.4
Ademir dos Anjos	A.P1.78, A.P1.79, A.P1.80
Adenilson José Chiquito	L.P1.25, P.P2.95
Adenilson Oliveira dos Santos	D.P1.2, J.P2.158, J.P2.159, P.P1.1, P.P1.3
Adhimar Flávio Oliveira	A.P1.12, C.P1.40, E.P1.14, E.P1.50, F.P1.20, O.P1.14, O.P1.52
Adilson Beatriz	J.P2.109
Adilson da Silva Mello	V.OR2.9, V.P1.38
Adilson J A de Oliveira	C.P1.56, P.P1.2
Adilson Luiz Chinelatto	A.P1.29
Adílson R. Prado	M.P1.34
Adilson Schackow	U.P1.6
Adilson Vitor Rodrigues	K.P1.34
Adis S Dzunuzovic	A.P2.83
Adjaci Fernandes Uchoa	Q.P1.2
Ado Jorio	PS004.5
Adolfo Franco Jr.	C.P1.15, C.P1.16, C.P1.38
Adolfo Junior Franco	E.OR4.14
Adolfo La Rosa-Toro Gómez	R.OR9.32
Adonilson Reis Freitas	D.P1.15
Adriana Alencar Santos	A.P2.107
Adriana Blandon	F.P1.60
ADRIANA CAMPOS	B.P1.26
Adriana da Silva Santos Duarte	R.P1.50
Adriana Franco Paes Leme	Q.OR2.5
Adriana Madalena de Araújo Faria	L.P1.54
Adriana Medeiros Gama	A.P1.5, A.P2.99, C.P1.21, J.P1.15, J.P1.19, J.P2.132, J.P2.94, P.P2.54
Adriana Oliveira Delgado-Silva	B.P1.18, J.P1.81, J.P2.112, J.P2.153, R.P2.103
Adriana Pavinatto	J.P2.130, J.P2.136, J.P2.137, J.P2.168
Adriana Scoton Chinelatto	A.P1.29
Adriana Silva de Albuquerque	F.P1.28, F.P1.61, R.P1.32
Adriana Zatti Lima	S.P1.7
Adriano Alves Rabelo	V.OR2.6
Adriano Cássio Baldim	K.P1.57
Adriano dos Santos Marques	O.P1.47
Adriano F. Feil	F.P1.74, J.P2.123, J.P2.150, N.P1.26
Adriano Gonçalves dos Reis	J.P1.4, J.P1.7
Adriano J. G. Otuka	L.OR1.3, L.OR3.11, M.OR6.19
Adriano Luis De Paula	A.P1.1, A.P2.94, C.P1.21
Adriano Luiz de Queiroz	B2J6, B2XW, R.P1.8
Adriano Marim Oliveira	C.P1.58
Adriano Moehlecke	J.P1.12
Adriano Rodrigues Azzoni	R.P2.83
Adriel Bortolin	Q.P1.21
Adrielli Cristina Peres Silva	J.P1.23
Adriel souza	K.P2.114
Adryelle do Nascimento	R.P3.157
Arantes	
Afonso Chimanski	R.P3.174, S.P1.6
Agamenon Lima do Vale	N.P1.5
Ágata Mayara Paula Pontes	K.P2.87
Agatha Matsumoto	O.P1.36, O.P1.37
Agda Eunice de Souza	A.P1.43, E.P1.21, E.P1.43, O.P1.61, U.P1.5
Agnes Nascimento Simões	A.OR2.4
Aginaldo Robinson de Souza	H.P1.13, H.P1.2, R.P3.130
Agustin Silvio Picco	R.P2.115

Ahmad T. Kabbani	A.OR3.10	Alejandro Junior Aranda	N.OR5.18
AHMET HIKMET UCISIK	R.OR9.30	Aguirre	
Ailton da Silva Ferreira	D.P1.27	Alejandro V. Silhanek	C.OR6.21
Ailton da Silva Nascimento	F.P1.10, F.P1.3, F.P1.37, F.P1.5, H.P1.33, V.P1.31	Aleksandr S. Rodin	H.OR2.4
Ailton Garcia Junior	N.OR6.21	Aleksey E Kuznetsov	H.OR4.19
Aimé Peláiz Barranco	P.P2.83	Alessandra Cremasco	K.OR3.7, P.P1.9
Aislan Douglas Machado	L.P2.128	Alessandra de Almeida Lucas	J.P2.87
Aitor Mugarza	A.OR6.25	Alessandra Luzia Da Róz	P.P2.96
A. K. Nigam	C.OR6.23	Alessandra Stacchini	L.P1.37
Alaide Braga de Oliveira	R.P1.8	Menandro	
Alain Polian	D.P1.26, D.P1.3	Alessandra Zenatti	C.P1.65
Alain Robin	J.P2.125	Alessandro Francisco Martins	R.P2.59, R.P3.192
Alana Fernandes Golin	L.P2.108, U.P1.14	Alessandro Henrique de Lima	H.OR3.7
Alan de Melo Antunes	R.P2.66	Alessandro Lopes Alves	L.P2.81
Alan John Duarte de Freitas	L.P1.27	Alexander Baev	L.P2.130
Alan Silva de Menezes	C.P1.3, C.P1.30, C.P1.35, C.P1.36, C.P1.4, C.P1.5	Alexander B. Dinitzen	G.P1.5
Alberico Borges Ferreira da Silva	N.P1.40	Alexander Caytuero Villegas	A.P2.151
Alberthmeiry Teixeira de Figueiredo	F.P1.21, J.P1.70	Alexander Eggeman	F.P1.6
Alberto Adriano Cavalheiro	A.P1.78, A.P1.79, A.P1.80, A.P2.81	Alexander Flacker	A.P1.52, N.OR3.12
Alberto Caneiro	E.OR1.3	Alexandra Carvalho	H.OR2.4
ALBERTO JOSÉ FARO DE ORLANDO	E.P1.23	Alexandre Alberto Chaves Cotta	C.P1.44, R.P1.15, R.P1.16
Alberto Moreira Jorge Junior	K.OR3.10, P.P1.8	Alexandre Amaral Leitão	H.OR1.3, H.OR4.16, H.P1.1, H.P1.21, H.P1.22, H.P1.3, H.P1.5, H.P1.6, H.P1.9, N.OR3.13
Alberto Salleo	L.OR6.24	Alexandre Aumiller	J.OR3.14
Alberto Tannús	S.P1.28	Alexandre Camilo Junior	I.P1.12, N.P1.14, N.P1.33, P.P1.14, P.P1.16
Albert Sánchez Laforet	EXP2.3	Alexandre Cestari	J.P1.27
Alceu Totti Silveira Junior	J.P2.114	Alexandre Cunha Machado	F.P1.32, F.P1.53
Alcides Lopes Leão	B.P1.31, B.P1.32	Alexandre de Castro Maciel	L.OR2.6, L.P2.111, L.P2.91
Aldeliane Maria da Silva	N.P1.44	Alexandre de Oliveira Jorgetto	J.P1.23
Aldison Diego Fonseca Dias	V.P1.45	Alexandre de Resende Camara	M.OR5.16
Aldo Eloizo Job	A.P1.43, F.P1.2, M.P1.21, R.P1.24, R.P2.64	Alexandre Dutra Golanda	V.P1.41
Aldo Felix Craievich	Mem.1	Alexandre Fassini Michels	J.P1.12, J.P1.59
Aldo J.G. Zarbin	A.P2.134, A.P2.136, L.P2.85, O.P1.33, O.P1.51	Alexandre Flauzino Junior	S.P1.18
Aldoni Gabriel Wiedenhoft	K.OR2.4	Alexandre Fontes da Fonseca	H.P1.12
Aldo Peña Ramírez	M.OR5.15	Alexandre Gonçalves Dal Bó	L.P2.125
Aleandro Ribeiro Marquesi	J.P1.58	Alexandre Guilherme Silva Tavares	P.P2.67
Aleffe Bruno Schura	L.P1.56	Alexandre Guimarães Brolo	J.P2.144
Alejandra Hortencia Miranda González	S.P1.26	Alexandre José Gualdi	P.P1.2
Alejandro Crespo Sosa	M.OR5.15	Alexandre Lopes	O.P1.17
Alejandro Cristians Rios Cuadros	F.OR6.18	Alexandre Magnus Gomes	D.P1.30, D.P1.31
		Carvalho	
		Alexandre Malta Rossi	F.OR3.8, R.P2.108
		Alexandre Margarido	F.P1.56

Alexandre Marletta	B2J6, B2XW, B46E, F.P1.38, L.P1.36, L.P1.52, L.P1.56, L.P2.78, R.P1.8, R.P3.157	Alice Gonçalves Osorio	A.P2.93
Alexandre Martins Santos	Q.P1.2, R.P2.65	Alice Ruini	H.OR4.14
Alexandre Mesquita	C.P1.57, F.P1.29, F.P1.36, F.P1.49, M.P1.26	Alice Zanforlin Benedetti	A.P1.24
Alexandre Neves Ribeiro	K.P1.47, K.P1.48	Alicia Elizabeth Chávez Guajardo	J.P2.115, R.P2.121, R.P2.70, R.P3.186
Alexandre Nogueira Ottoboni Dias	K.P1.2, K.P1.3, K.P1.38, K.P2.64, K.P2.83	Alicia María Oliver y Gutiérrez	M.OR5.15
Alexandre Oliveira Gomes	F.OR4.13, F.P1.41	ALICYA SOUZA ABDALA	N.P1.53
Alexandre Pancotti	I.OR3.10, I.P1.1, R.OR8.29	Ali Francisco Garcia Flores	B6YF
Alexandre Silva Mello	F.OR3.8	Aline Aparecida Becaro	B.P1.11
Alexandre S. M. Galvão Carvalho	P.P2.56, P.P2.59	Aline Barrios Trench	P.P2.65
Alexandre Soares Leal	R.P1.16, R.P1.17, R.P2.69	Aline Bruna da Silva	J.P2.107
Alexandre Urbano	P.P1.18	Aline Câmara de Oliveira	L.P1.42
Alexandre Z. Simões	A.P2.81, A.P2.84	Aline Capella de Oliveira	I.OR4.15
Alex Antonelli	H.P1.19	Aline Castilho Rodrigues	A.P1.1, P.P2.66, P.P2.68
Alexei Mikhailovich Essiptchouk	J.OR3.12, J.P1.62, J.P2.163	Aline Chiodi Borges	R.P2.80, R.P3.156
Alexey Barinov	B2DY	Aline Cristiane Pan	O.P1.42, O.P1.43
Alexey V Pan	C.P1.51	Aline da Silva	B6RV, K.P1.3, K.P1.51, K.P1.54
Alex Fabiano Cortez Campos	C.P1.17, J.P2.145	Aline Evangelista Aguiar	R.P3.184
Alex G. Roca	C.OR3.6	Aline Fontana Batista	A.P1.1, A.P2.94, C.P1.21, J.P2.132
Alex Henrique Miller	P.P1.30	Aline Furtado Oliveira	R.P2.125, R.P3.187
alex matos da silva costa	K.OR3.11	Aline Geice Vitor Silva	I.P1.5
Alex Otávio Sanches	A.P1.27, A.P1.33, B.P1.13	Aline Santos	L.P2.106, L.P2.112, L.P2.136, U.P1.5
Alexsander Lourenço Pessoa	C.P1.13	Aline Silva	K.P2.64
Alexsandro dos Santos Evangelista da Cruz	C.P1.53	Aline Souza Souza	V.P1.16, V.P1.17, V.P1.36
Alex Siemiarczuk	F.P1.23	Aline Vaz de Souza	J.P2.108
Alex Silva Paula	I.P1.16, R.P1.29	Alinne Damasia Martins Gomes	R.P2.75
Alex Treviso	I.OR4.16	Alisson Alves	V.P1.2
Alex Vieira Pedroso	A.P2.150, V.P1.47	Alisson de Jesus Santana	L.P1.61
Alex Vinicius Souza Araújo	F.P1.75, O.P1.56	Alisson Frank Canuto Brandão	P.P1.7
Alfonso Muñoz	D.OR2.5	Alisson Prodócimo	I.P1.28
Alfred Gold	N.P1.31	Alisson Ronieri Cadore	M.P1.41
Alfredo Bruger Junior	A.P2.113	Almir Oliveira Neto	P.P1.41
Alfredo de la Escosura-Muñiz	L.P1.17	Almir Spinelli	J.P1.11
Alfredo Duarte	P.P1.12, P.P1.13	A. L. Pinto	F.P1.72
Alfredo Gontijo de Oliveira	P.P1.45	Altair Soria Pereira	D.OR3.7, D.OR4.8, D.P1.22, D.P1.23, D.P1.27
Alfredo R. M. de Oliveira	L.OR7.28	Aluisio de Andrade	L.P1.21
Alfredo Segura	D.P1.25	Bartolomeu	
Alfredo Sena	B.OR3.7, B.P1.26	Alvaro Alencar Queiroz	R.P3.191
Alfredo Tiburcio Nunes Pires	B.P1.6, J.P1.11	Alvaro Antonio Alencar de Queiroz	S.P1.18, U.P1.4
Alfredo Vaz	A.OR9.31	Álvaro Ferreira Monteiro	L.P1.14
		Alvaro Herrera	D.P1.7
		Alvaro Roberto Martins	J.P1.5, J.P2.138
		Alzir Azevedo Batista	L.P1.53, L.P1.55

Amado Cabo	J.P1.16	Ana Carolina Ferreira de Brito	L.P1.47
Amanda Akemy Komorizono	K.P2.85	Ana Carolina Figueiredo Prado	J.P2.87
Amanda Carvalho Pereira	R.P3.191	Ana Carolina Floriano	L.P1.50
Amanda Cristina Medeiros da Silva	E.P1.19	Ana Carolina Mazarin de Moraes	A.P2.132
Amanda da Costa e Silva de Noronha Pessoa	R.P2.92, R.P3.190	Ana Carolina Ribeiro Figueiredo	F.P1.65
Amanda de Jesus Clemente	R.P2.69	Ana Carolina Rodrigues	M.P1.15
Amanda Delvizio Pereira	K.P2.108	Ana Carolina Rodrigues Ribeiro	J.P2.166
Amanda Estela de Lima	N.P1.19	Ana Carolina S. A. Rezende	I.P1.1
Amanda Ferreira Costa	Q.P1.3	Ana Celeste Ximenes Oliveira	R.P2.97
Amanda Gomes Marcelino Perez	R.P1.39, R.P2.126	Ana Champi	A.P1.2, A.P1.7, A.P2.141, A.P2.141
Amanda Martins Fernandes	V.P1.2	Ana Clara Lancarovici Alves	V.P1.32
Amanda Natalina de Faria	R.P2.77	Ana Cláudia Batista Almeida	L.OR7.26
Amanda Pires Nogueira de Souza	J.P1.52, J.P1.53	Ana Claudia Costa Oliveira	J.P1.41
Amanda P. M. P. Alcantara	R.P1.33	Ana Cláudia Queiroz Ladeira	A.P1.64
Amanda Ramos Melo	B.P1.34	Ana Clecia Santos de Alcântara	R.P2.128
Amanda Robau Porrua	A.P2.143	Ana Cugler Moreira	P.P1.4
Amanda Santos de Lima	I.P1.7, J.P1.77, J.P2.156, R.P2.101, R.P2.102, R.P2.106	Ana Elisa da Silva Dias	A.P2.118
Amanda Watanabe Paraguassú	C.P1.54	Ana Fabíola Leite Almeida	O.P1.53
Amar S. Bhalla	E.P1.25	Ana Flávia Nogueira	M.OR4.9, M.OR6.20, M.P1.16, O.OR3.7, O.OR4.12, O.OR4.16, O.P1.10, O.P1.13, O.P1.32, O.P1.34, O.P1.41, O.P1.45, O.P1.46, O.P1.47, O.P1.58, O.P1.6, O.P1.7, P.P2.76, P.P2.80, P.P2.90
AMAURI GARCIA	K.OR3.12, K.OR3.13, K.OR3.14, K.P1.10, K.P1.28, K.P1.29, K.P1.34, K.P1.39, K.P2.122, K.P2.82	Ana Flávia Suzana	K.OR4.19
Amauri Jardim de Paula	F.P1.59	Ana Gabriela de Freitas Barbosa	M.P1.19
Amedea Barozzi Seabra	Q.OR1.2, R.OR1.3	Ana Gabrielle Impere	C.P1.21
Amelie Rochet	F.P1.48	Ana Garcias Mestre	L.OR4.13
Américo Sheitiro Tabata	N.P1.35	Ana Graci Brito-Madurro	I.P1.14
Amilton Martins Santos	R.P3.144, R.P3.145, R.P3.147	Ana Júlia Tertuliano	E.OR1.2
Amrita Masurkar Masurkar	L.OR3.9	Ana L. A. Ribeiro	C.P1.9
Ana Amélia Rodrigues	R.P1.39	Ana Larissa Melo Feitosa	U.P1.10
Ana Angélica MARTINS COSTA	R.P3.191	Ana Laura Curcio	F.P1.29
Ana Augusta Mendonça Oliveira	C.P1.27	Ana Laura Elías	A.P2.134
Ana Beatriz Ferreira Vitoreti	O.P1.22	Ana Laura Rueda	K.P1.40
Ana Candida Martins Rodrigues	P.OR3.8, P.P1.17, P.P2.94	Ana lucia do Amaral Escada	R.P2.114, R.P2.72
Ana Carla Kawazoe Sato	R.P3.173, R.P3.179	Ana Lúcia Ferreira	F.P1.43
Ana Carolina Boacina de Freitas	J.P1.70	Ana Luisa Amadeu Ribeiro	C.P1.11
Ana Carolina Corrêa	B.P1.22, B.P1.26, Q.P1.15, Q.P1.25, Q.P1.8	Ana Luísa Lage	J.OR2.4, O.P1.30
Ana Carolina Duarte Duarte	I.P1.33, J.P1.35	Ana Luiza Silvestre Assis	A.P1.28
		Ana M. A. Lieberatore	R.OR6.22

Ana Maria de Guzzi Plepis	R.P2.99	Anderson Gabriel Marques da Silva	R.P3.158
Ana Maria do Espirito Santo	R.P3.142	Anderson Hoff	P.P1.47
Ana Maria do Espírito Santo	E.P1.54	Anderson Janotti	H.OR1.1
Ana Maria Ferrari Lima	J.P1.30	Anderson Kenji Okasaki	N.P1.12, N.P1.43, N.P1.8
Ana Maria Marques	F.P1.74	Anderson Maia	F.P1.24, F.P1.25, F.P1.8, V.P1.21, V.P1.23
Ana Maria Matildes dos Santos	P.P1.7	Anderson Nogueira Mendes	R.P1.45
Ana Maria Minarelli Gaspar	R.P3.169, R.P3.170	Anderson Oliveira Lobo	R.P1.43, R.P2.107, R.P2.118, R.P2.122, R.P3.142, R.P3.181
Ana Maria Pires	U.P1.5	Anderson Orzari Ribeiro	K.P2.86, T.P1.1
Ana Maria Rocco	L.P1.14, P.P1.37, P.P2.56, P.P2.59	Anderson Rodrigues Lima Caires	V.P1.29
Ana Maria Rocha Senos	K.P1.59	Anderson Rodrigues Teixeira	F.P1.12, F.P1.13
Ana Maria Segadães	D.P1.19	Anderson Thesing	M.OR2.5, M.OR2.6, M.P1.25
Ana Maria Valencia	A.OR3.11	Andréa Arruda Martins Shimojo	R.P1.39, R.P2.126
Ana Pacheli Heitmann Rodrigues	F.P1.27, F.P1.55	Andrea Boldarini Couto	A.P1.59, A.P2.130, P.P2.51, P.P2.52
Ana Paula Alves Favareto	R.P2.104	Andréa Cristiane Krause Bierhalz	S.P1.5
Ana Paula da Rocha Pissurno	L.P2.104, R.P3.189	Andrea D Bianchi	C.OR1.1
Ana Paula de Azevedo Marques	A.P1.75, J.P2.120, N.P1.15, N.P1.24, N.P1.59	Andrea Ferretti	H.OR2.5, H.OR4.14
Ana Paula de Moura	A.P1.73, A.P1.74, N.P1.2	Andrea Gomes Campos Bianchi	L.P1.54, U.OR3.7, U.OR3.7
Ana Paula dos Reis Weitzel	R.P1.51, R.P2.87	André Alexandre Vieira	L.P1.52
Ana Paula Duarte Pereira	R.P3.190	André Alves Ferreira	B6WQ
Ana Paula Figueiredo Monteiro	R.P1.20	André Antunes da Silva	L.P1.26, L.P1.28, L.P1.60, L.P1.63, U.P1.11, U.P1.15, U.P1.3
Ana Paula Nogueira Alves	J.P2.105	André Araujo Parussulo	O.P1.1
Ana Paula Pereira Alves	P.P2.55	Andrea Santos Liu	J.P1.19, J.P1.39
Ana Paula Ramos	R.P1.36, R.P2.77, S.P1.9	Andreas Eichler	D.OR4.10
Ana Paula Reis Santana	V.P1.15	Andrea Simone Stucchi de Camargo	M.P1.14, M.P1.33
Ana Paula Ribeiro Povinelli	B4GN, R.P1.29, R.P1.46	Andreas Reyher	F.P1.38, F.P1.69
Ana Paula Rosifini Alves Claro	R.P1.49, R.P2.100, R.P2.105, R.P2.110, R.P2.114, R.P2.72, R.P2.94, R.P2.96	Andreas Schmid	O.OR3.6
Ana Paula Silva Oliveira	R.P2.57	André Ben-Hur da Silva Figueiredo	A.P1.34
Ana Pimentel	B.P1.19, B.P1.20, B.P1.25	André Capaldo Amaral	B.P1.7
Ana Raquel Benetti	B6RQ	André Contin	J.P1.43, J.P1.6, K.P1.36
Ana Rosa Ribeiro	U.OR3.6	andre cruz maciel	K.P2.114
Ana Sofia C. M. D'Oliveira	J.OR4.17, K.P2.102	Andre Esteves Nogueira	A.P1.70, J.P1.79, P.P2.78
Anders Hagfeldt	PS007.8	André Felipe Oliveira	C.P1.55
Anderson A. Felix	E.OR6.18	André Felipe Ribeiro Moreira	I.OR4.15
Anderson Braun	P.P1.27	André Felipe Vale da Fonseca	O.P1.24
Anderson de Farias Pereira	F.P1.17		
Anderson Espirito Santo Pereira	Q.P1.4		
Anderson Felix Manoel	B.OR3.7, B.P1.4		
Anderson Fiamingo	R.OR6.21, R.P3.183		
Anderson Fuzer Mesquita	A.P1.62		

André Ferrarese	IN.3	Andressa Ribeiro Pereira	L.P1.2, L.P1.4
Andre Ferreira Sardinha	P.P2.51	Andressa Rodrigues	J.P1.14
André Fontoura Ponchet	N.OR3.12	Andressa Silva Gomes	R.P1.24, R.P2.64
André Galembeck	S.P1.20	Andressa Trentin	J.OR5.18, J.P1.76
André Gonzaga Santos	R.P3.180	Andressa V. Müller	O.P1.3
André Gustavo de Sousa Galdino	K.P2.91	Andre Strydom	D.OR4.10
Andre Hernandes Alves Malavazi	S.P1.27	André Vitor Chaves de Andrade	N.P1.45
Andréia Araujo	B.P1.19, B.P1.20, B.P1.25	Andrew A.R. Watt	M.OR3.7
Andreia Cardoso Pereira	J.P2.158	Andrew M Telford	L.OR2.6, L.P2.111
Andreia Cavalcante Lima	C.P1.31	Andrey Coatrini Soares	L.P1.5, L.P1.59, L.P1.7, L.P1.8
Andreia de Morais	O.P1.6, P.P2.90	Andrey Prokofiev	D.OR4.10
Andréia Fernandes da Silva	D.OR4.8, D.P1.30, D.P1.4, D.P1.5	Andreza de Sousa Andrada	S.P1.11
Andreia Ferreira Cobianchi	J.P2.131	Andreza Toledo	V.P1.38
Andrei Alaferdov	A.OR9.31	Ane Cheila Rovani	J.OR3.8
André L.F. Cauduro	O.OR3.6	Anelise C.O.C. Doria	J.P2.169
Andre Linden	EXP6.12	Anelise Simões Sampaio	R.P2.124
André Linhares Rossi	F.OR3.8	Anerise de Barros	L.P2.132
André L Oestereich	C.P1.10	Ângela Albuquerque Teixeira Neto	F.OR1.2, F.OR1.3
André Lopes Carvalho	L.P1.10, L.P1.5, L.P1.59, L.P1.7, L.P1.8	Angela Burlamaqui Klautau	C.OR4.12
André Luis de Jesus Pereira	D.OR2.5, N.P1.18, O.P1.27, P.OR5.15	Ângela Cristina Malheiros Luzo	R.P1.50
André Luis Silveira Fraga	O.P1.48	Angela de Jesus Vasconcelos	K.P2.73
André Luiz dos Santos	J.P2.107	Angela de Mello Ferreira	F.P1.55, J.P1.75
André Mello Bepe	K.P2.89	Angela Elisa Crespi	J.OR3.10, J.P1.57
André Paganotti	K.P2.107	Ángel Alberto Hidalgo	L.P1.61, L.P2.124, L.P2.84, L.P2.89, L.P2.93
André Paulo Tschiptschin	K.OR3.11, K.OR3.8, K.P2.92	Ângela Luzo	R.P2.126
André Santiago Afonso	P.P2.71, P.P2.72	Ângela Maria Moraes	R.OR1.2, S.P1.5
André Santos Barros	K.P1.43, K.P2.73, K.P2.84	Ângela Ortiz Zevallos	P.P2.92
Andres Cuña	P.P2.66, P.P2.68	Angela Priscila Pelegrini Bolach	L.P1.26, L.P1.28, L.P1.63, U.P1.11, U.P1.15, U.P1.3
Andre S Ferlauto	P.OR1.3	Angelica Irasema Sibaja Luis	Q.P1.1
Andrés Mauricio Muñoz Garcia	F.OR2.6, F.P1.60, H.OR4.18, H.P1.7	Angelica Maria Mazuera Zapata	E.P1.29
Andrés Naranjo Uribe	B6NB	Angelo Caporalli Filho	R.P2.105
André S. Polo	O.P1.3	Angelo Luiz Gobbi	F.P1.44, L.P2.80, N.P1.23, R.P2.56
ANDRESSA DE AGUIAR OLIVEIRA	A.P2.125	Angelo Malachias	I.OR3.12, L.P2.82, M.P1.39, M.P1.41, N.OR4.15, N.P1.30
Andressa Giombelli Rosenberger	J.P2.170, R.P2.116, R.P2.119	Angelo Malachias de Souza	F.OR6.18, I.OR1.2
Andressa Mayumi Kubo	J.P1.78, R.P2.112, R.P2.90	Angelo Titton Titton	D.P1.19
Andressa Meireles David	P.P1.10, V.P1.7	Anielle Christine Almeida Silva	E.OR3.11
Andressa Oliveira Rodrigues	A.P2.150, P.P2.50, V.P1.47	Anirban Som	A.OR3.10
Andressa Peglow Lüdtkke	B.P1.30	Anna Carolina Telatin Tognolo	R.P1.13
Andressa Peyrot	P.P2.91	Anna Christina Véron	L.P2.113, L.P2.114

Anna Gagor	D.P1.1	Antônio Jefferson Mangueira Sales	E.P1.56
Anna Miodek	R.OR3.7, R.OR9.35	Antonio Jorge Abdalla	J.P1.4
Anna Paula S. Levinsky	F.P1.48	Antonio Jose Felix Carvalho	B.P1.33, B.P1.5, B.P1.7, V.P1.30, V.P1.32, V.P1.33, V.P1.49
Anna Paulla Simon	I.P1.7, R.P2.101, R.P2.102, R.P2.106	Antonio J. Ramirez	K.OR1.2, K.OR3.11, K.OR3.8, K.OR3.9
Anna Thaise Bandeira Silva	R.P3.176	Antônio Lucas Rigotti Manesco	C.P1.6
Anne Guilbert	O.OR4.15	Antonio Luciano Seabra Moreira	K.P1.20, K.P2.84, V.P1.11
Anne Hitomi Yonamine	C.P1.51	Antonio Marcos dos Santos Leite	K.P2.118
Anne Karoline dos Santos Poli	A.P1.5, J.P1.15, J.P2.94	Antonio Marcos Helgueira de Andrade	C.P1.27, O.P1.10
Anny Manrich	B.P1.23, B.P1.24, Q.P1.15, Q.P1.25, Q.P1.8	Antônio Matias Navarrete Toledo	R.P3.173, R.P3.179
Antero Silva Ribeiro Andrade	R.P2.86	Antônio Maurício Tannure Fonseca	U.OR3.7
Antônia Alana Lima Pacheco	I.P1.11, V.P1.1	Antonio Osimar Silva	L.P1.23, L.P1.27, L.P1.31
Antonio Augusto Araujo Pinto Silva	K.P1.5, K.P1.51	Antônio Otávio de Toledo Patrocínio	J.P1.73
Antonio Augusto Couto	J.P1.4, K.OR2.6, K.P1.1, K.P1.30, K.P1.46, K.P1.47, K.P1.48, K.P1.5, K.P2.124	Antonio Otavio Toledo Patrocínio	N.P1.7
Antonio Augusto Godoy von Zuben	N.P1.44	ANTONIO PAULO SANTOS SOUZA	O.P1.53
Antonio Augusto Lopes Marins	F.OR4.13	Antonio Renato Bigansolli	F.P1.66
Antonio Augusto Malfatti Gasperini	J.P2.134, T.P1.2	Antonio Ricardo Zanatta	L.OR1.3, N.OR2.6, P.OR5.15
Antonio Avila	A.OR9.34	Antonio Riul Jr.	L.OR2.5, L.P1.13, L.P2.80, N.P1.23
Antônio Carlos Ancelotti	V.P1.14	Antônio Santana Santos	A.P2.103, A.P2.104
Antonio Carlos Doriguetto	P.P2.92	Antonio Sérgio Bezerra Sombra	E.P1.56
Antonio Carlos Gustaldi	R.P2.98	Antônio Sérgio Souza	A.OR9.31, A.P2.123
Antonio Carlos Hernandes	E.OR3.8, E.P1.31, M.OR6.21	Antonio Tadeu Rogerio Franco	K.P1.1, K.P1.46
Antonio Carlos Silva Costa Teixeira	N.P1.41	Anuar Jose Mincache	E.P1.11, E.P1.8
Antonio C. C. Migliano	R.P1.40	Aparecido Junior de Menezes	B.P1.18, J.P2.153
Antonio Claudio Tedesco	R.P1.35, S.P1.16	Araceli Mandujano Ruíz	J.OR3.11
Antonio Domingues Santos	F.OR4.12, I.P1.10, M.OR6.18, M.P1.38	Arão Pereira da Costa Filho	A.P2.89
Antônio Eduardo Hora Machado	N.P1.20, N.P1.7	Aravind Vijayaraghavan	A.P2.140
Antônio Eduardo Martinelli	U.P1.9	Arben Merkoçi	L.P1.17
Antonio Faria Neto	J.P1.52, J.P1.53	Argemiro Sousa da Silva Sobrinho	O.P1.27
Antonio Fernando Beloto	J.P2.135	Ariadne Cristina Catto	E.P1.15
Antonio Ferreira da Silva	P.OR3.6	Ariana de Souza Moraes	B.P1.31
Antonio Gomes Souza Filho	F.P1.59	Ariane Caroline Ribicki	J.P2.129, J.P2.91
Antônio Gouveia de Souza	J.P2.127, J.P2.162		
Antonio Guerreiro Serrano	E.P1.30		
Antonio Helio Neto	H.OR2.4		
Antonio Hernando	K.P2.63, K.P2.66		
Antonio Jeferson de Deus Moreno	D.P1.3		

Ariane Sandrine Mazzei Charalabopoulos	N.P1.15, N.P1.24	Augusto Batagin Neto	H.P1.30, L.P1.21, L.P1.35, L.P1.40, L.P1.65, L.P2.134
Ariane Silva Ribas	A.P2.150, P.P2.50, V.P1.47	Augusto Lelis Araujo	H.P1.18
Ariane Ritter	S.P1.6	Aurea Emanuelle Santos	V.P1.19, V.P1.22
Ariano De Giovanni Rodrigues	E.P1.28, F.P1.29, I.P1.16, N.P1.6, N.P1.9	Aureliano Rodrigues Barborati Ribeiro	K.P1.50
Ariela Veloso de Paula	J.P2.101	Aurileide Maria Bispo Frazão Soares	R.P1.45
Ariel Delgado del Toro	C.P1.28, C.P1.29, H.P1.29, H.P1.35	Ayrton André Bernussi	F.P1.44
Ariel Estole Nunes de Andrade	K.P1.36	Ayrton Fernando Gomes de Oliveira	S.P1.26
Ariel Moreno-Gobbi	A.P2.131		
Ariel Teixeira	V.P1.12		
Ariete Righi	A.OR6.20	<b>B</b>	
Arie van der Lee	D.OR2.4	Bachir Ouladdiaf	D.OR1.3
Arilza de Oliveira Porto	A.P1.62	Bárbara Aparecida Nogueira Barbosa	J.P1.86
Arlan da Silva Gonçalves	A.P1.13, H.P1.38	Bárbara Branquinho Duarte	K.OR3.10
Arlindo Pires Lopes	A.P2.107	Barbara Brena	P.OR6.18
ARMANDO AUGUSTO DE CAMPOS	K.P2.122	Bárbara da Silva Pinheiro	A.P1.54
Armando Beltrán	D.OR2.5	Bárbara Estefânia de Almeida Silva	B.P1.18
Armando Hideki Shinohara	G.P1.4	Bárbara Fornaciari	R.P2.53
Armindo Santos	P.P1.7	Bárbara Hellen de Souza Miranda	O.OR4.14
Armi Tiihonen	O.OR4.16, O.P1.7, P.P2.76	Barbara Maraston Fraygola	E.OR4.13
Armstrong Godoy Junior	O.P1.27	Bárbara O. De Paula	R.P2.129
Arnaldo Gakiya Kanashiro	L.P2.73	Bárbara Ramos Ferreira	J.P1.39
Arnaldo Homobono Paes de Andrade	V.P1.45	Bárbara Rosa	I.OR3.12, M.P1.39
Arokia Nathan	A.OR1.1	Bárbara Schvuchov Kern	L.P2.121
Aron Pazzin Andrade	R.P2.127	Beatriz Antoniassi	U.P1.1
Artejose Revoredo da Silva	I.P1.21	Beatriz Belotti Carvalho	P.P1.10, V.P1.7
Arthur Exner	M.OR2.5, M.P1.25	Beatriz Bernardes Caravieri	R.P2.113
Arthur Fernandes Nogueira Cesarino	A.OR7.27	Beatriz Carvalho Silva	A.P1.31, A.P1.32, A.P2.116, A.P2.97
Arthur Gustavo de Araujo-Ferreira	I.P1.35, I.P1.36	Beatriz dos Santos Gonzalez	V.P1.21
Arthur Henrique Wiering	J.P1.64	Beatriz Ferreira Mendes	I.P1.11, V.P1.1
Arthur Matsudo Garcia	R.OR6.22	Beatriz Rocha de Moraes	M.P1.13
Arthur Parente	J.P2.107	Beatriz Rodrigues Canabarro	F.OR2.5
Arthur Prado Camargo	R.P3.136	Beatriz Rossi Canuto de Menezes	A.P1.31, A.P1.32, A.P1.57, A.P2.116, A.P2.97
Arthur Rodrigues J. Barreto	L.P2.115	Beatriz Zuleika de Macedo	R.P1.21
Arthur Sant'Ana Cavichini	G.P1.6	Begoña Milián-Medina	H.P1.14
Arthur Scaglioni de Oliveira	A.OR9.32	Belarmino Gomes Tavares	N.P1.65
Artur Coelho	F.P1.30	Bento Ferreira	R.P1.10
Artur de Jesus Motheo	J.P1.32, J.P2.157	Berenice Anina Dedavid	K.P2.116
Artur Eduardo Alves Castro	S.P1.26	Bernardo de Souza	L.P1.38
Aryane Christine Neves Martins	R.P3.188	Beverley A Brown	L.OR1.1
Asaph Armando Jacinto	B.P1.27	Bianca Alves Marcello	J.P2.97
Atair Carvalho Silva	E.OR3.8, E.P1.25, E.P1.5	Bianca Campos Gregorio	K.P2.71

Bianca Gurski Chemin	J.P2.129	Bruno Cano Mascarenhas	E.P1.33, E.P1.34, E.P1.49, E.P1.51
Bianca Martins Estevão	Q.P1.17, R.P1.30	Bruno Cavalcanti Di Lello	R.P3.148
Bianca Pinheiro de Sousa	L.P2.86	Bruno César da Silva	N.P1.22
Bianca Siqueira Martins	F.P1.16	Bruno Cordeiro Silva	S.P1.7
Domingos		Bruno Dufau Mattos	B.P1.16, B.P1.17
Biljana D Stojanovic	A.P2.83	Bruno Esposto	B.OR2.3
Bonifacio Uc Can	M.OR5.15	Bruno Fedosse Zornio	I.OR2.6
Borja Sépulveda	C.OR3.6	Bruno F Finatti	C.P1.50
Braulio Soares Archanjo	F.P1.26	Bruno Gabriel Alves Leite	O.P1.33
Brena Raiara Correa Barradas	K.P1.9	Borges	
Brenda Batista de Oliveira	M.P1.42	Bruno Gondim de Melo Vieira	A.P1.11
Brenda de Souza Ferrari	A.P1.13	Bruno Henrique Ramos de	I.OR4.17
Brendon Willian Guedes	F.P1.16	Lima	
Barbosa		Bruno Henrique Ramos Lima	J.P2.128
Brener Rodrigo Carvalho Vale	I.P1.17, I.P1.18, I.P1.19, I.P1.20	Bruno Henrique Santana Goís	L.P1.26, L.P1.28, L.P1.60, L.P1.63, U.P1.11, U.P1.15, U.P1.3
Brenno Luigi de Pastena	F.P1.42	Bruno Luchesi	B.P1.26
Brenno Santos Leite	B.P1.37	Bruno Morandi Pires	E.P1.37, L.P1.51
Breno Rocha Barrioni	R.P2.97	Bruno M. Serafim	F.P1.31
Bridget ODonnell	F.P1.18	Bruno Nowacki	L.P2.130
Brillian Aquino Fernandes	L.P1.33	Bruno Oliveira Garcia	J.P1.29
Bruna Alice Gomes de Melo	R.P1.39, R.P2.126	Bruno Oliveira Thomazini	F.P1.42
Bruna Andrade	E.P1.6	Bruno Pionte	A.P2.137
Bruna Andressa Bregadiolli	O.OR4.17	Bruno Ricardo Carvalho	A.OR6.20
Bruna Carolina Costa	Q.P1.5	Bruno R. Matos	P.OR6.22, P.P1.40, P.P2.57
Bruna Castanheira	N.P1.41	Bruno Utiyama	R.P2.127
Bruna Corina Emanuely	I.P1.27, I.P1.32	Bruno Vinícius Manzolli	R.P1.43
Schibicheski		Rodrigues	
Bruna Cristina da Silva	A.P2.119, D.P1.16	Byeong Jeong	M.P1.19, N.OR6.23
Bruna Gobbi Garcia	K.P2.123		
Bruna Gomes Maciel	R.P3.186		
Bruna Horta Bastos Kuffner	K.P2.125, K.P2.126, K.P2.72, K.P2.74		
Bruna Louise Perotti	J.P1.18, U.P1.2		
Bruna Nádia Neves da Silva	H.P1.22		
Bruna Niccoli Ramirez	E.P1.2		
Bruna Patrocinio Lima	F.P1.54		
Bruna T. M. Souza	J.P1.49		
Bruna Vilas Boas	K.P2.80		
Brunna Maria Cunha Pereira	J.P2.121		
Bruno Alexandre Henriques	R.OR5.15, R.P3.162, R.P3.166		
Bruno Barreto da Cunha	H.P1.13, H.P1.2		
Holanda			
Bruno Bassi Millan Torres	L.P2.71, L.P2.72, L.P2.74		
Bruno Batista	A.OR5.16		
Bruno Bitaraes	A.P2.102		
Bruno Bravin	P.P2.64		
Bruno Caldas Coelho	F.P1.62		
Bruno Cambraia Lemos	I.OR4.20		
Bruno Campos Janegitz	L.OR6.23		
		<b>C</b>	
		Caetano Rodrigues Miranda	H.OR3.10, I.OR2.4, P.OR2.4, V.OR2.5
		Caio Castanho Xavier	K.P2.93
		Caio Flaret Argentino Oliveira	K.P2.103
		Caio Guilherme Pereira dos	J.P1.66
		Santos	
		Caio Henrique Nasi de Barros	B.P1.1
		Caio José Percin	C.P1.58
		Caio Lenon Chaves Carvalho	R.P3.176
		Caio Palumbo Abreu	I.P1.31, J.P1.56
		Caio Rodrigues-Silva	P.P1.48
		Caique Conde Rodrigues	C.P1.18
		Caique Prado Machado de	J.OR2.4
		Oliveira	
		Caíque Vendemiatti	J.P2.172
		Vendemiatti	

Calink Indiara do Livramento dos Santos	O.P1.21, O.P1.38	Carlise Hannel Ferreira	J.P1.77
Camen Cecilia Bueno	G.P1.7	Carlos Alberto Achete	A.OR6.23
Camila Alves de Rezende	B.P1.28, B.P1.29, P.P2.70	Carlos Alberto Alves Cairo	R.P1.11
Camila Alves Escanio	P.P1.7	CARLOS ALBERTO CARVALHO CASTRO	K.P1.17, K.P1.18
Camila Barbosa Bramorski	L.OR6.23	Carlos Alberto Costa	F.P1.34, N.OR6.21, Q.OR2.5
Camila Belo Gomes Brito	A.OR9.32	Carlos Alberto de Oliveira Couto	A.P2.147
Camila Brito Souza	A.P2.99	Carlos Alberto Fortulan	E.P1.26, I.P1.35, I.P1.36, J.P1.22
Camila Bussola Tovani	R.P1.36	Carlos Alberto Medalha Filho	P.P2.79
Camila Elia	R.P3.140	Carlos Alberto Mitio Hirano	K.P2.86
Camila Fernandes Higa	R.P2.79	Carlos Alberto Ospina Ramirez	I.P1.10, U.OR2.3
Camila F Silva	A.OR9.34	Carlos Alberto Pérez	F.P1.64
Camila Gonçalves Rodrigues	R.P3.173, R.P3.179	carlos alberto reis de freitas	E.P1.22, E.P1.23
Camila Ianhez Pereira dos Santos	N.P1.6	Carlos Alberto Rodrigues	K.P1.50, K.P1.54, K.P1.57, K.P2.125, K.P2.126, K.P2.72, K.P2.74
Camila Jaques Rosário	R.P1.51, R.P2.87	Carlos Alberto Senna	F.P1.26
Camila Machado de Oliveira	P.P2.95, R.P1.28	Carlos Alberto Soufen	A.P2.144, J.P2.154, J.P2.93
Camila Negrão Konno	K.P1.9	Carlos Alejandro Figueroa	F.OR3.10, J.OR3.10, J.P1.12, J.P1.18, J.P1.34, J.P1.57, J.P1.59
Camila Okinokabu Vieira	A.P1.48	Carlos Angelo Nunes	K.OR3.11, K.P1.5
Camila Pasquoloto	B.P1.23, B.P1.24	Carlos A. Ratto	L.P1.58
Camila Pereira	M.P1.7	Carlos Augusto Cardoso Passos	C.P1.69
Camila Raiane Ferreira	H.P1.15	Carlos Augusto de Souza Oliveira	V.P1.2
Camila Rodrigues Sciena	B.P1.11, B.P1.12, B.P1.8, E.P1.51	Carlos Augusto Galvão Barboza	R.P3.164
Camila Santana Carriço	B.P1.37, B.P1.9	Carlos Camurri	F.P1.19
Camili Ambrosio	K.P2.98	Carlos César Bof Bufon	N.OR1.2, N.OR1.3, N.OR3.8, N.OR3.9, N.P1.23, N.P1.52, N.P1.57
Camilla K.B.Q.M Oliveira	O.P1.40, O.P1.44	Carlos Cleverton Oliveira Santos	K.P1.49
Camilla Martins Ruiz	L.P1.26, L.P1.28, L.P1.60, L.P1.63, U.P1.11, U.P1.15, U.P1.3	Carlos David Gonzales Lorenzo	G.P1.7
Camilo Bruno Ramos de Jesus	C.P1.72	Carlos Doro Neto	F.P1.48
Camilo Bruno Ramos Jesus	C.OR6.20, C.P1.11, C.P1.12, C.P1.18, C.P1.19, C.P1.20, C.P1.48	Carlos Eduardo Campos Lanzi	U.P1.3
Carina Barros Mello	I.OR4.18, J.P1.54, J.P1.55	Carlos Eduardo Cava	A.P2.136, L.P2.87, O.P1.33
Carine Ribeiro dos Santos	H.P1.38	Carlos Eduardo Podestá	S.P1.12, S.P1.13
Caritas de Jesus Silva Mendonça	N.P1.53, N.P1.58	Carlos Eduardo Silva	I.OR3.11
Carla Andressa Almeida Farias	R.OR3.11	Carlos Eduardo Silveira Dias	J.P1.63, N.P1.42
Carla Daniela Boeira	J.P1.12, J.P1.18, J.P1.57, J.P1.59, U.P1.2		
Carla da Silva Meireles	B.P1.36, C.P1.63		
Carla Grijó Fonseca	H.OR1.3		
Carla Patrícia Lacerda Rubinger	L.P2.133		
Carla Yuri Kisen	A.OR9.38, A.P2.87		
Carleane Patricia da Silva Reis	L.OR5.18		
Carlino Carvalho de Almeida	K.P2.77		

Carlos Eduardo Tartaglia Bruzeguini	P.P1.10, V.P1.7	Carmen Gilda Barroso Tavares Dias	D.P1.17
Carlos E. M. Campos	D.OR4.11, L.P1.58	Carmen Greice Renda	J.P2.87
carlos Filipe Cardoso Bandeira	K.OR2.5	Carol de Souza Berger	I.P1.23
Carlos F. O. Graeff	L.OR7.25, L.P1.49, L.P2.113, R.P1.41, S.P1.26, U.OR1.2	Carolina Alexandrino Alencar	R.P1.33
Carlos Frajuca	K.P1.1, K.P1.46	Carolina Dakuzaku Freschi	M.P1.31, M.P1.8
Carlos Frederico de Oliveira Graeff	O.OR4.17	Carolina Del Roveri	K.P1.40
Carlos Giles	C.P1.25, C.P1.73, K.P1.24, K.P2.101	Carolina de Sena Madureira Figueiró	F.P1.39
Carlos Gracioli Aita	K.OR2.4	Carolina Ferreira de Matos	O.P1.33, O.P1.51
Carlos Guerra-Nunez	C.OR5.15	Carolina Fracalossi Rediguieri	R.OR3.10, R.OR6.20
Carlos Henrique Brito Cruz	M.P1.16	Carolina Franco Cunha	J.P2.121
Carlos Henrique Guimarães	A.P2.137	Carolina Frayne Cuba	L.P1.54
Carlos Itsuo Yamamoto	A.P1.65	Carolina Milcharek Machado	P.P2.95
Carlos José Leopoldo Constantino	F.P1.2, J.P2.126, J.P2.144, L.P2.118, R.P2.104, R.P3.138, R.P3.168, R.P3.172, R.P3.177	Carolina Moreira Watashi	Q.P1.6, Q.P1.7
Carlos K. Suzuki	I.P1.11, V.P1.1	Carolina Siqueira Franco Picone	R.P3.173
Carlos Lenz Cesar	L.P2.127, M.OR6.20	Caroline Aparecida Dalben Rampazo	Q.P1.7
Carlos Maciel de Oliveira Bastos	N.OR5.17	Caroline Barros	P.OR5.14, S.P1.25
Carlos Manuel Giles	F.P1.50	Caroline Brambilla de Aquino	M.P1.40
Carlos Marcus Gomes da Silva Cruz	I.P1.29, J.P1.32	Caroline Casagrande Sipoli	R.P2.92, R.P3.190
Carlos Martins Aiube	J.P1.74	Caroline Clare	S.P1.14
Carlos Oliveira Paiva-Santos	E.P1.52	Caroline de Mayrinck	O.P1.24, P.P2.81
Carlos Pacheco	I.P1.16	Caroline Freitas Rafael	R.OR5.15
Carlos Pérez Bergmann	A.P2.93	Caroline Lydie Mouls	C.P1.66, J.P1.24, J.P2.95
Carlos Rettori	B6NB, C.P1.19, C.P1.50	Caroline Martins dos Santos	A.P1.26, A.P2.119, D.P1.16
Carlos Rios Rios	K.P2.71	Caroline Oliveira Renó	S.P1.19
Carlos Roberto Ferreira Junior	A.P1.40	Caroline Oliveira Rocha	J.P2.101
Carlos Roberto Grandini	K.P2.105, K.P2.93, K.P2.95, R.OR8.27, R.P1.49	Caroline Raquel Bender	R.OR3.11
Carlos Rodríguez	F.P1.19	Caroline Santana dos Santos	P.P1.15, P.P1.20
Carlos Roque D. Correia	A.P2.137	Caroline Santos Alves de Lima	R.P2.67
Carlos Vital Paixão de Melo	K.P2.108	Caroline Silva Danna	F.P1.2, M.P1.21, R.P2.64
Carlos Wagner Moura e Silva	I.P1.30	Caroline Simoes Pereira	H.OR3.8
Carlos William Araujo Paschoal	N.P1.53, N.P1.58	Carsten Enderlein	J.P2.139
Carlos William Galdino	F.P1.50, K.P1.24	Caruline de Souza Carvalho Machado	J.P1.56
Carlos Yujiro Shigue	V.P1.41	Cássio Augusto Pinto da Silva	K.P1.42
Carlota Oliveira Rangel Yagui	H.P1.4	Cassius Olivo Figueiredo Terra Ruchert	J.P1.56
Carmeane Effting	U.P1.6	Catalin Popescu	D.P1.25
Carmem Célia Francisco do Nascimento	K.P1.7	Catarina Brunhara Batista	Q.P1.18
		Caterina Ducati	F.P1.9
		Catherine Gosselin	P.OR4.11
		Catia C. C. Ornelas Megiatto	R.OR6.18, R.P1.37, R.P2.111
		Cátia Crispilho Corrêa	N.P1.57
		Catia Pereira Barcellos	B.P1.36

Cátia Santos Nunes	D.P1.15, R.P1.14, R.P3.149, R.P3.192	César Tadeu Nasser Medeiros Branco	F.P1.10, F.P1.3, F.P1.37, F.P1.5, F.P1.58, H.P1.33, V.P1.31
Catiúscia Padilha Oliveira	Q.P1.26, Q.P1.27	Cesta Drasar	D.OR2.5
Cauê Ribeiro Oliveira	E.OR2.5, I.P1.8, J.P2.100, J.P2.102, J.P2.151, P.P2.78, Q.P1.15, Q.P1.21, Q.P1.25, Q.P1.8	Chad Junkermeier	H.P1.43
Cecilia A. C. Zavaglia	R.P2.96	Chandra S Tiwary	A.OR3.10, P.P2.55
Cecília Alves Mourão	R.P3.182	Charlane Cimini Corrêa	N.OR3.13
Cecilia de Almeida Zito	A.P1.51, A.P1.53, A.P2.105	Charlene Regina Matos	A.P1.47
Cedric Rocha Leão	H.OR1.2, H.P1.36	Charles Biral Silva	K.P2.86
Celia de Fraga Malfatti	P.P1.40	Charles Cornet	O.P1.23
Célia Machado Ronconi	C.OR3.5, C.P1.54	Charlie Oncebay	M.OR5.13
Célia Regina da Costa	F.P1.12, F.P1.13, V.P1.25	Chen Ying An	K.P2.68
Célia Regina Sousa da Silva	R.P1.31	Christian Ávila Dollinger	K.P2.68
Celine Eypert	J.P2.104	Christiane de Arruda Rodrigues	J.P2.92
Célio Antônio Finardi	N.OR3.12	Christiane Gimenes	S.P1.30
Celly Mieko Shinohara Izumi	M.P1.13	Christiane Philippini Ferreira Borges	N.P1.45
Celso Aparecido Bertran	J.OR1.2, J.P1.65, R.P3.184	Christiano J. S. de Matos	F.OR5.15, M.OR1.2
Celso Bortolini Júnior	R.P2.105	Christiano J.S. de Matos	A.OR4.14, M.OR1.1, M.OR5.16
Celso de Araujo Duarte	A.P2.117	Christine Dagon Lartigau	L.P2.120
Celso Israel Fornari	N.P1.12, N.P1.43, N.P1.8	Christof Woell	N.OR1.1
Celso Luiz de Aquino Santos	P.P1.32	Christoph Deneke	F.P1.34, I.OR3.12, M.P1.39, M.P1.41, N.OR4.15, N.OR6.21
Celso Pinto de Melo	J.P2.115, R.P2.121, R.P2.70, R.P3.186	Christophe Gatel	N.OR3.11
Celso Santilli	I.P1.13	Christophe Méthivier	O.OR3.6
Celso Valentim Santilli	A.OR9.36, H.P1.15, J.OR5.18, J.P1.76, J.P2.142, K.OR4.19	Christoph Genzel	J.P1.34
Celso Vataru Nakamura	R.P3.192	Cibele Vieira Arão da Silva	K.P1.9
Celso Xavier Cardoso	A.P1.43	Cibely Silva Martin	L.P1.15
César A Antonio	R.P2.103, R.P2.55	Cícero Venâncio Nunes Jr.	P.P1.12, P.P1.13
César Antonio Oropesa Avellaneda	B.P1.30	Cicero W. B. Bezerra	J.P2.116
César Augusto Díaz Pomar	K.P2.109, K.P2.112	Cid Bartolomeu de Araújo	M.OR5.15, M.P1.23, M.P1.35, M.P1.37
César Augusto Duarte Rodríguez	K.OR3.10, P.P1.26	Cíntia Andreia Alves Pereira	J.P2.156
Cesar Bergamin Duarte	P.P2.91	Cintia Kazuko Tokuhara	Q.P1.5
Cesar Comin	L.P1.8	Cintia Meiorin	C.P1.7
Cesar Fierro-Ruiz	C.OR2.4, F.P1.11	Cíntia Rodrigues Coelho	H.P1.42
Cesar Grisolia	J.P1.74	Cintia Rosa	A.P1.31, A.P1.32, A.P1.57, A.P2.116, A.P2.97
Cesar Ishiuchi	A.P1.21	C. Labre	F.P1.72
Cesar Moreno	A.OR6.25	Claire Gmachl	A.OR3.7
Cesar Renato Foschini	J.P1.22	claiton jose ribeiro acacio santos	K.P2.114
César Ricardo Teixeira Tarley	A.P2.109, J.P1.17, N.P1.49	Clara Isméria Damiani Bica	V.P1.42
		Clarice Steffens	J.P2.136

Clarissa Barros da Cruz	K.OR3.14, K.P1.29, K.P1.39	Cleber Lima Rodrigues	F.OR4.12
Clarissa de Almeida Olivati	E.P1.43, L.P1.28, L.P2.116, L.P2.117, L.P2.118, L.P2.119, L.P2.120, L.P2.123, L.P2.128, L.P2.75, U.P1.3, U.P1.5	Cleber Marchiori	O.P1.39
Clarissa Piccinin Frizzo	R.OR3.11	Cleber Renato Mendonca	M.OR5.13
Clascídia A. Furtado	A.OR6.23, A.P1.10, A.P1.14, A.P1.64, A.P2.100, A.P2.128, R.P2.86	Cleber R. Mendonça	A.P1.9, J.P2.110, J.P2.137, L.OR1.3, L.OR3.11, M.OR6.19, M.OR6.21, M.P1.12, M.P1.27
Classius Ferreira da Silva	R.P3.188	Clement Hamani	S.P1.29
Claude Forano	J.P2.90	Cleocir José Dalmaschio	B.P1.36, C.P1.63
Claudenete Vieira Leal	R.P3.185	Cleverson Alves Silva Moura	J.P2.160
Claudete Kallas	K.P1.47, K.P1.48	Cleverson Pinheiro	J.P2.140, K.P2.99
Cláudia Angela Maziero	R.OR5.15	Clodoaldo Saron	V.P1.14, V.P1.39
Volpato		Clodomiro Alves Jr.	L.P2.124
Claudia Bernal	R.P2.99	Clotilde Coppini Pereira	P.P2.60
Claudia Cardoso	H.OR4.14	Clóves Gonçalves Rodrigues	N.P1.5
Claudia Carrasco	F.P1.19	C. Moyses Araujo	P.OR6.18
Cláudia E. B. Marino	I.P1.32	Colin Peter Watson	L.OR1.1
Claudia Longo	P.OR3.7, P.P1.48, P.P2.90	Conceição Aparecida	R.P2.100
Cláudia Luisa Mendes	A.P2.144	Matsumoto Dutra	
Claudia Patricia Fernandez	P.P1.2	Conrado Game Saldeira	V.P1.16, V.P1.17, V.P1.36
Claudia Regina Elias Mansur	J.P2.108, J.P2.96, R.P2.52, R.P3.139, R.P3.140	Cortino Sukotjo	R.OR7.26
Claudilene Ribeiro Chaves	J.P1.86	Craig B. Arnold	M.OR6.21
Claudiney de Sales Pereira	C.P1.40, E.P1.14, E.P1.50, K.P1.2, K.P1.3, K.P1.38, K.P1.50, K.P2.103, K.P2.64, K.P2.65, K.P2.70, K.P2.81, K.P2.83	Cris Adriano	C.P1.25, C.P1.72, C.P1.73, D.P1.28
Mendonça		Cristal Cerqueira-Coutinho	R.P2.52, R.P3.140
Cláudio Antônio Perottoni	D.OR4.8, D.P1.19	Cristian Bernado da Silva	L.P1.27
Claudio Batista Ciulik	S.P1.15	Cristian Cley Paterniani Rita	J.P1.58, J.P2.163
Claúdio Luiz Carvalho	A.P2.91, C.P1.13	Cristiane Agra Pimentel	R.P1.26, S.P1.10
Claudio Michel Poffo	F.P1.35, F.P1.45	Cristiane Aparecida Pereira	R.P2.72
Cláudio Nunes Pereira	J.OR2.5	Cristiane A Silva	F.P1.59, Q.P1.14
Claudio Parolo	L.P1.17	Cristiane Casonato Melo	Q.P1.23
Cláudio Radtke	A.OR6.21, A.OR6.24	Cristiane da Silva Fonseca	A.P2.110
Claudio Ruggieri	K.OR1.1	Cristiane Gomes Almeida	A.P1.8
Claudio Ruggieri	K.P2.80	Cristiane Miotto Becker	B2VE
Claudio Ruggieri	K.P2.80	Cristiane Raubach Ratmann	M.P1.20, N.OR2.4, N.P1.28, N.P1.66, O.P1.5
Clayane Carvalho Dos Santos	N.P1.36	Cristiane Sanchez Farinas	B.P1.10
Clayane Carvalho Santos	J.P2.116, J.P2.167	Cristiane Yoga Ito	R.P2.57
Cleânio Luz Lima	L.P2.124	Cristiane Yumi Koga-Ito	R.P2.80, R.P3.156
Cleber Alexandre Amorim	L.P1.25	Cristian Momoli Salla	L.P1.38
Cleber Fabiano Marchiori	O.P1.40, O.P1.59	Cristiano Binder	I.P1.28
		Cristiano Carrareto Caliman	A.P1.62
		Cristiano Fantini Leite	A.OR6.20
		Cristiano Francisco Woellner	H.P1.11, H.P1.27
		Cristiano Jaeger Stradolini	F.P1.74, J.P2.123, J.P2.150
		Cristiano José da Silva	R.P1.23
		Cristiano Krug	F.P1.30
		Cristiano Legnani	B.OR3.9, L.P2.114

Cristiano Luís Pinto de Oliveira	B6BK, H.OR4.17	Daniela Cristina Manfroi Rodrigues	A.P1.78, A.P1.79, A.P1.80
Cristiano Monteiro de Barros Cordeiro	M.P1.10, M.P1.5	Daniela de Moraes Zanata	B.P1.2
Cristiano Morita Barrado	J.P1.70	Daniela Formaggio	Q.P1.2, R.P2.65
Cristiano Raminelli	L.P1.45	Daniela Kubota	R.P2.81
Cristiano Ramos da Cunha	M.P1.36	Daniel Alejandro Solis	H.P1.11
Cristiano Teles de Meneses	C.P1.1, C.P1.47, C.P1.48	Daniel Alessander Nono	J.P1.84
Cristiano Zanlorenzi	H.P1.17, L.P2.130	Daniel Alves de Lima	J.OR2.6
Cristina Angioletto Pozenato	A.P2.106	Daniela Menegon Trichês	D.P1.26
Cristina Battesini Adamo	A.P1.52, N.OR3.12	Daniel Andrada Maria	S.P1.11
Cristina Bormio Nunes	E.P1.4	Daniel Andrade	EXP3.4
Cristina de Freitas Bueno	N.OR6.22	Daniela Nunes	B.P1.19, B.P1.20
Cristina Ikehara	A.P1.21	Daniela Passarelo Moura da Fonseca	K.P2.67
Cristina Maria Fernandes	K.P1.59	Daniela Pereira Santos	L.P1.11
Cristina Pacheco-Soares	R.P1.4	Daniela Romão Manfio Gozzi	A.P1.72
Cristina Pungartnik	A.P2.103	Daniela Sachs	R.P3.191
Cristine Costa Fulchini	B.P1.22	Daniela Silvestrini Fernandes	J.P1.25, J.P2.164
Cristine Santos de Oliveira	L.P2.132	Daniel Assis Amâncio	K.P1.15, K.P1.16, K.P1.17, K.P1.18, K.P1.57, K.P1.59
Cristol de Paiva Gouvêa	L.OR6.20	Daniel Augusto Cantane	P.P1.34
Cristol Gouvêa	L.P2.115	Daniel Ayarroio Seixas	R.P2.109, R.P3.174
Crystopher Cardoso Brito	K.OR3.13, K.P1.34	Daniela Yurie Nakasato	Q.P1.4
Crystopher Cardoso de Brito	K.P1.10	Daniela Zanchet	C.OR3.10, P.OR6.17, P.P1.34, P.P1.35, P.P1.36
CYNTHIA MARINA RIVALDO GOMEZ	K.P2.112, N.P1.39	Daniel de Florio	E.P1.35, E.P1.38, E.P1.39, E.P1.45, E.P1.47, E.P1.48
Cynthia Penoni Volpi Abreu	Q.P1.26, Q.P1.27	Daniel Dornellas Athayde	P.P1.31
Cynthia Ribeiro Guimarães	J.P2.162	Daniele Cristina Potulski	B.P1.14
Cyro K. Saul	F.P1.31	Daniele dos Reis Soares	H.P1.10, K.P1.20, K.P1.33, V.P1.11
<b>D</b>		Daniel Eduardo Weibel	J.OR3.7, J.P1.12, J.P2.160, P.P2.91
Daiana Santos da Silveira	L.P1.50	Daniele Fernanda Chiarelli Gonçalves	B.P1.31, B.P1.32
Daiane Damasceno Borges	H.P1.11, P.OR5.13	Daniele Ribeiro de Araujo	R.OR1.3, R.P1.22
Daiane Szczerbowski	L.P2.131	Daniel Errandonea	D.P1.24, D.P1.25
Daisy Catharina Rodrigues	E.P1.9	Daniel Estevão Bonifácio	U.P1.6
Daisy Machado	R.OR7.25	Daniel Felipe Simião	E.P1.2
Dalita G. S. M. Cavalcante	R.P1.24, R.P2.64	Daniel Grandinetti	J.P1.37
Dalton Abdala	F.P1.64	Daniel Grandi Stroppa	R.P3.154
Dalva Alves de Lima Almeida	A.P2.130, P.P2.51, P.P2.52	Daniel Grassescchi	F.OR5.15, K.P2.69, M.OR1.2, N.P1.55
Damaris Tartarotti Maimone	C.P1.77	Daniel Guillermo Actis	C.P1.7
Dámiana Máximo Brandão	S.P1.1	Daniel Haskel	D.OR1.1, D.P1.29
Damjan Vengust	E.OR6.18	Daniel Hideki Oichi	S.P1.1
Dane Tadeu Cestarolli	O.P1.11	Danieli Aparecida Pereira Reis	J.OR3.12, J.P1.4, J.P1.7, K.P1.22, K.P1.8
Daniela Bianchi Ponce Leon Lima	E.P1.47	Danieli Born Guerra	C.P1.64
Daniela Branco Tavares Mascagni	L.P1.9		
Daniela Coelho de Oliveira	F.P1.48		
Daniela Cordeiro Leite Vasconcelos	I.P1.5		

Daniel Jacinto Silva	J.P1.71	Davide Bigoni	H.OR3.11
Daniel Julio Garcia	C.P1.60	David Fernando de Morais	R.P3.161
Danielle Berger	A.P1.74	Neri	
Danielle Marra Freitas Silva	R.P2.120	David Martin Taylor	L.OR1.1
Azevedo		David Santamaría-Pérez	D.OR2.5, D.P1.25
Danielle Santos Gonçalves	P.P1.35, P.P1.36	David Vaknin	B6YF
Daniel López-Cortés	A.OR4.14	Daví Filenga	C.P1.14
Daniel Lorscheitter Baptista	F.OR4.11, F.P1.47	Davi Henrique Starnini de	N.OR1.3, N.OR3.8
Daniel Mario Ugarte	F.P1.6, F.P1.9	Camargo	
Daniel Roberto Cassar	F.P1.57	Davi Neves	K.P1.52
Daniel Rodrigo Leiva	P.P1.9	Dayane Batista Tada	K.P1.19, Q.P1.2, R.P1.40, R.P2.65, R.P2.93
Daniel Rodrigues Oliveira	K.P1.25	Dayane de Souza Bancoff	M.P1.10, M.P1.5
Daniel Roger Bezerra Amorim	L.P2.97	Dayane Marques Oliveira	S.P1.11
Daniel Souza Corrêa	A.P2.111, A.P2.126, A.P2.130, B.P1.21, J.P2.130, J.P2.136, J.P2.137, L.P1.22	Dayse Carvalho da Silva	J.OR2.4, O.P1.30
Daniel Takanori Kemmoku	R.OR3.9	Martins	
Daniel Vercosa	S.OR1.3	Dayse Iara dos Santos	C.P1.51
Daniel Yukio Kakizaki	K.P2.98	Débora Aparecida Ribeiro	L.P2.86
Danijela Stanisic	R.P1.34	Débora Barros Barbosa	R.P2.112, R.P2.90
Danilo Castro Pereira	H.P1.26	Débora Botura Scariot	R.P3.192
Danilo Ferreira de Souza	L.P2.73	Débora Carvalho Dos Anjos	S.P1.20
Danilo Gomes Genaro	A.P2.146	Débora Clara Coelho da Mota	L.P1.20
Danilo Locilento	A.P2.126	Silveira	
Danilo Maciel Barquete	K.P1.36	Debora Domingos Cavaglieri	F.OR4.13, F.P1.41
Danilo Manzani	M.OR6.21	Débora França	B.P1.15
Danilo Martins dos Santos	R.OR6.21, R.P3.183	DEBORA GUIMARAES	M.P1.11, M.P1.9
Danilo Massaki Oshima	EXP6.10, J.P1.26, P.P1.29	OLIVEIRA	
Danilo Mustafa	A.P1.7	Deborah C.R. Santos	J.P1.49, J.P2.146, J.P2.147
Danilo OLIVEIRA DE	M.P1.34	Deborah Prezzi	H.OR4.14
SOUZA		Deborah S. A. Liguori	L.P2.121
Danilo Olzon Dionysio de	J.P1.33	Deborah Sivco	A.OR3.7
Souza		Debora Marani	E.P1.35, E.P1.38
Danilo Roque Huanca	F.P1.20, J.P1.63, N.P1.42	Débora Rodrigues Lima	R.OR8.29
Danilo Scapin	J.P2.93	Debora Terezia Balogh	L.OR3.11, L.P2.71, L.P2.72, L.P2.74, O.P1.35
Danilo Suvorov	E.OR6.18	Decio Marcon Neto	U.P1.6
Dante Ferreira Franceschini	F.P1.65	Deep Choudhuri	K.OR3.7
Filho		Deise M. P. O. Santos	L.P2.122, L.P2.126, L.P2.137
Danusa do Carmo	C.P1.27	Deise Rebelo Consoni	J.P2.89
Danyela Carvalho	V.P1.40	Deissy Johanna Feria Garnica	A.P1.63, A.P2.135
Danyelle Santos Ribeiro	K.P2.62	Deisy Aristizábal-Giraldo	C.OR6.22
Daphne de Camargo Reis	R.P1.10, R.P1.11, R.P1.21, R.P2.107	Deivy Wilson Masso	B6AN
Mello		Deize Corradi Grodniski	L.P2.77
Darcy Hiroe Fujii Kanda	B.P1.13	Delcicleide Costa dos Reis	P.P1.3
Dario Antonio Donatti	F.P1.54, F.P1.7, L.OR3.11, M.P1.26	Delia do Carmo Vieira	U.P1.12, U.P1.13, V.P1.43
Dario Bahamon	A.P1.7, F.OR5.15	Deliane da Silva Cabral	V.P1.33
Darren Neo	M.OR3.7	Delia Rita Tapia-Blácido	B.OR2.3
David Antonio Barbosa	E.P1.28	Demetrio Scelta	D.OR2.4
Quiroga			

Demetrio Werner Soares	N.P1.12, N.P1.17, N.P1.29, N.P1.4, N.P1.43, N.P1.8	Diego Luan Bertuzzi	R.OR6.18, R.P1.37, R.P2.111
Demétrio Zacarias	J.P2.140	Diego Luiz Tita	E.P1.52
Dener P. Santos	I.P1.1	Diego Mendes dos Santos	B2J6, B2XW, R.P1.8
Denilson Rabelo	J.OR2.6	Diego Muraca	C.OR3.10, C.P1.30, C.P1.33, C.P1.34, C.P1.7, C.P1.8
Denis Angelo da Silva	A.P1.54	Diego Pereira dos Santos	L.P2.132
Denis Augusto Turchetti	L.P2.129, L.P2.131	Diego Rafael Nespeque Correa	R.OR9.33
Denise Arruda	R.P2.65	Diego Rodrigues de Carvalho	P.P1.35
Denise A. Tallarico	R.P2.56	Diego Salazar-Aravena	C.OR3.9
Denise Crispim Tavares	R.P2.78	Diego Santos Oliveira	R.P1.18
Denise de Oliveira Silva	J.P2.165	Diego Scolfaro	N.P1.67
Denise Hirayama	V.P1.14	Diego Seiti Fukano Viana	E.OR3.7, E.P1.27, E.P1.41
Denise Sacramento Christovam	C.P1.12, C.P1.9	Diego Soares de Moura	P.P2.86, P.P2.87
Derval dos Santos Rosa	J.P2.143	Diego Sousa Moura	J.P1.74
Deuber Lincon da Silva Agostini	L.P1.26, L.P1.28, L.P1.60, L.P1.63, L.P2.118, U.P1.11, U.P1.15, U.P1.3, U.P1.5	Diego Stéfani Tedoro Martinez	A.P2.132
Devaney Ribeiro do Carmo	J.P1.25, J.P2.113, J.P2.155, J.P2.164	Diego Stefani Teodoro Martinez	A.P2.138, Q.OR1.3, Q.OR2.4, Q.OR2.5, Q.OR2.6, Q.P1.14, Q.P1.16, Q.P1.24
Deyli Anaid Galíndez Espinoza	J.OR3.11	Diego Valdevino Marques	V.P1.10
Deyse Costa	D.OR1.3, L.P2.115	Diego Venturini	R.P3.130
D. F. Franceschini	A.P2.151, C.P1.22, C.P1.53, F.P1.40, J.P1.48	Diéricon Sousa Cordeiro	O.P1.15
Diana Betancourth	C.P1.60	Dilermando Nagle Travessa	P.P1.8
Diana Gaspar	B.OR1.2	Dilson Silva dos Santos	F.P1.17
Diana María López	H.P1.8	Dimas Roberto Vollet	F.P1.54, F.P1.7, L.OR3.11, M.P1.26
Diana Robertada Silva Medeiros	I.P1.21	Dimitri Argyriou	G.OR3.5
Diego Alberto dos Santos Yamazaki	R.P1.14	Dimitrios Samios	V.P1.42
Diego Augusto Batista Barbosa	N.P1.53, N.P1.58	Dina Tobia	C.P1.18, C.P1.20, C.P1.72
Diego Bagnis	EXP6.11, O.OR3.5, O.OR4.14	Dinesh Kumar Shukla	C.P1.1
Diego da Silva Manoel	M.P1.26	Diogo Duarte dos Reis	F.OR6.18
DIEGO DAVID PINZÓN MORENO	V.P1.39	Diogo L. A. Silva	K.OR3.9
Diego de Holanda Saboya Souza	A.P1.25	Diogo Longhini	R.P2.124
Diego Edison Lopez Silva	A.P1.63, A.P2.135	Diogo M. Guilhermitti Neto	A.P1.56
Diego Fernandes Da Cruz	J.P2.100	Diogo Paschoalini Volanti	J.P1.71
Diego Fernando Silva Sousa	L.P1.41	Diogo Rúbio Sant'Anna	F.P1.12
Diego Henrique de Oliveira Machado	N.OR6.22	Diogo Rubio Sant'Anna das Dores	F.P1.13
Diego Henrique Oliveira Barbosa	A.P1.68	Diogo Volpati	R.P3.165
Diego Leonardo Silva Scoca	N.OR2.6	Djalma Lucas Sousa Maia	P.P2.73
		Djalma Ribeiro Silva	I.P1.21
		Djanira Rodrigues Negrão	B.P1.31, B.P1.32
		Djéssica Welzel	S.P1.14
		Djoille Denner Damm	K.P1.36
		Doh Lee	N.OR6.23
		Domingos Sávio Tavares Mendes Júnior	F.P1.37, K.P1.31
		Donaji Velasco Arias	C.P1.32

Donat Josef As	N.P1.50	E. B. Saitovitch	A.P2.151, B2VY, C.P1.22, D.OR3.7, D.OR4.10, J.P2.139, K.P2.120
Dora Altbir	C.P1.67	Edemar Zenardo	D.P1.9
Doris Sippel Dörr	B.P1.30	Edemir Luiz Kowalski	L.P2.85
Douglas A. S Gioielli Santos	M.P1.38	Eden Santos Silva	K.P1.7
Douglas Cardoso Dragunski	J.P2.170, R.P2.116, R.P2.119	Eder Carlos Ferreira de Souza	N.P1.45
Douglas Coutinho Coutinho	L.P2.111, L.P2.88, L.P2.97	Eder Couto Marinho	V.P1.19, V.P1.22
Douglas da Silva	A.OR5.16	Eder dos Reis Silva	K.P1.27
Douglas Del Duque	P.OR3.7	Eder Lopes	K.OR3.11, K.OR3.7
Douglas Fabris	R.P3.162, R.P3.166	Eder Paduan Alves	K.P2.68
Douglas Galante	F.P1.64	Edésia Martins Barros de Sousa	A.P1.66, C.P1.55, R.P1.15, R.P1.16, R.P1.17, R.P1.18, R.P1.32, R.P2.62, R.P2.66, R.P2.68, R.P2.69, R.P3.155
Douglas Henrique Vieira	L.P2.100	Edgar Dutra Zanotto	F.P1.57, R.P2.124
Douglas Marcel Gonçalves Leite	I.OR4.15, O.P1.27	Edgar Monrroy	F.OR2.6, F.P1.60, H.P1.7
Douglas Miquita	R.P3.131	Edgar Mosquera	O.P1.28
Douglas Ricardo de Assis	J.OR1.3	Edi Carlos Pereira de Sousa	B6BK
Douglas Roberto Monteiro	A.P1.44	Edielma Costa Mendonça	C.P1.48
Douglas Roca Santo	J.P2.134	Edilaine Ferreira da Silva	P.P1.7
Douglas Soares da Silva	O.OR3.8	Edilaine Honório Silva	J.P1.33
Douglas Soares de Oliveira	N.OR4.16, N.P1.11, N.P1.22	Edilene Assunção da Silva	L.P2.116, L.P2.119, L.P2.123, L.P2.128
Douglas Soares Galvão	A.OR3.10, A.OR3.8, A.OR3.9, A.OR9.33, H.OR3.11, H.P1.11, H.P1.27, H.P1.40, I.OR2.5, P.OR5.13	Edilma Pereira Oliveira	H.P1.10
Dr. Thomas Fischer	E.OR6.17	Edilson Lucena Falcão-Filho	M.P1.23, M.P1.35
Dr. Yakup Goenuellue	E.OR6.17	Edilson Silveira	F.P1.43
D S da Silva	M.P1.17	Edilso Reguera	C.P1.32, C.P1.37
Dubrazkha Carolina Lugo	A.P2.129, J.P1.85	EDINILSON JOSÉ SLABEI	A.P2.113
Ducinei Garcia	E.OR3.7, E.OR3.9, E.P1.27, E.P1.41, P.P1.2	Edir Leal	R.P2.127
Duclerc Fernandes Parra	F.P1.14, F.P1.15, F.P1.70, V.P1.4	Edison Barbieri	Q.P1.16
Duc Trong Duong	L.OR6.24	Edison Zacarias da Silva	I.OR2.6, I.OR3.11
Dulcina Pinatti Ferreira de Souza	E.P1.10, E.P1.12, E.P1.16, E.P1.40, E.P1.9	Edivaldo L. Queiróz	L.P2.89, L.P2.93
Durval Bertoldo Menezes	F.P1.38, F.P1.69	Edivandro Giroto	L.P2.137, L.P2.81
Durval Rodrigues Jr.	C.P1.46, C.P1.6, F.P1.66, K.P2.85	Edmar A Soares	F.P1.26
Dyovani Coelho	P.P2.74	Edmar Avellar Soares	BATP
		Edmilson José Silva Júnior	G.P1.4
		Edmilson Otoni Corrêa	K.P1.15, K.P1.16, K.P1.38, K.P1.59
		Edna Regina Spada	C.P1.10, F.P1.63, L.P1.34, M.OR5.12
		Ednelson Silva Costa	K.P2.111
		Ednilson da Cruz Rodrigues	C.P1.3, C.P1.4
		Edson Almeida Filho	R.P2.98
		Edson Cocchieri Botelho	V.P1.14
		Edson da Costa Bortoni	O.P1.14
		Edson Guedes Costa	G.P1.4
		Edson H. Takano	J.OR4.17
		Edson Laureto	L.P1.57
<b>E</b>			
E.A. Thoroh de Souza	A.OR4.14		

Edson Laureto Laureto	L.P1.46, L.P2.127, N.P1.47	Eduardo Ribeiro de Azevedo	L.OR6.24, S.P1.15
Edson Luiz de Miranda	K.P1.41	Eduardo Ruiz Hitzky	A.P1.47
Edson Passamani	K.P2.120	Eduard Westphal	L.P1.58, L.P1.64
Eduarda Medeiros de Araújo	J.P1.68	Edval Gonçalves Araújo	J.P2.171, J.P2.97
Eduarda Peinado Moraes	K.P1.13	Edvani Curti Muniz	D.P1.15, R.P1.14, R.P2.59, R.P2.63, R.P3.149, R.P3.175, R.P3.192
Eduardo Abramof	N.P1.12, N.P1.29, N.P1.4, N.P1.43, N.P1.8	Edward H Sargent	M.OR4.9, M.P1.16
Eduardo Almeida Anunciação	L.P1.16	Edwige Otero	BAAK
Eduardo Antonelli	E.P1.30, E.P1.31	Edwillson Gonçalves de Oliveira Filho	F.P1.10, F.P1.3, F.P1.37, F.P1.5, H.P1.33, V.P1.31
Eduardo Ariel Ponzio	C.P1.45	Edwin Gilberto Medina	K.P1.51, K.P1.54
Eduardo Azzolini Volnistem	E.P1.41	Edwin Sallica Leva	J.P1.10
Eduardo Bedê Barros	A.P1.11, O.P1.9	Edy Elar Cuevas Arizaca	D.P1.9
Eduardo Bellini Ferreira	E.P1.26	Efracio Mamani Flores	N.OR2.4, N.P1.28
Eduardo Bertoni da Fonseca	J.P1.40, K.P2.118, K.P2.119, K.P2.92	Egídio Paulo Nhavene	R.P2.68
Eduardo Bonini Guedes	I.OR3.13	Egont Alexandre Schenkel	I.P1.11, V.P1.1
Eduardo Ceretta Moreira	L.OR3.12, L.P1.44	Eguiberto Galego	O.P1.19
Eduardo Costa Estambasse	J.P1.20	Eidi Yoshihara	R.P2.64
Eduardo de Jesus Silva dos Santos	D.P1.17	Eigor Renato Petry	J.P1.59
Eduardo Diaz Suarez	H.P1.26	Elaine Cavalcanti Rodrigues Vaz	A.OR7.28, R.P1.38
Eduardo dos Santos Loureiro	J.P1.13, P.P1.11, R.OR5.17	Elaine Cristina Paris	B.P1.11, B.P1.12, B.P1.8, E.P1.33, E.P1.34, E.P1.49, E.P1.51, P.P2.78, Q.P1.15, Q.P1.25, Q.P1.8
Eduardo Ferreira Barbosa	L.P1.34	Elaine Pavini Cintra	J.P1.5, J.P2.138, K.P2.124
Eduardo Ferreira Molina	R.P2.113	Eleazar José Ribeiro	C.P1.46
Eduardo F Molina	R.P1.23, R.P2.78	Elena del Corro	A.OR6.20
Eduardo G. Ciapina	P.OR4.12	Elena Madrid Madrid	O.OR3.11
Eduardo Gonçalves Ciapina	P.P1.39	Elenice Mendes Silva Gomes	L.P1.23, L.P1.27, L.P1.31
Eduardo Granado	B6YF, C.P1.20, C.P1.61, C.P1.77, G.P1.1, G.P1.6	Elen Leal da Silva	P.P2.66, P.P2.68
Eduardo Guy Perpétuo Bock	R.P2.127	Elen Poliani da Silva Arlindo	A.P2.108
Eduardo Henrique Martins Nunes	P.P1.31	Eliana A. R. Duek	R.P3.185
Eduardo Luis Schneider	P.P1.27	Eliana Cristina da Silva Rigo	R.P2.58
Eduardo Maffud Cilli	R.P2.74	Eliana Navarro dos Santos	E.OR1.2, E.OR3.10, Muccillo
EDUARDO MAGALHÃES BRAGA	K.P2.111	Eliana Navarro dos Santos	E.OR1.1
Eduardo Marques	J.P2.154	Mucillo	
Eduardo Mascarin	P.P1.26	Eliana Pereira Silva	S.P1.2
Eduardo Matzenbacher Bittar	B2VY	Eliandra de Sousa Trichês	J.P2.105
Eduardo Nascimbem Turini	T.P1.3, T.P1.6	Eliane Aparecida Morais	L.P1.49
Eduardo Nicollas Miranda Mendes	J.P2.87	Eliane Cristina Viana	S.P1.20
Eduardo Norberto Codaro	R.P1.3	Revoredo	
Eduardo Oliveira Rodrigues	V.P1.13	Eliane Trovatti	B.P1.5, B.P1.7
Eduardo Padrón Hernández	C.P1.24, C.P1.28, C.P1.29, H.P1.29, H.P1.35	Eliane Valéria de Barros	F.OR4.13, F.P1.41
Eduardo Pires Bonhin	J.P1.2, J.P1.9	Elias da Costa	A.P2.113
Eduardo Quinteiro	S.P1.19		

Elias de Barros Santos	A.P2.138	Elson Longo	A.P1.33, A.P1.44, A.P1.73, A.P1.74, A.P1.75, A.P1.76, A.P2.114, A.P2.120, A.P2.82, A.P2.83, A.P2.84, A.P2.85, A.P2.86, A.P2.87, E.OR2.5, E.OR6.18, E.P1.21, E.P1.42, E.P1.57, E.P1.58, F.P1.68, I.OR3.11, I.P1.8, J.P1.78, J.P1.79, J.P2.116, J.P2.122, J.P2.167, K.P2.104, M.P1.18, N.P1.15, N.P1.24, N.P1.27, N.P1.3, N.P1.36, N.P1.40, N.P1.53, N.P1.58, N.P1.61, N.P1.68, O.P1.61, P.P2.77, P.P2.79, R.OR5.16, R.P2.112, R.P2.90
Elias Fagury Neto	E.P1.19, V.OR2.6	Elton Carvalho Lima	E.P1.5
Elias Monteiro Souza	J.P2.119	Elton José Pereira Felix	F.P1.32
Elias Paiva Ferreira Neto	D.P1.10, F.P1.52, J.P1.82	Elver Juan de Dios Mitma Pillaca	A.P1.77, J.P1.85
Elidia Maria Guerra	N.P1.63, O.P1.11	Elvio Antonio de Campos	S.P1.14
Elidiane Cipriano Rangel	B.P1.18, I.P1.6, J.P1.29, J.P1.30, J.P1.31, J.P1.42, J.P1.46, J.P1.47, J.P1.61, J.P2.153, J.P2.172, J.P2.99, N.P1.21, R.P2.103, R.P2.123, R.P2.55	Elvira Fantechi	C.OR3.6
Eliézer Fernando Oliveira	H.P1.14, H.P1.34	Elvira Maria Correia Fortunato	B.OR1.2, B.P1.19, B.P1.20, B.P1.25, L.P2.90, PS001.2, V.OR1.2
Elio Thizay Magnavita	P.P2.92	Elvis Oswaldo López Meza	F.OR3.8
Eliraldrin Amorin de Sousa	A.P2.108	Elvo Calixto Burini Junior	L.P2.68, L.P2.73
Elíria Maria de Jesus Agnolon Pallone	A.P1.29	elza monteiro leao filha	K.P2.114
Elisabete Inácio Santiago	P.OR6.22, P.P1.40, P.P2.60	Emanoele Maria Santos Chiromito	B.P1.5
Elisabeth Rice	L.OR2.6	Emanuela Coutinho Luna	J.P2.127
Elisa Carvalho Castro	F.P1.27	Emanuele Schneider Callisaya	K.P2.77
Elisa Marchezini Rodrigues	R.P1.51, R.P2.87	Emanuelle Ferreira Thomazini	L.P2.98
Elisa Molinari	H.OR4.14	Emerson Oliveira da Silva	A.P2.121, B.P1.34, R.P2.108, R.P2.73
Elisan dos Santos Magalhães	K.P2.97	Emerson Roberto Santos	L.P2.67, L.P2.68, L.P2.73, O.P1.31
Elisa Sales de Freitas	L.P1.57	Emerson Rodrigo da Silva	T.P1.1
Elisa Silva Ferreira	B.P1.28	Emerson Rodrigues Camargo	A.P1.44, A.P1.45, A.P1.70, J.P1.78, J.P1.79, R.P2.112, R.P2.90, R.P3.146, S.P1.8
Elisa S Orth	A.P2.134		
Elisban Juani Sacari Sacari	O.P1.28		
Elis Sinnecker	C.P1.67		
Elizabeth Fernandes Lucas	P.P2.67		
Elizabeth Hoyos	H.P1.8		
Elizabeth Luciana Marinho Miguel	H.P1.31		
Elizabeth Tennyson	O.OR2.3		
Elizangela Messias Almeida	R.P2.59, R.P2.63, R.P3.192		
Eliza Sbrogio Martin	A.P1.27		
Eliza Wilk Reis Almeida	K.P1.55		
Ellen Christine de Souza Galvão	J.P2.135		
Ellen Raphael	L.P1.11, O.P1.16, O.P1.18, O.P1.22		
Eloá Lopes Maia	J.P1.40		
Eloi Alves da Silva	K.P2.108		
Eloisa Pereira Cardozo	K.P2.102		

Emerson Sarmiento Gonçalves	A.P1.1, A.P1.5, A.P1.54, A.P2.94, A.P2.98, A.P2.99, C.P1.21, J.P1.15, J.P1.19, J.P2.132, J.P2.94, P.P1.25, P.P2.54, P.P2.66, P.P2.68, P.P2.69, R.P2.57	Ernesto Chaves Pereira	C.P1.56, J.P1.77, P.P2.58, P.P2.65
Emilia Annese	BAAK	Ernesto Chaves Pereira de Souza	P.OR1.2
Emília Pereira Veras	I.P1.21	Ernesto David Gonzalez	R.OR9.31
EMILLY SILVA	L.P2.116	Ernesto Jimenez Villar	M.OR6.20
GERVAZONI		Ernesto Osvaldo Wrasse	H.P1.18
Emilson Ribeiro Viana Junior	A.P1.17	Esperidiana A. B. Moura	A.P2.143
Emily M Speller	L.OR2.6	Esperidiana B. Moura	A.P2.148
Emmanuel de Sousa Almeida	U.P1.10	Estácio Paiva de Araújo	B46E
Emmanuelle Oliveira Sancho	E.P1.56, S.P1.21	Estácio Tavares Neto	S.P1.24
Emmanuel Petitprez	F.P1.30	Esteban Espinosa Vidal	R.P3.161
Emmanuel Santos Moraes	L.OR5.17	Estefânia Mara do Nascimento	A.P1.14, R.P2.86
Emmanuel Silva Marinho	S.P1.2	Martins	
Emre Yassitepe	M.OR4.9, M.OR6.20, M.P1.16, O.P1.41, O.P1.46	Estela Melaré Ribeiro dos Santos	J.P1.78, J.P1.79
Enderson Sergio Bannwart	P.P2.93	Estér Figueiredo Oliveira	A.P1.14, R.P2.86, R.P3.131
Eneida de Paula	R.P1.22, R.P2.128, R.P2.129	Estevam Vitorio Spinacé	P.P1.41
Enésio Marinho da Silva Jr	H.P1.36	Estêvão Pompermayer	P.P1.19
enio mauricio nery santos	K.P2.114	Cristofori Lima	
Enrica Gianotti	Q.P1.17, R.P1.30	Euclides Alexandre Bernardelli	I.P1.22, I.P1.28
Enrique Carbo-Argibay	R.P3.154	Euclides Marega Junior	M.OR6.17, N.P1.30
Enrique Victoriano Anda	C.OR6.17	Eudes Eterno Fileti	H.P1.28
Eralci Moreira Therézio	L.P1.36, L.P1.56	Eugen Barbu	B.P1.7
Erb Ferreira Lins	H.P1.10	Eugenia Laura Dalibon	J.P1.16
Erica Cristina Almeida	A.P1.3, A.P2.103, A.P2.104	Eugênio Teixeira Filho	I.P1.21
Erica Silva dos Santos Alves	J.P2.162	Eupidio Scopel	B.P1.36, C.P1.63
Erica Ximenes Dias	K.P2.96	Euripedes Alves Silva Filho	L.P1.23, L.P1.27, L.P1.31
Eric Fujiwara	I.P1.11, V.P1.1	Euripedes Silva Junior	A.P1.73, A.P1.76, A.P2.86
Erick Gabriel Ribeiro dos Anjos	J.P2.131	Eustaquio de Castro	F.OR4.13
Erick Piovessan	L.P1.41, L.P1.50	Euzebio Skovroinski	J.P2.152
Eric Moura	D.OR4.10	Evaldo José Corat	A.P2.129, J.P1.43, J.P1.6, K.P1.36
Érico Teixeira Neto	F.OR1.2, F.OR1.3	EVALDO JÚLIO FERREIRA SOARES	K.P2.113
Eric Tsuneki Yoshiura Ono	A.P2.124, O.P1.31	Evaldo Ribeiro	A.P2.117, F.P1.31, F.P1.43, F.P1.44
Erika Aparecida da Silva	K.P2.115	Evaldo Toniolo Kubaski	D.P1.11, D.P1.8
Erika Padilla Ortega	A.P1.47	Evandro Drigo	R.P2.127
Erika R. M. Andreetta	C.P1.26	Evandro Garske Scarabelot	E.OR3.6
Erika Soares Bronze-Uhle	R.P1.1, R.P2.85	Evandro Ivanov	M.P1.30
Erilaine Barreto Peixoto	C.P1.47, C.P1.48	Evandro Martin Lanzoni	F.P1.34, N.OR6.21
Erivaldo José Scaloppi Jr.	V.P1.24	Eveline Ramos	P.OR3.7
Erlon Henrique Martins Ferreira	L.OR6.20	Evelyn Alves Nunes	A.P1.57
		Evelyn Christyan da Silva Santos	C.OR3.5, C.P1.54
		Evelyn Nery de Santana Marculino	A.P2.133

Everaldo Carlos Venancio	B.P1.22, P.OR6.20, P.P2.49, P.P2.61, R.P2.109	Fábio Henrique Sales	E.P1.58, E.P1.6, K.P2.110
Everson Martins	N.P1.21	Fábio Herbst Florenzano	R.P3.143
Everton Lucas de Oliveira	I.P1.35, I.P1.36	Fabiola Bergamasco da Silva	J.P2.99
Everton Willian Rodrigues da Silva Oliveira	J.P2.128	Marcondes Palinkas	
Ezequiel Cafumann Ratmann	N.OR2.4, N.P1.66	Fabiola de Almeida Ferreira	A.P1.50
Ezequiel Melo Melo	L.P2.103	Fabio Lombardi Maximino	M.OR6.18
		Fabio Luis Zabotto	E.OR3.7, E.OR4.13
		Fábio Minoru Yamaji	P.P2.96
		Fabio Plotegher	Q.P1.15, Q.P1.25, Q.P1.8
		Fabio Roberto Passador	A.P1.26, A.P2.119, A.P2.147, D.P1.16, J.P2.105, V.P1.35
		Fabio Rodrigues Orsetti	J.P1.30, R.P2.123
		Fábio Ruiz Simões	A.P1.19
		Fábio Santana dos Santos	A.P2.150, V.P1.47
		Fábio Santos de Sousa	F.P1.10, F.P1.3, F.P1.37, F.P1.5, H.P1.33, V.P1.31
		Fabio Santos Lisboa	L.P2.85
		Fábio Simões de Vicente	F.P1.49, F.P1.54, F.P1.7, L.OR3.11, L.P2.69, L.P2.70, M.P1.26
		Fabio S. Tavares	N.P1.15, N.P1.24
		Fabírcia Assis Resende	K.P1.22
		Fabricia Emanuelli Moreira Dias	A.P1.78, A.P1.79, A.P1.80
		Fabírcio A. dos Santos	Q.P1.13, Q.P1.19
		Fabricio Aparecido dos Santos	Q.P1.18
		Fabírcio Souza Delite	Q.OR2.4, Q.OR2.6
		Fabricio Vinicius Andrade de Souza	K.P1.26, K.P1.43, K.P2.73
		Fábulo Ribeiro Monteiro	A.P1.29
		Fadi Choueikani	BAAK
		Fanny Béron	B6TQ, C.OR3.9, C.OR4.13, C.OR5.15, C.OR6.20, C.P1.35, C.P1.52
		Fanny Rodolakis	C.P1.25
		Fausto Capuano Neto	R.P1.41
		Fauze Ahmad Aouada	A.P1.36, A.P1.37, A.P1.38, A.P1.39, A.P1.40, A.P1.6, A.P1.67, A.P1.68, A.P1.69, A.P2.92, Q.P1.21
		F. C. Zawislak	G.P1.3
		Federico Gorelli	D.OR2.4

## F

Fabia Cassanjes	M.P1.31, M.P1.36, M.P1.42
Fabia Castro Cassanjes	M.P1.7
Fabiana Massarente Pereira	R.P3.171
Fabián Andree Cerda Pastrián	R.P3.158
Fabiana Perrechil Bonsanto	R.P3.179
Fabiana Rodrigues Arantes	C.OR6.22
Fabiane de Jesus Trindade	N.P1.41
Fabiane Roberta Freitas Da Silva	K.P1.27
Fabiano Colauto	C.OR6.21, C.P1.27
Fabiano Emmanuel Montoro	K.P1.8
Fabiano Mesquita	J.P2.123
Fabiano Severo Rodembusch	L.OR3.12, L.P1.44, L.P2.125
Fabia Zampieri D'Antola de Mello	R.P1.10, R.P1.21
Fabiele Collovini Tavares	B.P1.30
Fábio Abud Mansur	P.P1.7
Fábio Andrijauskas	H.OR3.12
Fabio Antonio Cajamarca Suquila	A.P2.109
Fábio Antonio Xavier	R.P1.9
Fabio Barboza Passos	A.P2.151, I.P1.15
Fábio Baum	O.OR3.10, O.P1.48
Fabio Biscarini	L.OR4.13
Fabio Cerdeira Lírio	R.P2.82
Fábio Cesar dos Santos	J.OR5.18, J.P2.142
Fábio Coral Fonseca	E.P1.32, E.P1.35, E.P1.38, E.P1.39, E.P1.48, P.OR6.22, P.P1.40, P.P2.57
Fabio Daniel Saccone	D.P1.24, D.P1.25
Fábio de Lima Leite	B.P1.31
Fábio Dondeo	J.OR3.14
Fábio Dondeo Origo	A.P2.142, J.P2.103
Fábio Faria Conde	K.OR1.2
Fabio Furlan Ferreira	N.P1.39
Fabio Gatamorta	K.P2.80
Fabio H.B. Lima	P.P1.38

Felipe Almeida La Porta	A.P2.114, K.P2.104, K.P2.117, K.P2.63, K.P2.66, M.P1.18, R.OR5.16	Felipe Tadashi Kasuga	A.P2.150, P.P2.50, V.P1.47
Felipe A. Moro Loureiro	P.P2.56	Felipe Tejada Araújo	L.OR4.14
Felipe Augusto de Aguiar Possoli	I.P1.22	Felipe Wallysson Ferreira de Oliveira	P.P1.7
Felipe Azevedo Borges	R.P2.74, R.P2.98, R.P3.169, R.P3.170, R.P3.180	Felippe Jose Pavinatto	B6AN, R.P3.138
Felipe Banin	A.OR7.27	Fellipe Baptista Carneiro	B2VY
Felipe Barbosa Soares	L.P2.87	Fengling Zhang	O.OR1.2
Felipe Barros Laraz	U.P1.13	Fermin Herrera Aragón	F.P1.21, R.P1.17
FELIPE BERTELLI	K.P2.122	Fernanda Amorim Santos	L.P2.104, R.P3.189
Felipe Berto Ometto	P.P1.42	Fernanda Andréia Rosa	R.P3.149, R.P3.192
Felipe Castro Menezes	R.OR4.14	Fernanda Chiarello Stedile	I.OR4.16
Felipe Cemin	J.P1.59	Fernanda Cristina Pena	L.P1.19
Felipe Darriba Battaglin	I.P1.6	Ferreira Sales	
Felipe da Silva Barros	V.P1.3	Fernanda de Almeida Melo	V.P1.29
Felipe David Crasto de Lima	A.P1.4	Fernanda de Paula Oliveira	R.P3.131
Felipe de Carvalho Zavaglia	S.P1.7	Fernanda Endringer Pinto	F.OR4.13
Felipe de Oliveira Outi	H.P1.39	Fernanda Ferraz Camilo	A.P2.146, N.P1.60, P.P2.62, R.OR6.22
Felipe dos Santos Vieira	C.P1.57	Fernanda Franco Massante	R.P3.140
Felipe Elan Barbosa Silva	M.P1.35	Fernanda Freitas Quadros	K.P2.105, R.OR8.27
Felipe Ferraz Morgado de Oliveira	C.P1.66, J.P1.24, J.P2.95	Fernanda Galhardo	D.P1.14
Felipe Ferreira Lopes	U.P1.12, U.P1.13, V.P1.43	Fernanda Grandizoli Santos	R.P3.175
Felipe Fortes Lima	R.P2.73	Fernanda Lanzoni Migliorini	A.P2.111, A.P2.126, J.P2.136
Felipe Gollino	N.P1.40	Fernanda Lima	A.OR9.34
Felipe Gondim Carlucci	O.P1.27	FERNANDA MAGALHÃES DE OLIVEIRA CAMPOS	N.P1.37
Felipe Henrique Santa Maria	A.P2.131	Fernanda Malato Praxedes	K.P2.113, K.P2.114, V.P1.28, V.P1.46
Felipe Kairo de Sousa Lima	S.P1.2	Fernanda Midori de Oliveira	N.P1.49
Felipe Melleu Tedesco	B2VE	Fernanda Nardo Cobo	V.P1.8
Felipe Moessa Bezerra	A.P1.78, A.P1.79, A.P1.80	Fernanda Roberta Marciano	R.P1.43, R.P2.107, R.P2.118, R.P2.122, R.P3.181
Felipe Mondaca	M.P1.3	Fernanda Rodrigues Sousa	B2VG
Felipe Oliveira	R.P1.11	Fernandes Henrique de Azevedo Jr	L.P1.20
Felipe Oliveira Fernandes	J.P1.46, J.P1.47, J.P1.61	Fernando Aécio de Amorim Carvalho	R.P1.47
Felipe Pinheiro Souza	J.P2.166	Fernando Alvarez	F.OR3.10, J.OR1.1, J.P1.34, N.OR2.6
Felipe Ptak Lemos	F.P1.46, M.P1.29	Fernando Alves Ferreira	L.P1.31
Felipe Rocha Caliarri	J.OR3.12, J.P1.62	Fernando Aparecido Sigoli	C.P1.39, T.P1.5
Felipe Sales Brito	A.P1.31, A.P1.32, A.P1.57, A.P2.116, A.P2.97	Fernando A. Ponce	F.P1.22
Felipe Saura	J.P1.29	Fernando Assis Garcia	C.P1.61
Felipe Silva	K.P2.98	Fernando Augusto de Oliveira	F.P1.25
Felipe Silva Bellucci	E.P1.7	Fernando B. Effenberger	C.OR2.3
Felipe Silva Pontes	V.P1.16	Fernando Campanhã	A.P2.139
Felipe Soares Covre	O.P1.23	Fernando Carvalho Silva	C.P1.30, C.P1.35, C.P1.36
Felipe Souza Eloy	K.P1.50	Fernando Costa Basilio	B2J6, B2XW, F.P1.38
Felipe Souza Miranda	J.OR3.12, J.P1.62		

Fernando de Almeida Gonçalves	K.P2.113	F. H. Cristovan	J.P2.112, L.P1.41, O.P1.4, R.P2.93, R.P3.153, S.P1.3
Fernando Ely	A.P1.52, O.P1.36, O.P1.37	Filipe Camargo Dalmatti Alves Lima	H.P1.26
Fernando Fabris	C.P1.53	Filipe Dione Souza Gorza	J.P2.115, R.P2.70
Fernando Franco	K.OR1.2	Filipe Estevão de Freitas	J.P1.7
Fernando Fuzinato Dall`Agnol	H.P1.37	Filipe Johnatan Martins Dantas Costa	U.P1.9
Fernando Galembeck	A.OR5.16	Filipe Martel Magalhães Borges	J.P1.68
Fernando Gomes de Souza Junior	R.P2.117, R.P2.82, R.P3.139	Filipe Matheus Cabral Santos	L.P1.20
Fernando Guzmán	A.OR4.15	Filipe Samuel Silva	R.P3.162, R.P3.166
Fernando Henrique Cristovan	L.P1.42, L.P1.50, L.P2.86	Filipe Signorelli	J.OR1.2
Fernando Henrique Pavoni	P.P1.21	Filipe Vargas Ferreira	A.P1.31, A.P1.32, A.P1.57, A.P2.116, A.P2.97
Fernando Iikawa	N.P1.22, O.P1.23	Filippo Renò	Q.P1.17
Fernando J. Fonseca	O.P1.31	Flademir Wouters	Q.P1.26, Q.P1.27
Fernando Josepetti Fonseca	L.OR3.9, L.P1.43, L.P2.66, L.P2.95	Flávia B. Mendes	D.P1.21, J.P1.8
Fernando Junior Quites	L.OR5.17	Flávia Cristina Assis Silva	H.P1.25
Fernando Loureiro Stavale	F.P1.55	Flávia Danielle Santos	J.P2.161, P.P2.85
Fernando Lucas Primo	S.P1.16	Flávia dos Santos Gomes	A.P2.104
FERNANDO LUZIA FRANÇA	I.P1.25	Flavia Elisa Galdino	L.P1.51
Fernando Machado Guimarães	B2VE	Flavia Emilena Stelle	D.P1.11, D.P1.8
Fernando Manuel Bico Marques	E.P1.20	Flávia Gonçalves Pacheco	A.OR6.23
Fernando M. Araujo Moreira	A.P2.85, F.P1.56	Flávia Gontijo da Silva	R.P2.75
Fernando Menegatti de Melo	I.P1.10, N.P1.55	Flávia Mesquita Cabrini	S.P1.17
Fernando Modesto Borges Oliveira	E.P1.42	Flavia Regina Estrada	E.OR3.9
Fernando Molin	L.P1.64	Flavia Stefanini Ribeiro	B.P1.12
Fernando Olmedo Carvalho	S.P1.6	Flavia Suzany Ferreira dos Santos	R.P1.26, S.P1.10
Fernando Pelegrini	K.P2.120	Flavia Vitale	S.OR1.3
Fernando Pereira Sabino	H.OR4.15, N.OR5.17	Flávio Alexandre Carvalho	R.P3.180
Fernando Ritter	J.OR3.9	Flávio Camargo Cabrera	L.P1.28
Fernando Rogério de Paula	C.P1.10, C.P1.13, F.P1.63	Flávio César Guimarães Gandra	D.P1.29
Fernando Santos Ortega	J.P1.36	Flavio Cesar Vicentin	F.P1.64
Fernando Sato	H.OR3.7	Flávio de Castro Dutra	A.P2.128
Fernando Silva Pena	N.P1.4, N.P1.43	Flavio Franchello	L.P1.46, L.P2.127, L.P2.98
Fernando Soares dos Reis	O.P1.43	Flavio Garcia	C.P1.54
Fernando Soares Lameiras	P.P1.7	Flávio Henrique Feres	L.P2.94
Fernando Stavale	I.OR3.8, L.P2.115	Flavio Horowitz	J.P1.12
Fernando Wypych	A.OR6.19, A.P1.35, A.P1.65, D.P1.13, H.OR1.3, H.OR4.16, H.P1.5, H.P1.6, J.P2.88, J.P2.90	Flavio Leandro Souza	P.P2.80, P.P2.88
		Flávio Makoto Shimizu	J.P2.168, L.OR6.21, L.P1.10, L.P1.22, L.P1.24, L.P1.5, L.P1.7, N.OR2.5
		Flávio Paulo Milton	E.OR3.7
		Flavio Shimizu Shimizu	L.P1.13
		Flávio Soares Silva	V.P1.13
		Flavio Souza	E.P1.14, E.P1.50

Flávio Vinícius Viana de Holanda	L.P1.20	Francisco Ferreira Junior	K.P2.111
Florence Pereira Novais Antunes	H.OR4.16, H.P1.21, H.P1.22, H.P1.3, H.P1.9, N.OR3.13	Francisco Gracia Garoca	N.P1.1, O.P1.28
Florencia Grinblat	D.P1.24, D.P1.25	Francisco Heriberto Martinez Luzardo	A.P1.3
Florian Meneau	K.OR4.19	Francisco Javier Goyo Brito	J.P1.80
Francelly Emilly Lucas	L.P1.52	Francisco Javier Manjón	D.OR2.5
Francesca Boccafoschi	R.OR4.12	Francisco J. Mondelo Garcia	A.P2.143
Francesca Cavallo	N.OR4.15	Francisco José dos Santos	L.OR3.11
Francesco Dal Corso	H.OR3.11	Francisco José Grandinetti	J.P1.37
Francesco Di Renzo	D.OR2.4	Francisco José Moura	V.P1.34
Francesco Fracassi	J.P1.42	Francisco Moura Filho	N.P1.37
Franciele Carlesso	K.P1.41	Francisco Nivaldo Aguiar Freire	O.P1.53
Franciele Fernanda Da Silva	J.P2.170	Francisco Nunes de Souza Neto	A.P1.44, J.P1.78, J.P1.79, R.P2.112, R.P2.90, S.P1.8
Franciele Flores Vit	R.P2.125, R.P3.187	Francisco Pereira Lopes de Azevedo	P.P1.26
Franciele Silva Mendes de Oliveira	G.P1.3	Francisco Piorino Neto	K.P2.68
Francieli Crivellaro	R.P2.60	Francisco Rolando Valenzuela Diaz	A.P2.143, A.P2.148
Francine Aline Tavares	A.P1.73, B.P1.8, E.P1.33, E.P1.34	Francisco Sávio Mendes Sinfrônio	A.P1.75, C.P1.30, C.P1.35, C.P1.36, C.P1.5
Francine Coa	Q.P1.16, Q.P1.24	Francisco Trivinho-Strixino	J.P1.14, J.P1.66, J.P1.67, J.P1.81, J.P2.112
Francineide Lopes de Araújo	L.P2.111	Francisco Yastami Nakamoto	K.OR2.6, K.P1.1, K.P1.30, K.P1.46, K.P1.47, K.P1.48
Francine Perri Venturini	Q.OR3.9	Francis Kley Moreira	B.OR3.10
Francine Tatsch	G.P1.3	Françoise Toledo Reis	L.OR5.18
Francio Souza Berti Rodrigues	M.P1.28	François-Xavier Darras	N.OR3.11
Francisca Célia da silva	J.P2.158	Franco Sauvisky	L.P2.137
Franciscarlos Gomes da Silva	C.P1.17	Francys Kley Vieira Moreira	Q.P1.15, Q.P1.25, Q.P1.8
Francisco Afrânio Cunha	F.P1.59	Frank Marken	O.OR3.11, P.P2.75
Francisco Anderson de Sousa Lima	O.OR3.5, O.P1.6, O.P1.9	Frank Nelson Crespilho	L.OR4.15, L.P1.18, L.P1.19, L.P1.2, L.P1.3, L.P1.4, P.OR3.10
Francisco Batista do Nascimento	T.P1.1	Frank Nüesch	L.P2.113
Francisco Benedito Teixeira Pessine	R.P1.12, R.P2.60, R.P2.81	Frederico Alves Revoredo Júnior	C.P1.24, H.P1.29, H.P1.35
Francisco Carlos Barbosa Maia	F.OR5.15, L.P2.72, M.OR5.12, M.P1.41	Frederico Dias Brandão	F.OR6.18
Francisco Carlos Lavarda	H.P1.14, H.P1.30, H.P1.34	Frederico Girardi Knop	F.P1.12, F.P1.13
Francisco Carlos Serbena	I.P1.27, I.P1.32, R.P2.124	Frederik Seibt	S.OR1.3
Francisco das Chagas Marques	M.OR6.20, O.OR3.8, O.P1.29, O.P1.34, O.P1.45, O.P1.57	Fred Lacerda Amorim	R.P2.79
Francisco de Assis Sousa	F.P1.59	Fredrik Von Kieseritzky	O.P1.39
Francisco Eduardo Gontijo Guimarães	L.P1.12, L.P2.99, M.OR5.13	Fredy João Valente	P.P1.26
Francisco E.G. Guimaraes	P.P2.82	Fredy Niño	F.P1.60
Francisco Erivan Melo	D.P1.3	Fritz Huguenin	P.OR2.5, P.P1.23, P.P1.24, P.P2.64
Francisco Fábio Oliveira de Sousa	R.P3.151		
Francisco Ferreira de Sousa	U.P1.7		

## G

Gabriela Augusta Prando	N.P1.16	Gabriel Marques Rosa	L.P1.50
Gabriela Bosco Minervino	P.P2.79	Gabriel Mendes Hirayama Machado	V.P1.46
Gabriela Byzynski Soares	A.P2.110, I.P1.8, I.P1.9, J.P1.71	Gabriel Nagamine	M.P1.16, M.P1.4, N.OR6.23
Gabriela Cordeiro Silva	F.P1.55	Gabriel Pereira Freitas	I.OR3.8
Gabriela de Carvalho Costa	H.P1.23, H.P1.24	Gabriel Rabelo Coelho	A.P1.18, J.P1.17
Gabriela Delli Colli Zocolaro	A.P2.101	Gabriel Soares de Camargo Munaro	A.OR6.22
Gabriela de Moraes Gouvêa Lima	R.P2.80, R.P3.156	Gabriel S. Reis	J.P2.147
Gabriela de Paula Oliveira	M.P1.22	Gabriel Vieira Maia	I.P1.3
Gabriela dos Santos Simões	R.P2.80, R.P3.156	Gabriel Vieira Soares	A.OR6.21, A.OR6.24
Gabriela Furlan Giordano	J.P2.98	Gabriel Zazeri	B4GN, R.P1.29, R.P1.46
Gabriela Helena Da Silva	Q.P1.24	Gabriel Ziviani Vitiello	N.OR6.25
Gabriela Kurokawa E Silva	K.P1.30	Gaël Poirier	M.P1.31, M.P1.33, M.P1.42, M.P1.7, M.P1.8
Gabriel Alves Candido da Silva	E.P1.32	Gael Yves Poirier	M.P1.36, P.P2.78
Gabriela Maria Matos Demiti	R.P1.14	GALO CARDENAS	K.OR4.17, Q.OR3.12
Gabriela Martinez	H.P1.17	Gardênia Pinheiro	U.P1.7
Gabriela Martins de Araújo	A.P1.19	Gaston Eduardo Barberis	B6YF
Gabriela Moreira Lana	R.OR9.34	Geanso Miranda de Moura	D.P1.2
Gabriela Pasa Panesso	F.P1.74, J.P2.123, J.P2.150	Gedeon Silva Reis	K.P1.7
Gabriela Piovesan Santiago Suárez	K.P2.95	Gehan Amaratunga	A.OR2.5
gabriela sonai sonai	O.P1.32, P.P2.76	Geiger Thomas	L.P2.113
Gabriela Souza Silva	N.P1.61	Geise Ribeiro	J.P2.165
Gabriel Augusto Alemão Monteiro	R.P3.155	Gelson Biscaia de Souza	I.P1.27, I.P1.32
Gabriel Costa	A.OR5.16	Gelson Luís Adabo	R.P2.124
Gabriel de Brito Mello	I.P1.24	Genda Chen	E.OR4.12
Gabriel Dornela Alves da Rocha	N.P1.25, N.P1.47	Genesis de Oliveira lima	N.P1.58
Gabriel Ferreira Baptistone	K.P2.66	Gennady Gusev	A.P1.7
Gabriel Gaál	L.P2.80	George Brian	A.P1.9
Gabriel Gomes Baltazar Alves	H.P1.34	George Nicolas Kontogiorgos	F.P1.50, K.P1.24
Gabriel Gonçalves Pessoa de Castro	I.P1.33, J.P1.35	Georgia Maria Amaral Junqueira	H.OR3.7
Gabriel Henrique Nunes	L.P2.82	Geovânia Cordeiro de Assis	J.P2.152
Gabrieli Borges Ugioni	V.P1.12	Geovani Rodrigues	K.P1.2, K.P1.3, K.P2.103, K.P2.125, K.P2.126
Gabriel Kavilhuka Metzger	A.P2.117	Geovany Albino de Souza	T.P1.4
gabriella dayane ulrich	A.P1.41	Gerald J. Meyer	O.P1.3
Gabriella Rodrigues Daniel	P.OR3.7	Geraldo Lúcio Faria	K.P2.61
Gabriella Veronese	B.P1.7	Geraldo Magela Trindade	A.OR9.31, A.P2.123
Gabrielle Brehm Zanin	B2VE	Geraldo Silva	F.P1.12
Gabrielle Melo Burigo	J.P2.89	Gerardo Morell	A.OR4.15
Gabriel Leonardo Nogueira	L.P2.107, L.P2.110, L.P2.136	Gerhard Gobsch	O.OR3.9
Gabriel Machado Machado	C.P1.62	Germana Michelle Medeiros e Silva	P.P1.33
Gabriel Marques Guimarães	D.P1.31	Germano Andrade Siqueira	B.P1.31

Germano Penello	A.OR3.7	Gilza Maria Piedade Prazeres	N.P1.53, N.P1.58
Germano Tremiliosi-Filho	K.OR3.10, P.P1.26	Gino Capobianco	A.P2.113
Gerson Ferreira Junior	H.P1.18	Giovana Almeida Pimentel	M.P1.9
Gerson Luiz Mantovani	B.OR3.10, B.P1.4, K.P1.56, P.P2.49, P.P2.61	Giovana Artuzo Parolin	L.P2.135
Gerson Marinucci	V.P1.45	Giovana Ribeiro Ferreira	L.P1.32, U.OR3.7
Getúlio Vasconcelos	J.P1.41, J.P1.43, J.P2.133	Giovani Gonçalves Ribamar	U.P1.10
G. Greaves	G.OR3.9	Giovani Gozzi	L.P2.69, L.P2.70, L.P2.94
Giacomo B. F. Bosco	N.OR5.19	Giovanna Cristina da Silva	E.P1.53
Gian Duarte	C.P1.28	Batista	
Giane B Damas	P.OR6.18	Giovanna Lara	R.P1.15
Gianfranco de Mello Stieven	H.P1.10, K.P1.20, K.P1.33, V.P1.11	Giovanna Machado	P.P1.33, P.P1.46
Gianina A. Kloster	C.P1.7, C.P1.8	Giovanni Barrera Torres	F.P1.2
Gianina Andrea Kloster	C.P1.7	Giovanni Bortoloni Perin	R.P2.54
Gianina Kloster	C.P1.8	Giovanni Da Vinci Oliveira	J.P2.141
Gian Paulo Freschi	M.P1.31, M.P1.8	Giovanni Di Santo	BAAK
Gilbert Bannach	H.P1.13, H.P1.2	Giovanni Fanchini	N.P1.10
Gilberto Campos Fuzari Junior	A.P2.108	Giovanni Faus Salussolia	K.P2.77
Gilberto Fabbris	D.P1.29	Giovanni Paro Cunha	L.OR6.24
Gilberto Fernandes de Sá	M.OR6.20	Giovanni Pimenta Mambrini	J.P1.14
Gilberto Ferreira Borges Jr.	L.P1.52	Gisele Amaral-Labat	R.P1.19, V.P1.18
Gilberto Magalhães Bento	K.P1.45	Gisele de Freitas Gauze	R.P1.14
Gilberto Medeiros Ribeiro	F.P1.44	Bandoch	
Gilberto Petraconi Filho	J.OR3.12, J.P1.58, J.P1.62, J.P2.163	Gisele Elias Nunes Pauli	L.P1.17
Gilbert Silva	B6RV, F.P1.16, J.P2.166, K.P1.2, K.P1.3, K.P1.38, K.P1.58, K.P2.125, K.P2.126, K.P2.60, K.P2.64, K.P2.65, K.P2.72, K.P2.74, K.P2.81, K.P2.83, K.P2.87, K.P2.88, K.P2.97, V.OR2.9, V.P1.38	Gisele Ferreira de Lima	P.P1.8
Gildemberg Pereira de Barros	V.P1.26	Gisele Rasia	B2VE
Silva		Gisele Xavier Celante	P.P1.11
Gilderlan Almeida Araújo	S.P1.2	Giselle Fe Colls	A.P2.143
Gildo Machado Ribeiro	S.P1.22	Giselle Justo Zenker	R.P1.7
Gilia Cristine Marques Ruiz	R.P3.177	Gislaine Bezerra de Carvalho	S.OR2.5
Gilles Henri Gauthier	E.OR1.3	Barreto	
Gilmara Gonzaga Pedrosa	L.P1.20	Gislayne Sabrina de Lira Paes	J.P2.127
Gilmar Marques	N.P1.31	Gislene Valdete Martins	K.P1.8, O.P1.4
Gilmar Patrocínio Thim	J.P1.62	Gislene Zehetmeyer	B2VE
Gilmar Patrocínio Thim	A.P1.31, A.P1.32, A.P1.57, A.P2.116, A.P2.97	Giulia Elisa Guimarães	R.P1.6
Gilson José Rodrigues	C.P1.62	Gonçalves	
		Giulia Maria Rodrigues	P.P2.61
		Alvares	
		Giuliana Thalina Franco	J.P1.32
		Giuseppe Mele	R.P3.178
		GIUSEPPE STRANGI	L.OR3.7
		Giuvanni Mutton	P.OR3.7
		Givanildo Alves dos Santos	K.OR2.6, K.P1.1, K.P1.23, K.P1.30, K.P1.46, K.P1.47, K.P1.48, K.P2.124
		Gizilene Maria de Carvalho	R.P2.53, R.P3.135, V.P1.6, V.P1.8
		Gladis Camarini	V.P1.16, V.P1.17, V.P1.36
		Glauca Regina Silva Pita	J.P1.41
		Glauco Braga Ferreira	N.P1.19
		Glauco Oliveira Testoni	A.OR9.38

Gláucio Soares da Fonseca	K.P1.27	Guilherme Gorgen Lesseux	C.P1.19, C.P1.20
Glauco Meireles Mascarenhas	E.P1.44	Guilherme Koszeniewski	A.OR6.21
Morandi Lustosa		Rolim	
Glaura Goulart Silva	A.P1.28, P.P2.55, P.P2.63	Guilherme Kretzmann	J.P2.160, P.P2.91
Glécia Virgolino da Silva Luz	O.P1.62	Belmonte	
Gleice Botelho	F.P1.68, J.P2.167, P.P2.77	Guilherme Kubo Ribeiro	F.P1.49
Gleice Ellen Almeida Verginio	S.P1.19	Guilherme Lima Lopes	A.P2.144
Gleison Souza	B.P1.32	Guilherme Lopes do Lago	R.P2.54
Glenda Biasotto	A.P2.120	Guilherme Matos Sipahi	N.OR5.17
Glenda Gisela Ibanez	A.P2.139	Guilherme Mendes Martins	U.P1.14
Gloria Maria Farias Viegas	F.P1.41	Guilherme Oliveira Barbosa	R.OR2.4
Aquije		Guilherme Pazini Abatti	J.P1.11
Gloria Viegas Aquije	F.OR4.13	Guilherme Rodrigues	J.P1.46, J.P1.47, J.P1.61
Golfer Muedas Taipe	R.OR9.32	Barbaza	
Gonçalo Rodrigues Pardal	K.P2.102	Guilherme Rodrigues de Lima	L.P2.101, L.P2.102, L.P2.105, L.P2.109
Gong Chen	O.OR3.6	Guilherme Rolim	A.OR6.24
Graciela da Costa Pedro	J.P2.115, R.P2.70	Guilherme Seidi Sasaki	E.P1.21
Graciela I. B. Muniz	B.P1.14	Guilherme Sombrio	M.P1.28
Gracielle Ferreira Andrade	R.P2.68	Guilherme Tavares de Melo	P.P1.34
Graciely Elias dos Santos	F.P1.44	Guilherme Torres Marques	O.P1.42
Graciete Solange Capella	J.P2.93	Vidal	
Graziela Cristina Sedenho	L.P1.3	Guilherme Vilela Ferreira	K.P1.40, R.P2.58
Graziela da Silva Savonov	K.P1.41	Guilhermina Ferreira Teixeira	A.P2.82, A.P2.83
Graziele Aparecida de Jesus	R.P3.147	Guilhermino José Macedo	A.OR8.30
Aguiar		Fechine	
Gregorio Couto Faria	L.OR6.24, L.P2.88	Guillaume Maurin	P.OR5.13
Greice K. B. Costa	M.OR1.2	Guillermo Gomez Silva	C.OR6.17
Greice Kelly Bezerra da Costa	M.OR5.16	Guillermo Gonzalez-Moraga	P.P2.89
Greice Kelly dos Santos Brito	H.P1.20	Guillermo Solorzano	Q.OR3.12
Grzegorz A Potoczny	O.OR4.14	Gurpreet Singh	A.OR7.26
Guaracy Silva Junior	A.P1.24	Gustavo Alexandre Viana	O.OR3.8
Guilherme Altomari Geríbola	J.P2.97	Gustavo Almeida Magalhães	L.P2.82, M.P1.39
Guilherme Arantes	A.OR9.34	Sáfar	
Guilherme Augusto Justen	L.P1.64	Gustavo Bezerra da Silva	C.OR3.5
Guilherme Botton Santos	K.P2.64, K.P2.65, K.P2.81	Gustavo Brunetto	H.P1.40
Guilherme Brum da Luz	V.P1.42	Gustavo Ceballos	A.OR6.25
Guilherme Cañete Vebber	J.OR2.5	Gustavo da Rosa Cunha	A.P2.93
Guilherme da Silva Lopes	H.P1.43	Gustavo de Medeiros Azevedo	D.P1.7
Fabris		Gustavo de Mello Correa	A.P2.124
Guilherme da Silva Miranda	L.P2.74	Marinho Rodrigues	
Guilherme de Souza Braga	L.P2.95	Gustavo de Souza Machado	K.P1.50
Guilherme Dognani	L.P1.26, L.P1.28, L.P1.60, L.P1.63, U.P1.11, U.P1.15, U.P1.3	Gustavo Fernandes Souza	M.OR2.4, M.P1.11, M.P1.22, M.P1.32, M.P1.5, M.P1.9
Guilherme Elias Silva	O.P1.11	Gustavo Foresto B. Almeida	L.OR1.3, M.P1.12
Guilherme Frederico Bernardo	Q.OR3.10,	Gustavo Gonçalves Dalkiranis	B2J6
Lenz e Silva	Q.OR3.11, R.P1.19, V.P1.18	Gustavo H. D. Tonoli	B.OR3.5
Guilherme George Lesseux	C.P1.72	Gustavo Henrique de	H.P1.42, J.P1.69
		Magalhães Gomes	
		Gustavo Henrique Rodrigues	R.P2.129
		da Silva	

Gustavo José Vasconcelos Xavier	G.P1.4	Heide Heloise Bernardi	K.P2.90
Gustavo Machado Domingues Caetano	A.P1.5, J.P1.15, J.P2.94	Heinz von Seggern	L.OR7.26, L.P2.88
Gustavo Marciniuk	A.P2.150, P.P2.50, V.P1.47	Heitor Augusto Pinto Cavalli	J.OR3.8
Gustavo Riether	EXP4.7	Heitor Conde Figueiredo	K.P2.70
Gustavo Roberto Ramos	D.P1.19	Heitor Morales	J.P2.154
Gustavo Rocha Castro	J.P1.23	Heizir Ferreira de Castro	J.P2.161, P.P1.32, P.P2.85
Gustavo Sanguino Dias	E.P1.11, E.P1.41, E.P1.8	Helder Galeti	N.P1.16, O.P1.23
Gustavo Senra Gonçalves de Carvalho	H.P1.22, H.P1.9, N.OR3.13	Helder Keitaro Arcari Ambo	K.P2.121
Gustavo Targino Valente	L.P2.99	Helder Nunes da Cunha	L.P2.91
Gustavo Wegher	A.P1.17	Helena Augusta Lisboa de Oliveira	C.P1.17
Gustavo Wiederhecker	N.OR6.20	Helena Bacha Lopes	R.P2.84
Guy Koeckelberghs	M.P1.27	Helena Maria Petrilli	C.OR4.12, H.P1.26, R.P3.136
György József Jaics	K.P2.66	Hélio C. N. Tolentino	F.P1.64
<b>H</b>		Hélio Merá de Assis	J.P2.109
Hagen Klauk	B.OR2.4, N.OR3.7	Hélio Obata	N.P1.44
Haifaa Alghamdi	N.P1.16	Heloisa Andréa Acciari	R.P1.3
Hakinny Loyra de Medeiros Vieira	D.P1.12	Heloisa N. Bordallo	B6RQ, G.OR1.1, G.P1.5
Hállen Daniel Rezende Calado	O.P1.25	Heloisa Pinto Dias	F.OR4.13, F.P1.41
Halley Caixeta de Oliveira	Q.P1.4	Heloisa Regina Turatti Silva	J.P2.89, V.P1.10
Hamid Reza Darabian	M.P1.17	Heloise de Oliveira Pastore	O.OR4.16, O.P1.7
Hamilton Ferreira Gomes de Abreu	K.P2.76	Helton Maia Peixoto	S.OR2.4
Hannes Winkler	D.OR4.10	Helton Pereira Nogueira	J.P2.114
Hans-Michael Petri	EXP4.7	Henara Líllian Costa	A.OR6.23
Harald Bock	L.OR7.26, L.P2.103, L.P2.121, L.P2.122, L.P2.126, L.P2.137, L.P2.81	Henri Ivanov Boudinov	M.P1.28
Harald Hoppe	O.OR3.9	Henrik Ronnow	D.OR4.10
Harold Jose Camargo Avila	L.OR6.20, L.P2.115	Henrique Batista Duffles Teixeira Lott Neto	G.P1.4
Haroldo Cavalcanti Pinto	K.OR1.2	Henrique Bortolaz de Oliveira	A.OR6.19, A.P1.65
Haroldo Gurgel Mota Filho	R.P3.164	Henrique Brolezi Nunciaroni	O.P1.55
Harolds Wilson Lourenço Silva	J.P1.37	Henrique Cesar Musetti	E.P1.49
Harrison H Lee	L.OR2.6	Henrique de Santana	L.P2.119
Harry Westfahl Jr	F.P1.48, F.P1.64	Henrique Eisi Toma	A.P2.102, I.P1.10, J.P2.114, K.P2.69, N.P1.55, O.P1.1, O.P1.60, P.P1.12, P.P1.13
Hazel Assender	M.OR3.7	Henrique Ferreira	A.P1.7, A.P2.141
Hebe Mercedes Villullas	P.P1.42, P.P1.43, P.P1.44	Henrique Guimarães Rosa	A.OR4.14
Hector Amaro Virginia	R.P1.9, V.P1.12	Henrique Leonel Gomes	L.OR4.13
Hector Reynaldo Meneses Costa	J.P1.3	Henrique Limborço	P.P1.45
Hector Reynaldo Menezes Costa	A.P2.145, A.P2.149	Henrique Takaaki Tamoto	R.P3.174
		Henrique Thadeu Baltar de Medeiros Cabral Moraes	M.OR5.15
		Henry Yesid Bustos	F.OR2.6, F.P1.60, H.P1.7
		HERBERT DUCHATSCH JOHANSEN	J.P1.44
		Hercílio Gomes de Melo	I.P1.31, K.P1.47, K.P1.48

Herick Garcia Takimoto	L.P2.67, L.P2.68, O.P1.31	Ialy Fernanda Gonzaga Martins	H.P1.29, H.P1.35
Herivaldo Pascoal da Silva Filho	K.P1.31	Iasmin Cunha Araujo	R.P1.8
Herman Pessoa Lima Júnior	F.P1.51	Içamira Costa Nogueira	E.P1.57, N.P1.27, N.P1.3, N.P1.36, N.P1.68
Hermi Felinto Brito	C.OR3.7, C.OR3.8, C.P1.42, C.P1.59	Icoana Lais Leitão	O.P1.62
Hermínia Veridiana dos Santos Pessoni	C.P1.15	Mascarenhas Martins	
Hernandes F. Carvalho	R.OR2.4	Idejan Padilha Gross	B.P1.6
Hernane Silva Barud	B.OR3.9	Idelma A. A. Terra	L.P1.12
H Eveline Dal Magro Follmann	R.P1.2	Idomeneu Gomes de Souza Filho	L.P2.90
Hind Albalawi	O.P1.23	Ieda Lúcia Viana Rosa	A.P1.73, A.P1.74, M.P1.18, N.P1.36
Hiroshi Aoyama	A.OR9.35	Iêda Maria Garcia Santos	J.OR4.16, J.P2.127, J.P2.162, V.P1.26
Hisashi Doi	R.OR9.33	Ieda Maria Martinez Paino	Q.P1.18, Q.P1.19, Q.P1.20, R.P1.48
Hissae Fujiwara	G.P1.4	Iedo Alves de Souza	E.P1.57, E.P1.58, K.P2.110
Homero Santiago Maciel	J.P1.58	Ifor D.W. Samuel	PS005.6
Hongen Xie	F.P1.22	Igor Alexsander Barbosa Magno	K.P1.26, K.P1.43, K.P2.73
Honória de Fátima Gorgulho	A.P1.50, A.P2.100, A.P2.95, L.P1.49	Igor Carvalho	F.P1.18, F.P1.23, J.P2.104
Horst-Günter Rubahn	O.OR3.6, O.OR3.9	Igor dos Santos Gomes	F.P1.58
Hubertus Marbach	I.OR1.1	Igor Frota de Vasconcelos	O.P1.9
hugo adalberto klahn	K.OR4.17	Igor Konieczniak	F.P1.44
Hugo Águas	B.P1.25	Igor Osorio Roman	M.P1.21, R.P2.64
Hugo Alarcón Cavero	C.P1.49, N.OR5.18	Igor Pessoa Miranda	M.P1.23
Hugo Alfonso Rojas	I.P1.15	Igor Polikarpov	P.P2.70
Hugo Alvarenga Oliveira	A.P2.151	Igor Ricardo Prado da Silva	K.P1.42
Hugo Bonette de Carvalho	C.P1.57, C.P1.62, O.P1.14, P.P2.92	Igor Saulo Santos de Oliveira	A.P1.15
Hugo C. Braga	L.P1.38	Igor Silva	R.P3.146
Hugo Freitas Pimentel	J.P2.171	Igor Tenório Soares	R.P2.52
Hugo Gallardo	L.P1.38, L.P1.52, L.P1.58, L.P2.122, L.P2.137	Igor Yamamoto Abe	O.P1.17
Hugo José Dias Mello	L.P1.1	I. G. Solórzano	C.P1.22, F.P1.40, F.P1.72
Hugo Ricardo Zschommler Sandim	K.P2.90	I Instrutécnica	EXP5.9
Hui Ling Ma	R.P2.99	Ildebrando Freires de Brito	F.P1.55
Humberto Araujo Machado	J.P2.163	Inacio Maria dall Fabbro	K.P1.30
Humberto de Melo Brandão	Q.P1.26, Q.P1.27	Inacio Regiani	D.P1.18
Humberto Gomes Ferraz	R.P2.67	Indianara Alves Fernandes	J.P1.68
Humberto Naoyuki Yoshimura	R.P3.174, S.P1.6	Inès Pereyra	A.P1.63, A.P2.135
Humberto Rigamonti Júnior	C.P1.46	Ingrid David Barcelos	M.P1.41
Hunos Paixão Madureira	L.P2.124	Ingrid Regina dos Santos Lacerda	K.P1.22
Hunter McDaniel	M.OR3.8, M.P1.4	Ingrid Tavora Weber	J.OR4.16, J.P1.74
Hyor Andrew da Silva	F.P1.32	Ioannis Kymissis	L.OR3.9
		Iolanda Midea Cuccovia	R.P2.61
<b>I</b>		Irã Borges Coutinho Gallo	P.P1.43, P.P1.44
Iaci Miranda Pereira	F.P1.27, F.P1.67	Iram Taj Awan	L.P1.59
Iain Mckenzie	A.OR9.34		

IRENE TERESINHA	P.P2.86, P.P2.87	Ivênio Teixeira de Souza	K.P1.25
SANTOS GARCIA		Ivo Alexandre Hümmelgen	L.OR7.28, P.P1.47
Irineu Hattenhauer	A.P2.117	Ivo Mateus Pinatti	J.P2.167, N.P1.36
Irvin Bryan Machado Ferraz	J.P1.74	Ivone Regina de Oliveira	R.P1.4, R.P1.5, R.P3.137
Isaac Pericles Maia Medeiros	I.P1.34	Ivo Utke	C.OR5.15
Isaac Rodrigues Perez	P.OR5.14	Ivy Turci Aoke	R.P3.137
Isabela Corteletti Rocha	O.P1.16, O.P1.22	Izabel Fernanda Machado	E.OR1.2, P.P1.5
Isabela Costa Mendes Peres	A.P1.64		
Isabela dos Santos Catozzo	M.P1.42	<b>J</b>	
Isabela Maria Martins	R.P2.80, R.P3.156	Jacek Wojcik	N.OR5.19
Isabela Rosado Belê	A.P2.114, K.P2.104, K.P2.117, R.OR5.16	Jacek Wychowanec	A.P2.140
Isabel Cristina de Freitas	M.P1.40	Jackeline Barbosa Brito	D.OR4.8, D.P1.4, D.P1.5
Isabel C. S. Carvalho	M.OR1.2, M.OR5.16, M.P1.29	Jackeline Moraes Malheiros	S.P1.28, S.P1.30
Isabella Batista Graça Grego	V.OR2.9	Jacob T Robinson	S.OR1.3
Isabella Franco de Bastos Cirello	E.P1.52	Jacqueline Ferreira	L.OR5.16, L.P1.39, M.OR2.5, M.OR2.6, M.P1.25, O.OR3.10, O.P1.12, O.P1.50
Isabel Liz Castro Merino	K.P2.120	Jacqueline Ferreira Leite Santos	M.OR2.4
Isabel Souza Dinola	F.P1.55	Jacqueline Santiago Nojosa	R.P1.33, R.P1.33, R.P3.151
Isac Kiyoshi Fujita	K.P1.30	Jacques Huot	P.OR4.11, P.P1.6
Isadora Góss	K.OR2.4	Jacson Malcher Nascimento	K.P1.26, K.P1.43, K.P2.73
Isha N. Haridass	A.P1.48	Jader Géa Garcia	V.P1.37
Isidro Cruz-Cruz	P.P1.47	Jadielson Lucas Antonio	J.P1.5
Ismael Casagrande Bellettini	R.P2.59	J. A. Hinks	G.OR3.9
Ismail Es	R.P2.83	Jailson dos Ssntos Silva	L.P1.27
Isnard Domingos Ferraz	O.OR4.13	Jaime Camargo González	J.OR3.11
Isolda Costa	F.P1.33, I.P1.31, J.P1.56, K.P2.118	Jaime Ricardo Vega Chacon	R.P1.13
israel roger montoya matos	D.OR4.8	Jaime Tupiassú Pinho de Castro	K.OR2.5
Ítalo Azevedo Costa	J.P1.73	Jair Francisco Rodrigues	O.OR4.14
Ítalo Martins Oyarzabal	G.P1.3	Jair Francisco Souza Magalhães	F.P1.10, F.P1.3, F.P1.37, F.P1.5, H.P1.33, V.P1.31
Italo Odone Mazali	C.P1.39, L.P2.132, Q.OR1.3, T.P1.5	Jairo Luís Dos Santos Dutra	C.P1.31
Ivair Aparecido Santos	E.P1.11, E.P1.41, E.P1.8	Jair Pedralli Pedralli	I.P1.29
Ivaldete da Silva Dupim	P.P1.6, P.P2.88	Jair Scarminio	P.P1.15, P.P1.18, P.P1.20, P.P1.21
Ivaldo De Domenico Valarelli	J.P1.22, J.P2.111	Jake Fontana	M.OR1.2, M.OR5.16
Ivana Cesarino	H.P1.30	Jakob Heier	L.P2.113
Ivana Miletto	R.P1.30	James Durrant	L.OR2.6, P.P2.90
Ivan de Paula Miranda	C.OR4.12	James Kirkpatrick	R.OR1.1
Ivan Dias	L.P1.46	Jamile Thön Langbehn	R.P1.28, R.P1.9
Ivanei Ferreira Pinheiro	A.P2.107, A.P2.127	Janaína A. Dernowsek	R.OR3.9
Ivan Frederico Lupiano Dias	L.P2.98	Janaina Bastos Depianti	G.P1.6
Ivan H. Bechtold	L.OR7.26, L.P1.17, L.P1.38, L.P1.52, L.P2.103, L.P2.121, L.P2.122, L.P2.126, L.P2.137, L.P2.78, L.P2.81		
Ivan H. J. Koh	R.OR6.22		
Ivan Kwei Liu Kam	J.P1.28		
Ivan Lima	J.P2.118		

Janaína Menezes Perez	L.P2.125	Jefferson Bettini	C.P1.31, F.OR3.9, N.OR3.9,
Janaína Simões Lima	C.P1.69		N.OR4.16, N.P1.22, Q.OR1.3
Janaina Soares Santos	J.P1.14, J.P1.67, J.P2.112	Jefferson Carnevalle Rodrigues	R.P3.134
Janaína Versiani dos Anjos	A.OR7.28	Jefferson Esquina Tsuchida	L.P1.29
Janaíne Rocio Ivassechen	J.P1.23	Jefferson Fabrício Cardoso Lins	I.P1.33, J.P1.35
jandrews lins gomes	C.P1.28, C.P1.29, H.P1.29, H.P1.35	Jefferson Luis Ferrari	F.P1.62, I.P1.17, I.P1.18, I.P1.19, I.P1.20, L.P1.11, M.P1.31, O.P1.16, O.P1.18, O.P1.21, O.P1.22, O.P1.24, O.P1.38, P.P2.81
Jane Maria Faulstich de Paiva	V.P1.5, V.P1.9		
Janice Caroline Hardt	J.P2.170, R.P2.116, R.P2.119	Jefferson Márcio Sanches Lopes	L.P1.55
Janice Rodrigues Perussi	R.P2.99	Jefferson Patrício Nascimento	A.P1.64, A.P2.100, A.P2.128
Janine Contro	I.P1.16	Jefferson Silva Martins	L.P1.38
Janine Sanches Gonzaga de Camargo	J.P2.153	Jeffrey E. Grice	A.P1.48
Janiny Nunes Lacerda	C.P1.45	Jeffrey W Lynn	G.OR1.2
Janne Puustinen	N.P1.16	Jeffrey W. Lynn	G.P1.1
Jan Ringnalda	EXP3.6	Jeison Fonseca	R.P2.127
JANUÁRIO KORDIAK	P.P1.14, P.P1.16	Jenaina Ribeiro Soares	A.P1.16
Jaqueline Alves Coelho	L.P1.34	Jennifer Cláudia Passos Teixeira	O.P1.42
Jaqueline de Assis Oliveira	V.P1.2	Jenny Nelson	L.OR2.6, L.P2.111, O.OR4.15
Jaqueline de Souza da Silva	P.P2.57	Jerémy Brisbois	C.OR6.21
Jaqueline dos Santos Soares	R.P2.91	Jeremy N Munday	O.OR2.3
Jaqueline Nascimento Silva	R.P2.104	Jérôme Depeyrot	C.P1.17, J.P2.145
Jaqueline Pérola Souza	Q.OR3.9, Q.P1.13	Jérôme Rouquette	D.OR2.4
Jarem Raul Garcia Garcia	A.P2.150, P.P2.50, V.P1.47	Jerzy Hanuza	D.P1.1
Jaroslaw Z. Domagala	N.OR6.24	Jessica Aparecida Nascimento Ferreira	E.P1.4
J. Arout Chelvane	C.OR6.23	Jéssica Ariane Oliveira	J.P1.72, P.P2.78
Jason A. Burdick	A.P1.45	Jéssica Cristina Costa de Castro	K.OR3.15
Jason Guy Taylor	L.P1.47	jessica cristina da silva gualberto	O.P1.54
Jason Rohr	L.OR2.6	Jessica de Carvalho Arjona	A.P2.124
Javier Andrés Munoz Chaves	A.P2.131	Jéssica Eliza Silva Fonsaca	A.P2.134
Javier Ojeda	Q.OR3.12	Jéssica Fernanda Baretta	Q.P1.13
Jean Besson	Q.OR3.8	Jéssica Fernandes Silva	A.P1.30
Jean Carlo Souza	C.P1.11, C.P1.12, C.P1.19	Jéssica Marcon Bressanin	A.P1.21
Jean Claude M'Peko	E.OR3.8, N.OR2.5	Jéssica Oliveira Rodrigues	C.P1.35
Jean de Souza Matias	C.P1.41	Jessica Santos Rego	O.P1.2
JEAN DILLE	F.OR5.14	Jessica Silva Santos	A.P2.124
Jean-Louis Bobet	P.P2.88	Jessica Taeko Sanches Kohara	A.P2.101, E.P1.7
Jean-Marc Thibaud	D.OR2.4		
Jean Mimar Santa Cruz Yabarrena	F.P1.52		
Jean-Paul Gaston	J.P2.104		
Jean-Pierre Celis	R.OR7.26		
Jean Silva Rodrigues	F.P1.37		
Jean Valdir Uchoa Teixeira	K.P2.113, K.P2.114, V.P1.28, V.P1.46		
Jeferson Ferreira de Deus	A.P1.17, L.P1.46, L.P1.62		

Jessyka Carolina Bittencourt	L.P1.26, L.P1.28, L.P1.60, L.P1.63, L.P2.118, U.P1.11, U.P1.15, U.P1.3	João Luís da Silva Júnior	J.P2.171
Jesualdo Luiz Rossi	F.P1.33	João Manoel Barbosa Pereira	M.OR5.16
Jesus Arbey Benavides	S.P1.27	João Marciano Laredo dos Reis	A.P2.145, A.P2.149
Jesus Eduardo Gonzalez Ruiz	A.P2.148	João Marcos Brandet	M.P1.18
Jesús Jacobo Hernández-Montelongo	R.OR7.25	João Marcos Madurro	I.P1.14
Jhessica de Cássia Mendonça	A.P2.109, N.P1.49	João Mariz Guimarães Neto	L.P2.89
Jheyce Cristina Moraes	B.P1.23, B.P1.24	João Otávio Donizette Malafatti	B.P1.11, B.P1.12, E.P1.51
Jhon Alexander Peñafiel	O.P1.10, O.P1.58	joão otávio ferreira	A.P1.41
Jhonatam de Oliveira Carvalho	D.P1.2	João Paulo Almeida de Mendonça	H.OR3.7
Jhones Luis Oliveira	Q.P1.1	JOÃO PAULO ALVES SILVA	P.P1.32
Jhonny Dias Oliveira	K.P2.91	João Paulo Braga	L.P2.102, L.P2.109
Jiang Kai	L.OR7.27	João Paulo Campos Trigueiro	P.P2.63
Jiaxi Stephen Yan	S.OR1.3	João Paulo Carvalho Alves	O.P1.6
Jiaying Wu	L.OR2.6	João Paulo de Campos da Costa	A.P2.120, E.OR6.21, E.P1.44
Jiho Yoon Yoon	L.OR3.9	João Paulo Sinnecker	C.P1.53, C.P1.67
Jilian Nei de Freitas	A.P1.56, L.OR5.17	João Paulo Vita Damasceno	Q.OR1.3
Jivago Vieira Muniz da Silva	K.P1.31, K.P1.32	João Paulo Winiarski	J.P2.129, J.P2.91
Joab Serra Rodrigues da silva	L.P1.23, L.P1.31	João Pedro Aquiles Carobolante	R.P2.94
Joana Claudio Pieretti	M.P1.40	João Pedro Barros Cuba	L.P1.40
Joana Mesquita Guimarães	R.P3.162, R.P3.166	João Pedro Conte Sobrinho	I.P1.30
Joana V Pinto	B.P1.19	João Roberto Ferreira	K.P1.57, K.P1.58
Joandson Aníbal de Sousa	J.P2.127	João Roberto Moro	K.P1.48, R.P2.127
Joanisa Possato Curtulo	K.P1.39	João Victor Narducci Ferreira	R.P3.152
João Afonso da Silva Neto	I.P1.14	João Vitor Paulin	L.P1.49
João Alziro Herz da Jornada	D.OR4.8, D.P1.4, D.P1.5	JOAQUIM BRASIL FILHO	O.OR2.4
João Batista Fogagnolo	J.P1.10, J.P1.21, R.P1.50	Joaquim F. M. C. Pratas Leitão	O.P1.42
João Batista Giordano	J.P2.98	Joaquim Paulo da Silva	L.P1.29, N.OR3.10
João Batista Neto	R.P3.160, R.P3.183	Jo Dweck	V.P1.44
João Batista Santos Barbosa	R.P3.131	Johanna Valenzuela Oses	H.P1.4
João B. Floriano	L.P1.34, L.P1.48	Johannes Gierschner	H.P1.14
João Cardoso de Lima	D.P1.23, D.P1.26, D.P1.27, F.P1.35, F.P1.45	John Jacob Neumeier	C.P1.77
João Carlos Alves	P.P1.15	John Jairo Hoyos	K.OR3.8
João Carlos Angélico	N.P1.18, P.OR5.15	Johnnatan Duarte de Freitas	L.P1.27
João Carlos Biazon	J.P2.111	Johnnatan Rodríguez	K.OR1.2, K.OR3.8, K.P2.119
João Carlos Martins	P.P2.53	Jonas Björk	B2DY
João Fiori	EXP3.5	Jonas de Arruda Leite Júnior	P.P1.23
joao frederico haas leandro monteiro	N.P1.45	Jonas dos Santos Sousa	L.P1.23
João Gustavo Cardoso Semensin	V.P1.48	Jonas Gruber	L.P1.6
João Henrique Ghilardi Lago	R.P1.6, R.P3.152	Jonas Henrique Osório	M.P1.10
João Hermes Clerici	N.P1.44	Jonas Jakutis Neto	J.P1.28
Joao Lucas Rangel	F.P1.18, F.P1.23, J.P2.104	Jonas Mendes	K.P2.72, K.P2.74, K.P2.88
João Lúcio Barros	P.P2.96	Jônatas Faleiro Berbigier	L.P2.125
		Jonathan Gazzola	K.P1.30
		Jonathas de Paula Siqueira	M.OR5.13
		Jonder Moraes	F.P1.47

Jonhatan Hanel	D.OR4.10	José Auri Pinheiro	S.P1.2
Jonnas Santos Alves	K.P1.21	José A. Varela	A.P1.73, A.P1.74, E.OR6.18, E.P1.42, J.P2.119, N.P1.2
Jordana Borges Griep	L.P1.39	José Bragança	L.OR4.13
Jordanna Fernandes Assis	R.P2.93	José Brant Campos	J.P1.51, R.P3.148
Jorge Augusto de Moura Delezuk	J.P2.168, L.P1.10	José Brant de Campos	F.P1.51
Jorge da Silva Shinohara	K.P2.69	José Bruno Cantuária	L.P2.105
Jorge Henrique da Silva Araújo	F.P1.42	Jose Carlos Dutra Filho	A.P2.121
Jorge Luís Lauriano Gama	F.P1.53	José Carlos Germino	L.OR5.17
Jorge Luis Lopez Aguilar	J.P1.86, R.OR6.23	José Carlos Gomes	A.OR4.14
Jorge Luis Machado Amaral	F.P1.51	José Carlos Leandro de Sousa	I.P1.17
Jorge Luiz Rosa	F.P1.16	José Carlos Moreira	R.P2.109
Jorge Mario Osorio Guillén	B6NB	José Carlos Pinto	R.P2.82, R.P3.139
jorge Morales Hernández	J.OR3.11	José Costa de Macêdo Neto	A.P2.107, A.P2.127
Jorge Nahuel Pecina	J.P1.16	José D'Albuquerque e Castro	C.P1.67
Jorge Otubo	J.P1.4	José Daniel Biasoli de Mello	A.OR6.23
Jorge Pimentel	J.P2.123	José de los Santos Guerra	E.OR3.11, E.OR3.8, E.P1.25, E.P1.5, P.P2.83
Jorge Ricardo Mejía Salazar	M.OR5.12	José Domingos Ardisson	C.P1.55, F.P1.28, F.P1.61, J.P1.33, R.OR9.34, R.P1.32
Jorge Tadao Matsushima	A.P2.98, A.P2.99, P.P1.25, P.P2.69	José Domingos Fabris	J.P1.33, P.P2.71, P.P2.72
Jorge Teófilo Barros Lopes	K.P1.33	José Edmilson Martins Gomes	K.P1.58
Jorge Vicente Lopes da Silva	R.OR3.9, R.OR7.24, R.P1.26, R.P2.79	José Eduardo Padilha de Sousa	A.OR3.6
Jorge William Engelmann	R.P2.119	José Elizalde-Galindo	C.OR2.4
Jorgimara de Oliveira Braga	I.P1.33, J.P1.35	José Enrique Eirez Izquierdo	L.P1.43
Jorg Sichelschmidt	C.P1.61	José Ezequiel De Souza	P.P2.93, V.P1.29
Josane Assis Costa	J.P2.108, J.P2.96	JOSÉ FILIPE BACALHAU RODRIGUES	S.OR2.5
José Alberto Fracassi da Silva	R.OR1.2	Josefredo Rodriguez Pliego	H.P1.31
José Alberto Giacometti	L.OR2.4, L.OR6.21, L.P2.110	José Geraldo de Souza Silva	V.P1.26
José Alexandre Diniz	B6TQ, C.OR5.15	José Geraldo Nery	B4GN, I.P1.16, P.P1.30, R.P1.29, R.P1.46
José Alves de Lima Jr.	D.P1.3	José Gerivaldo Duque	C.P1.47, C.P1.48, C.P1.60, C.P1.61, D.P1.28
José Anderson Farias da Silva Bomfim	L.P1.31	José Guilherme Simões	J.P2.149, J.P2.169
Jose Angel Ramon Hernández	R.P3.139	José Henrique de Freitas Gomes	K.P2.83
José Antonio da Silva Souza	J.P2.99	Jose Henrique Vallim	Q.P1.10, Q.P1.9
José Antônio Eiras	E.OR4.13, E.OR5.16, E.P1.27, E.P1.41, E.P1.54, O.P1.20	Jose Higino Dias Filho	R.OR6.23
José Antonio Malmonge	A.P1.27, A.P1.33, A.P2.108, A.P2.112, A.P2.91, B.P1.13	José Humberto de Araújo	C.P1.31
José Antônio Santos Souza	R.P2.112, R.P2.90	José Humberto Dias da Silva	J.P1.83, N.P1.18, N.P1.21, N.P1.35, P.OR5.15, R.OR8.28, R.P2.85
José Antonio Souza	K.P2.109, K.P2.112, N.P1.39	José Humberto Tavares Guerreiro Fregnani	L.P1.5, L.P1.59, L.P1.7, L.P1.8
José Arimatea Silva	D.P1.3		
José Augusto França Rodrigues	K.P1.20, V.P1.11		
José Augusto Magar Garcia	M.P1.35		
José Augusto Martins Garcia	M.P1.37		
Jose Augusto Perrotta	G.OR2.3		

José Jarib Alcaraz Espinoza	J.P2.115, R.P2.121, R.P2.70, R.P3.186	José R. Ribeiro Bortoleto	J.P2.172, N.P1.21, N.P1.35
Jose Joaquim Souza Melo	K.P2.110	José Tadeu Gouvea Junior	M.P1.31
Jose Jobanny Martinez	I.P1.15	jose ubiragi lima mendes	J.P2.117
José L. Duarte	L.P2.98	Jose Ulian Cardoso Almeida	F.P1.75, O.P1.56
Jose Leandro Alves	V.P1.9	José Veríssimo Ribeiro de Toledo	K.P1.15, K.P1.16, K.P1.17, K.P1.18, K.P1.57, K.P1.58, K.P1.59
José Leonil Duarte	L.P1.46, L.P2.127, N.P1.47	José Vieira da Silva Neto	J.P1.43, J.P1.6
José Lúcio Pádua Gemeinder	R.P3.180	José Vitor Souza	J.P1.84, J.P1.9
José Luis Dávila	A.P1.42, R.P3.185	José Wilson de Jesus Silva	J.P2.166
Jose Luis Enriquez-Carrejo	F.OR6.19	José Wilson Palma	U.P1.4
José Luis Lima de Jesus Silva	P.OR6.18	Josiane Caetano	J.P2.170, R.P2.116, R.P2.119
Jose Luis Passamai Jr	G.P1.6	Josiani Cristina Stefanelo	L.OR1.3, L.P2.92
Jose Luis Valin Rivera	A.P2.143, A.P2.148	Josias Rogerio Lopes	A.P2.138, Q.P1.16, Q.P1.24
josemairon Prado Pereira	K.P1.45	Jossano Saldanha Marcuzzo	A.P1.5, A.P1.54, A.P2.98, K.P2.68, P.P1.25, P.P2.66, P.P2.68, P.P2.69, R.P1.19, R.P2.57, R.P2.80, R.P3.156
José Manoel Marconcini	B.OR3.10, B.OR3.7, B.P1.10, B.P1.22, B.P1.26, B.P1.4	Josué Martins Gonçalves	A.P2.102, P.OR3.9, P.P1.12, P.P1.13
José Manuel Rivas Mercury	E.P1.57, E.P1.58, N.P1.27, N.P1.68	Josue Mendes Filho	D.P1.3, U.P1.7
José Marcelino da Silva Dias Filho	K.OR3.14, K.P1.28, K.P1.29, K.P1.39	Joyce Rodrigues Araujo	P.P2.90
Jose Marcelo Vargas	C.OR3.8, C.P1.1, C.P1.59	Juan Alberto Chavez Ruiz	J.P1.68
Jose Marcio F Calixto	A.P1.24, A.P2.118	Juan Alfredo Guevara Carrió	A.P2.125
José Maria Braga Pinto	F.P1.10, F.P1.3, F.P1.37, F.P1.5, H.P1.33, K.P2.75, V.P1.31	Juan Andrés	I.OR3.11
José Maria Clemente da Silva Filho	M.OR6.20, O.P1.29, O.P1.34, O.P1.45, O.P1.57	Juan Andrés Castañeda	M.OR4.9, M.P1.16
José Maria do Vale Quaresma	K.P1.43, K.P2.84	Juan Angel Sans	D.OR2.5
José Mário Ferreira Júnior	F.P1.33	Juan Carlos Campuzano	C.P1.25, C.P1.73
José Maurício Pereira dos Santos	B6RV, K.P1.54	Juan Carlos González	P.P1.45
Jose Mauro Granjeiro	U.OR3.6	Juan Carlos Medina Llamas	J.P2.115, R.P2.121, R.P2.70, R.P3.186
José Mauro Pimenta de Souza Messias	D.P1.20	Juan Carlos Moreno Lopez	B2DY
Jose Mireles-Jr-Garcia	F.OR6.19	Juan Gallo	R.P3.154
José Pereira dos Santos Júnior	L.P2.84	Juan Hernandez-Paz	C.OR2.4, F.P1.11
Jose Pereira Santos Junior	L.P2.89	Juan Jairo Diaz Marin	P.OR3.8
Joseph Garrett	O.OR2.3	Juan Jose Toro	H.P1.8
Josep Nogues	C.OR3.6	Juan Lucas Nachez	J.P1.48
Jose Rafel Capua Proveti	C.P1.63	Juan Manuel Orozco	C.P1.33
José Ramon Jurado Egea	E.OR3.6	Juan Pablo Ramos Andrade	N.P1.13
José Renato de Oliveira Lima	N.P1.53, N.P1.58	Juan Rodríguez Rodríguez	N.OR5.18
José Ribeiro dos Santos Júnior	L.P2.84, L.P2.89	Juan Sebastian Aguirre	A.P2.102
José Roberto Guimarães	P.P1.48	Juarez L. F. Da Silva	H.OR4.15, H.P1.16, N.OR5.17
José Roberto Souza Almeida Leite	Q.P1.20	Júlia Adami Nogueira	R.OR3.9
José Roberto Tozoni	R.P3.157	Júlia Cassiano Arisseto	J.P2.103
José Rodolfo Vieira Leite	V.P1.35	Julia Cristina Oliveira Pazinato	P.P2.86, P.P2.87

Júlia Frasnelli Matias Fernandes	R.P2.88	Julio Cesar Camilo Albornoz Diaz	E.P1.13
Julia Lopes da Silva Gascho	O.P1.49	Julio Cesar Guimarães Tedesco	D.P1.30
Juliana Alves Martins	A.OR6.20	Júlio César Martins Silva	P.P1.41
Juliana Aparecida Vendrami	L.P2.68	Júlio César Matias Souza	R.P3.162, R.P3.166
Juliana Bergamasco	B4GN, R.P1.29, R.P1.46	Julio Cesar Molina	J.P1.2
Juliana Cancino Bernardi	L.OR6.23, Q.OR3.8, Q.P1.22, Q.P1.23, R.P1.44	Julio Cesar Silva	A.P2.122
Juliana Cardoso Neves	A.P1.28	JULIO CESAR UGUCIONI	L.P1.29
Juliana Carine Gern	Q.P1.27	Julio Criginski Cezar	BAAK, C.P1.23, C.P1.66, C.P1.68, I.OR4.14, J.P1.24, J.P2.95
Juliana Casarin	J.P1.17	Julio Muñoz	H.OR4.18
Juliana Coatrini Soares	L.P1.5, L.P1.7, L.P1.8	Julio Pusterla	T.P1.2
Juliana Cristina Freitas	R.P1.13	Julio Ricardo Sambrano	N.P1.35
Juliana da Silva Bernardes	F.P1.1	Julio Roberto Bartoli	A.P1.21, A.P2.123
Juliana Eccher	L.OR7.26, L.P1.38, L.P2.103, L.P2.121, L.P2.122, L.P2.126, L.P2.81	Junior Cintra Mauricio	F.P1.48
Juliana F. dos Santos	L.P1.12	Junior C. S. Pantoja	L.P1.57
Juliana Feijó de Souza Daniel	R.OR5.16	JURANDI NEVES ARAÚJO JÚNIOR	C.P1.24
Juliana Ferreira Floriano	R.P1.41	Juscelino B. Leão	G.OR3.6
Juliana Fischer Haddad	H.P1.9	Juscelino Chaves Sales	E.P1.56, S.P1.21
Juliana Juliana Heloisa Pinê Américo Pinheiro	A.P1.6	Jussara Vieira Silva	I.P1.14
Juliana Leme	R.P2.127	Jussier de Oliveira Vitoriano	L.P2.124
Juliana Luiza de S. Martins	O.OR3.5	<b>K</b>	
Juliana M.P. Almeida	M.OR5.13, M.OR6.21, M.P1.12	Kaidu Hanashiro Barrosa	R.P1.6
Juliana Nunes	V.P1.23	Kalil Almeida Figueiredo	K.P1.36
Juliana Paiva	A.OR8.29	Kalil Cristhian Figueiredo Toledo	E.P1.37
Juliana Primo Basílio de Souza	A.P2.145, A.P2.149	Kaline Dantas Silva	V.OR2.6
Juliana Reghine Souza	A.P1.37	Kamila Cássia Pagnoncelli	L.P1.4
Juliana Regina Kloss	A.P1.71, A.P2.133	Kamila Colombo	A.P1.65
Julián Arnaldo Ávila	K.P2.119	Kamil Dziubek	D.OR2.4
Julian Arnaldo Avila Diaz	K.OR1.2	Karen Araujo Borges	N.P1.7
Juliana Santos Barbosa	M.P1.7	Karen Cristina Massini	Q.P1.11, Q.P1.12
Juliana Steffens	J.P2.136	Karen de Souza do Prado	B.OR1.1
Julia Natália Mazoni El Kadri	R.P3.159	Karen Ferraz Faria	R.P1.8
Juliana Verdan Silva	J.P2.96	Karen Vieira Melo	P.P1.37
Juliane Carla Bernardi	P.P2.61	Karine Damaceno Souza	R.P1.7
Juliano A Bonacin	L.P1.51	Karla Balzuweit	F.P1.26
Juliano Alves Bonacin	A.P1.23, E.P1.37, O.P1.54	Karla De Michelis Mograbi	S.P1.29
Juliano Casagrande Denardin	C.OR4.13	Karla Faquine Rodrigues	A.P1.31, A.P1.32, A.P1.57, A.P2.116, A.P2.97
Juliano Sartori Mendonça	R.P1.33	Karoline Oliveira Moura	C.OR6.20, C.P1.18, C.P1.52
Julia Sawaki Tanaka	E.P1.52	Karthik Ramasamy	M.OR3.8
Júlia Siqueira Silva	R.P3.143	Kassia Cristina Kafer Escher	I.P1.29
Julien Haines	D.OR2.4	Kate Cristina Blanco	L.P1.25
Julio Alberto Peres Ferencz Jr.	O.P1.55		
Julio Antonio Larrea Jimenez	D.OR4.10		

Katharina Rodrigues Malafaia Macedo	V.OR2.8	Koiti Araki	A.P2.102, J.P2.114, O.P1.1, P.OR3.9, P.P1.12, P.P1.13
Katharinne Sabrina Nascimento Teixeira	R.P3.178	Korllvary Rhanddy Parra Jimenez	P.P1.2
Kathrin Muller	B2DY	Krishna Badhiwala	S.OR1.3
Katia Cristiane Gandolpho Candioto	V.P1.41	Kristiany Moreira Diniz	A.P2.109
Katiane Judy Batista Da Costa	J.P2.127	Kristina Lilova	A.P2.96, J.P1.26, P.P1.28, P.P1.29
Katia Regina Cardoso	K.P2.89, P.P1.8	K R Krishnadas	A.OR3.10
Katia Regina Evaristo de Jesus	Q.P1.11, Q.P1.12		
Kátia Santos Damacena Nunes	V.P1.50		
Kati Miettunen	O.OR4.16, O.P1.7, P.P2.76	<b>L</b>	
Kelcilene B. R. Teodoro	B.P1.21	Laercio Costa Ribeiro	C.OR6.17
Kelen Cristina dos Reis	B.OR3.5, N.OR3.10, N.OR3.10	Lai Kuan Yu	R.P2.100
Kelin Regina Tasca	K.P1.24, K.P2.101	Lais Amaral Alves	I.OR4.20
Kelly Cordeiro Miranda	C.P1.69	Lais Angelice de Camargo	B.P1.10
Kelly Cristine da Silveira	P.P2.67	Laís Canniatti Brazaca	L.OR6.23
kelly roberta francisco	A.P1.41	Laís Cristina Gomes Nagaki	A.P1.26
Kelly Tasso Paula	L.OR3.11	Laise Maia Lopes	R.OR6.19
Kenneth E. Gonsalves	J.P2.160	Laís Luz Rodrigues Neto	Q.OR2.6, Q.P1.16
Kerolene Barboza da Silva	R.P2.110	Lais Ronconi	A.P2.148
Kessily Barbosa Rufato	R.P1.14, R.P3.192	Lais Siebra de Brito Ramos	R.P1.11
Kéthy Germano Torres	A.P2.95	Lalgudi Venkataraman Ramanathan	O.P1.19
Kethlin Ramos	E.P1.10	Lania Auxiliadora Pereira	A.P1.59
Ketul C Popat	R.P1.49	Lara F. Loguercio	L.OR5.16, L.P1.39, M.OR2.5, M.OR2.6
Kevin De Mello Santamaría	J.P2.110	Lara Rezende Souza	I.P1.30
Kevin Liu Rodrigues	K.OR4.18, L.OR2.5	Lara Robert Nahra	S.P1.3
Kevin M Knowles	A.OR9.36	Larisa Baldo Arruda	B.P1.32
Kevin Raduenz Pakuszewski	C.P1.25, C.P1.73	Larissa A.S.C. Oliveira	K.OR3.9
Keyte Nayara Da Silva Nascimento	S.P1.20	Larissa Fernanda Ferreira	R.P2.115
Khalifa Aguir	E.OR2.5, E.P1.15	Larissa Gomes França	L.P2.78
Klaus Rischka	R.OR7.25, R.P1.27	Larissa Helena de Oliveira	L.P2.132, T.P1.5
Klaus Wilhelm Heinrich Krambrock	F.OR6.18	Larissa Lavorato Lima	N.OR3.13
Kleber Daum Machado	P.P1.47	Larissa Mara Batista Duarte	R.P1.51, R.P2.87
KLEBER RIBEIRO DA SILVA	K.P1.17, K.P1.18	Larissa M. S. de Castro	R.P1.4
Kleber Roberto Matos da Silva	K.P2.75	Larissa Nunes da Silva	J.P2.143, V.P1.21
Kleber Roberto Pirola	B6TQ, C.OR3.9, C.OR4.13, C.OR5.15, C.OR6.20, C.P1.18, C.P1.33, C.P1.52, C.P1.8	Larissa Oliveira Mandú	L.P1.40, L.P1.65
Kleilton Oliveira Santos	S.OR2.5	Larissa Otubo	P.P1.3
Kleper de Oliveira Rocha	J.P1.83, N.P1.18, P.OR5.15	Larissa Ribas de Lima Soares	J.P1.2, K.P2.77
Kleyton Torikai	N.OR1.3	Larissa Santos Reis	R.P1.5
		Larissa Sayuri Ishibe Veiga	D.P1.29
		Larissa Verena Figueiredo Oliveira	N.P1.60
		Latif Ullah Khan	C.OR3.7, C.OR3.8, C.P1.42, C.P1.59
		Laura Bissoli de Mello	C.P1.39
		Laura Cipriano Crapina	R.P2.89
		Laura de Melo Corgosinho	R.P2.62
		Laura Gabriela Pampillo	D.P1.24, D.P1.25

Laura Oliveira Péres	L.P1.37, L.P1.45, L.P2.123, L.P2.135	Leonardo Albergaria Oliveira	K.P1.2, K.P1.38, K.P2.65, K.P2.83, K.P2.87
Laura Raldi Canal	A.OR9.35	Leonardo Antonini	K.P2.85
Lauro June Queiroz Maia	M.OR5.14	Leonardo Barbosa Godefroid	K.P1.55, K.P2.61
Lauro Tatsuo Kubota	A.P1.52, L.P1.23, T.P1.5	Leonardo Barcelos de Paula	R.P1.35, S.P1.16
layo ricardo machado leal	K.P1.42	Leonardo Bontempo	M.P1.24, M.P1.37
Lays Batista Fitaroni	J.P2.148	Leonardo C. Campos	M.P1.41
L. A. Zago	C.P1.10	Leonardo Contri Campanelli	R.P2.88
Lazaro A Padilha	M.OR4.9, M.P1.16, M.P1.19, M.P1.4, N.OR6.23, O.P1.55	Leonardo Dantas Machado	H.OR3.11
Lázaro Aurélio Padilha	M.P1.15	Leonardo De Boni	A.P1.9, M.OR5.13, M.OR6.19, M.P1.27
L. Cantelli	J.P1.81, J.P2.112	Leonardo de Farias Araujo	M.OR5.16
Léa Maria Lopes de Almeida	V.OR2.8	Leonardo Drumond da Silva	R.P1.31
Leandra Ernst Kerche-Silva	R.P2.64	Leonardo Fernandes Fraceto	Q.P1.1, Q.P1.4, R.P1.22, R.P2.71, R.P3.154
Leandro Aparecido Pocrifka	J.P1.52, J.P1.53, O.P1.54, P.P2.53	Leonardo Ferreira Paula	J.P1.73
Leandro Benatto	O.P1.59	Leonardo Francisco Gonçalves Dias	R.P1.1
Leandro Campos Vargas	K.P1.44	Leonardo Giordano Paterno	J.P1.73
Leandro Cardoso Moraes	P.P2.96	Leonardo Gois Lascane	L.P1.40
Leandro Carneiro Fonseca	A.P2.132	Leonardo Gondim de Andrade Silva	P.P2.60
Leandro de Sá Bortolozzo	Q.P1.24	Leonardo José Amaral Siqueira	R.P3.152
Leandro Felix Bufaiçal	D.P1.28	Leonardo Lúcio de Araújo Gouveia	V.P1.2
Leandro Hostalácio Freire Andrade	C.P1.43	Leonardo Marchese	Q.P1.17, R.P1.30
Leandro Ize Gutierrez	N.P1.26	Leonardo Mathias Leidens	J.OR3.10, J.P1.57, J.P1.59, U.P1.2
Leandro Martins Pereira	B.OR3.10	Leonardo Pacheco Wendler	E.P1.12
Leandro Mercedes	N.OR1.2, N.OR3.8	Leonardo Resende	D.P1.20
Leandro M Malard	A.OR6.20	Leonardo Souza Silva	C.P1.48
Leandro M. Socolovsky	C.P1.32, C.P1.34, C.P1.37	Leonardo Terrabuio	J.P2.154
Leandro R. Tessler	N.OR5.19	Leonardo Werneck Trindade de Barros	M.P1.19
Leandro Santos Grassi Cardoso	O.P1.42, O.P1.43	Leonardo Wu	K.P2.92
Leandro Seixas Rocha	H.OR2.4	Leonélio Cichetto Junior	A.P2.84, A.P2.85
Leandro Silva Matos	F.P1.68, P.P2.77	Leonid Ivanovich Charakhovski	J.OR3.12
Leide Cavalcanti	T.P1.2	Leonilson Kiyoshi Sato de Herval	N.P1.50
Lei Jiang	PS002.3	Leon Miranda Costa	R.P2.120
Leilane Roberta Macario	J.P2.122	Letícia Caroline Bonkovoski	R.P3.149, R.P3.175
Leinig Antonio Perazolli	A.OR9.38, A.P2.81, A.P2.86, A.P2.87, E.P1.44, J.P2.119	Letícia de Melo Costa	C.P1.23, C.P1.66
Leiriana Aparecida Pinto Gontijo	O.P1.21	Letícia Gazola Tartuci	O.P1.18
Leíse Serena Pasa	A.P2.112	Letícia Graziela Costa Santos	T.P1.3, T.P1.6
Leni Akcelrud	H.P1.17, L.P2.130, L.P2.131, S.P1.15	Letícia Guerreiro da Trindade	P.P2.58
Leni Campos Akcelrud	L.P2.129	Letícia Liu	R.P1.34
Leniher Castan	R.P1.23	Letícia Nunes Coelho	K.P1.24, N.P1.30
Lenise Muller Ricciardi	R.P3.163	Letícia Paifer Marques	R.P1.12
Lennon Dias	R.P3.157	Letícia Pedretti Ferreira	R.P2.117, R.P2.82
Leonã da Silva Flores	N.OR3.13		

Letícia Pereira Almeida	R.P3.151	Liu Yao Cho	J.P1.19, J.P1.39
Letícia Pereira Dote	J.P2.120	Lívia Aparecida Procópio	R.P2.107
Letícia Poras Reis de Moraes	E.P1.35, E.P1.38, P.OR6.22, P.P1.40	Livia Cassia Viana	B.P1.14
Letícia Sabioni Yamin	J.P2.133	Livia C. dos Passos Araujo	S.P1.24
Letícia Tessari Bim	J.P1.18	Lívia de Rodrigues Menezes	A.P2.121, B.P1.34
Letícia Vitorazi	Q.P1.15, Q.P1.25, Q.P1.8	Lívia Maria de Castro Sousa	O.P1.35
Leticie Mendonça Ferreira	B2VY	Livia Melo Carneiro	P.P1.32, P.P2.85
Letizia Papa	M.P1.40	Lívia Mesquita Dias Loiola	R.P3.132
Leyvison Rafael Vieira da Conceição	J.P2.161, P.P1.32, P.P2.85	Livia Pacheco	J.P2.118
L. G. Martinez	J.P1.33	Lívia Rodrigues Menezes	R.P2.108, R.P2.73
Lia Mara Silva Marcondes	M.P1.31, M.P1.42	Livia Serra Selvatici	J.P1.13, P.P1.11, R.OR5.17
Liana Alvares Rodrigues	A.P1.72, D.P1.14	Lívia Sottovia	J.P1.29, J.P1.30, R.P2.123
Liane M. Rossi	C.OR2.3	Lívia Terezinha Pimentel Branco	R.P3.143
Liang Fan	E.OR4.12	Livio Amaral	G.P1.3
Lia Raquel Moura Silva	R.P1.45, R.P1.47	Lizandro Manzato	K.P2.100
Lia Souza Coelho	F.P1.66, R.P2.108	Lízia Maria Oliveira Gonçalves	R.P1.45
Lidiaine Maria dos Santos	N.P1.20, N.P1.7	Liz Specian de Moraes	A.OR6.18
Lidia Maria Rebolho Batista Arantes	L.P1.10	Ljubica Tasic	B.P1.1, Q.P1.3, R.P1.34
Lidiane de Oliveira Pinto	F.P1.1	L. M. M. Ferro	J.P2.112
Lidiane Franqui	Q.P1.14	Lohana Komorek Faria	P.P2.54
Lidiane Gonçalves Gonçalves	R.P2.90	Lorena Luiza Teixeira Oliveira	K.P2.61
Lidiane Oliveira Pinto	T.P1.5	LORENA MONIQUE MELO	E.P1.19
Lidiane Silva Franqui	Q.OR1.3, Q.OR2.5	Lorena Oliveira de Sousa	O.P1.26
Lidiany Karla Rodrigues	R.P1.33	Lorenzo Antonio Buscaglia	B6AN
Lidice Aparecida Gonçalves	C.P1.28, C.P1.29, H.P1.35	Loreto Margarita Valenzuela	R.OR3.6
Lígia Nunes de Moraes Ribeiro	R.P2.128, R.P2.129	Louise Fernanda Rodrigues Oliveira	J.P1.36
Lígia Parreira Souza	P.OR1.3	Louise Patron Etcheverry	L.OR3.12
Lilia Müller Guerrini	S.P1.3	Lourdes Marcela Yataco	A.P2.148
Liliam Viana Leonel	R.P3.131	Lazaro	
Lilian Campelo Holanda	P.P1.46	Lourival Marin Mendes	B.OR3.6
Lílian Cruz Santos	E.P1.51	L S Sharath Chandra	C.OR6.19
Liliane Cristina Battirola	B.P1.2, S.P1.17	Luana Caroline Gonçalves	Q.OR1.2
Liliane Cristina Gonçalves	O.P1.33	Luana Cristina Wouk de Menezes	L.P1.46, O.P1.39, O.P1.44
Liliane Lelis Oliveira	R.P2.72	Luana Elisa Cardoso de Siqueira	P.P1.5
Liliane Maria Ferrareso Lona	A.P2.127	Luana Jacomini	S.P1.14
Lilian Goulart Schultz	B.P1.35	Luana Lacy Mattos	L.OR5.18
Lilian Siqueira	J.P2.105	Luana Marotta de Vasconcellos	R.P1.10, R.P1.11
Lilian Soares Cardoso	L.P2.92	Luana Marotta Reis de Vasconcellos	R.P2.107
Lina Dayse Rodrigues Moreira	K.P1.19	Luana Marotta Vasconcellos	R.P1.21
Lincon Zadorosny	A.P2.91	Luana Rodrigues	R.P3.157
Linda Casson	F.P1.18	Luanda Zarría Morais Jabour	E.P1.19
Link Brown	J.P1.26, P.P1.29	Luan Rios Paz	B2VE
Lino Alberto Soares Rodrigues	K.P2.111	Luca Bignardi	B2DY
Linus Pauling Faria Peixoto	M.OR2.4, M.P1.11, M.P1.5		
Lisandro Cardoso	P.P1.1, P.P1.3		
Lisiane Rocha Azevedo de Carvalho	R.P1.50		

Luca Fusaro	R.OR4.12	Luciano Caseli	J.P2.120, L.OR4.14, L.P2.123, R.P1.6, R.P1.7, R.P3.134, R.P3.152
Lucas Alan de Aguiar	J.P1.1	Luciano Costa Almeida	P.P1.46
Lucas Angelini Deltreggia	F.P1.49	Luciano F Costa	L.P1.8
Lucas Atila Bernardes Marçal	I.OR3.12, M.P1.39, N.OR4.15, N.P1.30	Luciano Lobo de Almeida	K.P1.27
Lucas Barboza Sarno Da Silva	C.P1.46	Baracho	
Lucas Barreto	I.P1.2	Luciano Monteiro Almeida	F.P1.10, F.P1.3, F.P1.37, F.P1.5, H.P1.33, V.P1.31
Lucas da Silva Ribeiro	A.P1.70	Luciano Morais Lião	L.P1.50
Lucas de Souza Ferreira	F.P1.25	Luciano Paulino Silva	R.P2.61
Lucas Evangelista Sita	P.P1.15, P.P1.20	Luciano Pighinelli	B2VE
Lucas Fabricio Bahia Nogueira	S.P1.9	Luciano Rossi Bilesky	J.P2.140
Lucas Ferreira Lima	O.P1.33	Luciano Tavares Costa	P.OR6.18
Lucas Ferreira Xavier Ortiga	L.P2.117	Luciano Tavares da Costa	H.P1.23, H.P1.24, H.P1.25
Lucas Fiocco Sciuti	M.OR6.19	Luci Cristina de Oliveira	R.P2.58
Lucas Fugikawa Santos	L.P1.25, L.P2.101, L.P2.102, L.P2.105, L.P2.109, L.P2.83	Vercik	
Lucas Gabriel Faria Inácio	P.P1.7	Luciene Covolan	S.P1.28, S.P1.29, S.P1.30
Lucas Henrique Eiras dos Santos	J.P1.32	Lucila Menacho	A.P2.141
Lucas Henrique Mendes	S.P1.8	Lucimara de La Torre	R.P2.83, R.P3.167
Lucas Kaique Roncaselli	L.P2.119	Lucimara Gaziola de la Torre	R.P2.125, R.P2.92, R.P3.187, R.P3.190
Lucas Ladeira	A.P2.118	Lucimara Stolz Roman	A.P2.136, L.P2.85, O.P1.33, O.P1.39, O.P1.40, O.P1.44, O.P1.51, O.P1.59, P.OR6.19
Lucas Luiz Messa	B.P1.15	Lucinéia Ferreira Ceridório	J.P2.120
Lucas Militão	R.OR4.13	Lucio Carlos Pinto Rangel	U.P1.8
Lucas Muraro Sassi	J.P1.50	Lucio Flavio dos Santos Rosa	H.OR3.13
Lucas Patricio Hernandez	A.P2.102	Lucíola Lucena de Sousa	K.P1.40, R.P2.58
Lucas Polo Fonseca	R.P3.132	Lucyano J. A. Macedo	L.OR4.15
Lucas R. Amaral	L.P1.13	Ludmila Vargas	A.P2.99
Lucas Ribeiro Ramos	K.OR3.12	Luelc Sousa da Costa	C.OR3.10, P.P1.35
Lucas Stori de Lara	I.P1.12	Luigi Baldini Paulucci	P.P1.34
Lucas Travi	J.OR3.9	Luisa Fernanda Gutierrez	I.P1.15
Lucas Vinicius de Lima Citolino	L.P2.75	Luis Alfredo Montes Vides	H.OR4.18
Lúcia Adriana Villas Boas	E.P1.40	Luis Almeida	J.P2.154
Lucia Helena Mascaro	P.P2.74, P.P2.75	Luis Antonio Genova	F.P1.4
Luciana Almeida Silva	A.P1.8, P.P2.73	Luís Antonio Polaci	A.P1.19
Luciana Daniele Trino	R.P1.1	Luís Augusto Rocha	K.P2.93, Q.P1.5, R.OR7.26, R.OR8.28, R.OR9.33, U.OR3.6
Luciana de Simone Cividanés	A.P1.31, A.P1.32, A.P1.57	Luis Bolaños Vargas	N.P1.17
Luciana Dornelas	F.P1.22, I.OR3.12	Luis Carlos Costa Arzuza	C.OR3.9, C.P1.52
Luciana Gaspar Feio	K.P2.111	Luís César Aliaga	A.P2.131
Luciana Kassab	M.P1.17	Luis Claudio Mendes	V.OR2.8
Luciana Machado Rodrigues	K.P1.35	Luis Dias Carlos	L.P2.131
Luciana Pataro	EXP1.1		
Luciana Pereira	B.OR3.10		
Luciana Pereira Silva	S.P1.19		
Luciana Reyes Pires Kassab	F.OR4.12, M.P1.24, M.P1.35, M.P1.37		
Luciana Rodrigues da Cunha	L.P1.30		
Luciana Sampaio Ribeiro	P.P1.7		
Luciane Dias Oliveira	R.P1.11		
Luciano Alkmin	K.P1.5		

Luis Eduardo Antunes Vieira	K.P1.41	Luiz Carlos Rosa	A.P1.54
Luis Eugenio Fernandez-Outon	C.P1.43, C.P1.44, C.P1.55, F.P1.28, F.P1.61, R.OR9.34	Luiz Carlos Salay	A.P1.3, A.P2.103, A.P2.104
Luis F. C. Morato	R.P3.138, R.P3.168	Luiz Claudio Pardini	A.P1.30, A.P1.72, D.P1.14, V.P1.50
Luis Felipe Costa Gouvêa	M.P1.8	Luiz Eduardo de Angelo Sanchez	J.P1.22
Luís Fernando da Silva	E.OR2.5, E.P1.15, M.P1.6, N.OR2.5	Luiz Felipe Oliveira Faria	D.P1.6
Luis Frederico P. Dick	O.P1.10, O.P1.58, P.OR5.14, S.P1.25	Luiz Fernando Cótica	E.P1.11, E.P1.41, E.P1.8
Luis Gustavo Costa e Silva	K.P1.14	Luiz Fernando de Sousa Lima	H.P1.42, J.P2.124, O.P1.30
Luís Gustavo Duarte	L.P2.125	Luiz Fernando Gorup	J.P1.78, J.P1.79, R.P2.112, R.P2.90
Luis Gustavo Oliveira de Vasconcellos	R.P1.11	Luiz Fernando Lobato Silva	U.P1.7
Luis Gustavo Pacheco	J.P2.125	Luiz Fernando Zagonel	N.OR6.25, N.P1.22
Luis Henrique Chung Caravante	V.P1.41	Luiz Flávio Reis Fernandes	V.P1.16, V.P1.17, V.P1.36
Luis Henrique da Silveira Lacerda	N.P1.14, N.P1.33, N.P1.34, N.P1.54, N.P1.64	Luiz Francisco Malmonge	A.P2.91, B.P1.13
Luis Henrique de Lima	I.P1.2	Luiz Galvão Tizei	F.P1.6, N.OR6.25
Luis Marcelo G da Silva	B.P1.22, P.P2.49	Luiz Guilherme Ambrósio de Carvalho	L.P1.11
Luis Pereira	B.OR1.2	Luiz Guilherme Lomônaco Germiniani	B.P1.35
Luis Ricardo S. Kanda	J.P2.88	Luiz Gustavo Bonato	M.P1.16, O.P1.41, O.P1.45
Luis Vergara González	K.OR4.17, Q.OR3.12	Luiz Gustavo de Lima Guimarães	L.P1.11
Luis Vicente de Andrade Scalvi	N.OR6.22, N.P1.10	Luiz Gustavo Guimarães	A.P2.95
Luis Visani Luna	A.P2.132	Luiz Gustavo Hiroki Komatsu	F.P1.15, F.P1.70
Luiza Amim Mercante	A.P2.111, A.P2.126, J.P2.130, J.P2.137	Luiz Henrique Capparelli Mattoso	A.P2.126, B.OR3.10, B.OR3.7, B.P1.10, B.P1.11, B.P1.26, J.P2.130, J.P2.137, L.P1.22, Q.P1.15, Q.P1.21, Q.P1.25, Q.P1.8, V.P1.24
Luiza Baptista de Oliveira Freitas	R.P2.62	Luiz Henrique Galvão Tizei	N.P1.11
Luiza Botan Favalessa	J.P1.13, P.P1.11, R.OR5.17	Luiz Nunes de Oliveira	H.OR4.15
Luiza Cardoso Cintra	V.P1.44	Luiz Orlando Ladeira	A.P1.24, A.P2.118, F.P1.26, J.P1.86, L.P1.33
Luiza De Lazari Ferreira	O.P1.25	Luiz Sanches	B.P1.26
Luiza de Marilac Pantoja Ferreira	A.P1.49	Luiz Tadeu Fernandes Eleno	C.OR4.12
Luiza de Mattos Manica	L.OR5.16, L.P1.39	Luiz Travassos	R.P2.65
Luiza de Queiroz Corrêa	O.OR3.5	Luzeli Moreira da Silva	P.P1.1, P.P1.3
Luiz Angelo Berni	J.P2.135, K.P1.41	Luziana Bezerra Borralho	E.P1.6
Luiza Paula da Conceição Lopes	J.P2.109	Luziane Rosa Simões	R.P1.42
Luiza Spanamberg Silveira de Souza	L.P2.122	Lyane Costa	M.P1.17
Luiz Brito de Souza Filho	L.P2.84, L.P2.89	L. Y. LIU	C.P1.22, F.P1.40
Luiz Carlos Da Silva Filho	L.P1.21	Lyudmila V. Goncharova	N.P1.10
Luiz Carlos da Silva Nunes	I.P1.24, U.P1.8		
Luiz Carlos Mariano	L.P2.85		
Luiz Carlos Poças	L.P1.57, L.P2.98		
Luiz Carlos Robinson	V.P1.42		
Luiz Carlos Rolim Lopes	K.P1.27		

## M

Macarena p Ruiz	Q.OR3.12	Marcela Mohallem Oliveira	A.P2.134
Maciele Cristina Pegoretti	R.P1.28	Marcela Silva Lamoglia	K.P2.60
Machado		Marcella Cabrera Berg	B6RQ
Madalena Pinheiro Dias	R.OR5.15	Marcella Cogo Muniz	B2J6
Engler		Marcella Rocha Franco	L.P1.30, U.P1.14
Madson Albertini	L.P2.98	Marcelle Bruna de Mendonça Spera	I.P1.4
Magali Aparecida Rodrigues	R.P2.61	Marcello Ferreira da Costa	N.P1.49
Magda Bittencourt Fontes	B2VY, J.P2.139	Marcello R. B. Andreetta	C.P1.26, E.OR3.7, E.P1.16
Magda Sousa da Silva Gondim	N.P1.27, N.P1.68	Marcello Vertamatti	S.P1.12, S.P1.13
Magnum Augusto Moraes	J.P1.75	Mergulhão	
Lopes de Jesus		Marcel Miyamura Bonilha	C.P1.51
Magnus Gidlund	C.OR3.7, C.P1.42	Marcelo Alexandre De Farias	F.OR3.9, Q.OR2.5
Mahavir Singh	C.P1.1	Marcelo Antunes de Paula	K.P2.94
Maiara de Jesus Bassi	O.P1.44	Marcelo Aparecido Chinelatto	R.P3.171, V.P1.20
Maiara de Souza Magossi	J.P2.113	Marcelo Assumpção Pereira da Silva	L.P1.43
Maikel Yusat Ballester Furones	H.OR3.7	Marcelo Augusto Ferreira	H.P1.27
Mailson de Matos	B.P1.16	Marcelo Bento Pisani	F.P1.75, O.P1.56
Mainã Portella Garcia	K.P1.56	Marcelo Capella Campos	A.P2.144, J.P2.154, J.P2.93
Maira Costa Maftoum	R.P3.142	Marcelo de oliveira	F.P1.33
Maísa B. Costa	J.OR2.6	Marcelo de Oliveira Jesus	L.P2.73
Maiza da Silva Ozório	L.P2.100, L.P2.107	Marcelo de Sousa	A.P2.132
Manfredo Harri Tabacniks	F.OR4.12, J.P1.81, R.P2.103	Marcelo dos Santos Pereira	K.P2.115, K.P2.96
Manoel Carvalho Castro Junior	C.P1.36	Marcelo Eising	A.P2.136
Manoel Cleber de Sampaio Alves	J.P1.2, J.P2.121, J.P2.140, K.P2.106, K.P2.77, K.P2.99	Marcelo Evers	J.P1.48
Manoel Martins Filho	F.P1.53, V.P1.19	Marcelo Fernandes Cipreste	R.P1.16, R.P1.17, R.P2.66
Manoel Ribeiro da Silva	C.P1.40, E.P1.14, E.P1.50, K.P2.65, K.P2.70	Marcelo Fernandes Oliveira	R.P1.26, R.P2.79
Manuela Fontana	J.P1.35	Marcelo Franco	A.P2.104
Manuela Klaus	J.P1.34	Marcelo Ganzarolli de Oliveira	R.OR4.13, R.P2.76, S.P1.17
Manuel Antonio Ramos-Murillo	F.OR6.19	Marcelo Gonçalves Vivas	A.P1.9, I.P1.17, M.P1.27
Manuela Rizzi	Q.P1.17	Marcelo Huguenin Maia da Costa	R.P1.31
Manuel Banõbre-Lopez	R.P3.154	Marcelo José Gomes da Silva	K.P2.76, U.P1.10
Manuel Henrique Lente	E.OR4.13, E.OR5.16, E.P1.53, E.P1.54, F.P1.4, O.P1.20	Marcelo Knobel	C.OR3.10, C.OR3.8, C.P1.30, C.P1.33, C.P1.34, C.P1.37, C.P1.7
Manuel J. Mendes	B.P1.25	Marcelo Lancellotti	R.OR7.25, R.P2.125
Manuel Vieira	A.P1.61	Marcelo Lubaszewski	F.P1.30
Mara Adlay Andrade	J.P1.65	Marcelo Lucas Pereira	K.P2.121
Mara Canesqui	A.OR9.31, A.P2.123	Machado	
Marcela Dias França	N.P1.7	MARCELO LUIS SIQUEIRA	K.P1.37
Marcela Lacerda	B.P1.37	Marcelo Machado Viana	J.OR2.4, J.P1.69
		Marcelo Manoel Valentim	V.P1.38
		Bastos	
		Marcelo Marques da Silva	L.P2.107, L.P2.110
		Marcelo Martins	J.P1.40

Marcelo M Capovilla	K.P2.98	Marcio Cristiano Monteiro	E.P1.37
Marcelo Meira Faleiros	L.OR5.17	Marcio Gustavo Di Vernieri	P.P1.5
Marcelo Moizinho Oliveira	E.P1.58	Cuppari	
Marcelo Mulato	L.P1.1, L.P1.29, N.P1.62, R.OR3.7, R.OR9.35	Márcio Luiz dos Santos	R.P2.98
Marcelo O Orlandi	E.OR6.20, E.P1.1, E.P1.17, E.P1.36, E.P1.42	Márcio Mafra	I.P1.22, I.P1.28
Marcelo Pederiva	C.P1.52	Marcio Mateus Beloti	R.P2.84
Marcelo Porto Bemquerer	R.P2.61	Márcio Medeiros Soares	F.P1.64, J.P2.134, P.P2.73, T.P1.2
Marcelos Lima Peres	N.P1.12, N.P1.17, N.P1.29, N.P1.4, N.P1.43, N.P1.8	Marcio Nele de Souza	R.P2.82, R.P3.139
Marcelo Szymanski	R.P2.83	Márcio Nunes Zurlo	K.P2.124
Marcelo Telascrêa	U.P1.1	Márcio Paulo de Araújo Mafra	V.OR2.6
Marcelo T.P. Paes	K.OR3.8	Marcio Peron Franco de	N.P1.17, N.P1.50, N.P1.56, N.P1.6, N.P1.67, N.P1.9
Marcelo Vianna Nogueira	A.OR9.38, J.P2.119	Godoy	
Marcelo Vitor Ferreira	R.P3.148	Márcio Raymundo Morelli	E.P1.12
Machado		Marcio Roberto da Rocha	R.P1.9, V.P1.12
Marcel Yuzo Kondo	J.P1.9, J.P2.140, K.P2.77, K.P2.99	Marcio Sangali Cristino da	K.P1.44
Márcia Aparecida da Silva	R.P2.61	Silva	
Márcia Aparecida da Silva	B.OR1.1, B.P1.27	Marcio Sena Curvello	C.P1.65
Spinacé		Marcio Teodoro	N.P1.31
Marcia Carvalho de Abreu	P.OR6.21, R.P2.61	Marcio Venzon	D.P1.20
Fantini		Márcio Wandré Moraes de	R.P2.61
Márcia Cristina Breikreitz	R.P2.128	Oliveira	
márcia isabel de souza prado	T.P1.1	Marco Antonio Albuquerque	J.P1.14
Márcia Machado Marinho	S.P1.2	Gaspar	
Marcia Marie Maru	A.OR6.23	Marco Antônio Chaer	R.P1.31
Marcia M Kondo	V.P1.13	Nascimento	
Marcia Regina de Moura	A.P1.36, A.P1.37, A.P1.38, A.P1.39, A.P1.40, A.P1.6, A.P1.67, A.P1.68, A.P1.69, A.P2.92, S.P1.4	Marco Antonio Grinet	R.P3.142
Márcia Regina Russo	F.P1.39	Marco Antonio Modenes	A.P2.115
Márcia Rejane Santos da Silva	J.P2.127, J.P2.162	Junior	
Marcia Rodrigues de Moraes	U.P1.1	Marco Antonio Ramírez	A.P1.77, A.P2.129, J.P1.85
Chaves		Marco Antonio Schiavon	A.P1.9, I.P1.17, I.P1.18, I.P1.19, I.P1.20, L.P1.11, O.P1.16, O.P1.18, O.P1.21, O.P1.22, O.P1.24, O.P1.38, P.P2.81
Márcia Tsuyama Escote	C.P1.65, E.P1.2, P.P2.61	Marco Antonio Stanojev	G.OR3.8
Márcia Windson Costa	L.OR7.28	Pereira	
Caetano Greenshields		Marco Antonio Tito Patricio	N.P1.31
Márcio A. B. Fontan	G.P1.4	Marco Antonio Voinarovicz	V.P1.47
Márcio André Miranda	A.OR9.35	Marco Aurélio de Oliveira	E.OR3.8, P.P2.83
Marcio Aurélio Pinheiro	N.P1.53, N.P1.58	Marco Aurélio Toledo da Silva	L.P1.46, L.P1.57, L.P2.98, N.P1.25
Almeida		Marco César Soares	I.P1.11, V.P1.1
Marcio Celso Fredel	R.OR5.15, R.P3.162, R.P3.166	Marco Cremona	B.OR3.9, L.OR6.20, L.OR7.27, L.P2.114, L.P2.115
Márcio César Pereira	P.P2.71, P.P2.72	Marco Durlo Tier	K.OR2.4
		Marco Guarise	C.P1.68
		Marco Ramirez	R.P2.127

Marco Roberto Cavallari	L.OR3.9, L.P1.43	Marcos Massi	I.OR4.15, K.P1.8, O.P1.27, O.P1.4
Marcos Abreu Avila	C.OR6.22	Marcos P. Gonçalves	D.P1.21, J.P1.8
Marcos Akira d'Ávila	A.P1.42, A.P2.138, F.P1.24, R.P3.185	Marcos Roberto Cardoso	L.OR1.3
Marcos Allan Leite dos Reis	A.P1.49, A.P1.61, B2VG	Marcos Rolando Piccilli	K.P2.60
Marcos Antonio Coelho Berton	J.P1.38	MARCOS TADEU D ORLANDO ORLANDO	G.P1.6
Marcos Antonio Coelho Júnior	L.P1.20	Marcos Tadeu Tibúrcio Gonçalves	J.P1.22, J.P2.111
Marcos Antonio de Sousa	J.P2.139	Marcos Valério Ribeiro	J.P1.9, K.P2.94, K.P2.99
Marcos Antonio Eufrásio Cruz	R.P2.77	Marcos Vinicius Lorevice	A.P1.37
Marcos Antonio Moura de Sousa	L.P2.96	Marcos Vinicius Puydinger dos Santos	B6TQ, C.OR5.15
Marcos Antonio Pinto Martins	R.OR3.11	Marco Vinicius da Silva	J.P1.3
Marcos Antonio Santana Andrade Junior	O.OR4.16, O.P1.7	Marcus Antônio de Freitas Melo	U.P1.9
Marcos Antonio Villetti	P.P2.86, R.OR3.11	Marcus Giotto	I.P1.16
Marcos Assunção Pimenta	A.OR6.20	Marcus Lima Sousa	J.P2.158, J.P2.159
Marcos Augusto Lima Nobre	A.P2.101, E.P1.7	Marcus Nathan Silvestre	K.P1.11, K.P1.14
Marcos A. Z. Vasconcellos	J.OR3.9	Marcus Vinicius Castegnaro	F.P1.47
Marcos Benedito Jose de Freitas	J.P1.13, P.P1.10, P.P1.11, P.P1.19, P.P1.22, R.OR5.17, V.P1.7	Marcus Vinicius David Rangel e Silva	L.P1.14
Marcos Bizeto	R.P2.89	Marcus Vinicius de Lia Fook	R.P1.26, S.OR2.5
Marcos Cirilo dos Santos	K.P1.57, K.P1.58	Marcus Vinicius Gonçalves Vismara	L.P2.113
Marcos Davi de Carvalho Junior	E.P1.6	Marcus Vinicius Lia Fook	S.P1.10
Marcos de Abreu Avila	B6NB, C.P1.50	Marcus Vinicius Moreira	P.P1.45
Marcos de Aguiar Guimarães	K.OR2.6	Marcus Vinicius Salgado	K.OR3.11
Marcos de Paula Cougo	K.P2.97	Marcus Vinicius Silva	A.P1.8, E.P1.54
Marcos Farina	F.OR3.8	Maressa Vilela Garcia	J.P1.38
Marcos Geovanni de Souza Pinheiro	L.P1.40	Margarita Darder	A.P1.47
Marcos Gomes Eleutério da Luz	O.P1.59	Maria Adrina Paixão de Sousa da Silva	K.P1.20, K.P1.31, K.P1.32, K.P1.42, K.P1.9, V.P1.11
Marcos Gonçalves Júnior	J.P1.22	Maria Adrina Paixão de Souza da Silva	K.P2.73
Marcos Henrique Falcão da Costa	I.P1.24	María Alexandra Puerto Medina	D.OR4.8, D.P1.30, D.P1.4, D.P1.5
MARCOS HENRIQUE	L.P2.66	Maria Alice Carvalho Mazzeu	P.P2.54
MAMORU OTSUKA HAMANAKA		Maria Alice Martins	B.P1.23, B.P1.24, V.P1.24
Marcos Henrique P Wondracek	J.P1.23	Maria Alice Witt	R.P3.175
Marcos Jose Leite Santos	L.OR5.16, L.P1.39, M.OR2.5, M.OR2.6, M.P1.25, O.OR3.10, O.P1.12, O.P1.48, O.P1.50	Maria Angélica Briones	A.P1.2
Marcos Leandro Garcia Andrade	G.OR3.8	Maria Aparecida Miranda de Souza	A.P1.30
Marcos Lopes Dias	A.P1.25		
Marcos Lúcio Corazza	J.P2.88		

Maria Ap. Zaghete	A.OR9.38, A.P1.33, A.P1.78, A.P1.79, A.P1.80, A.P2.120, A.P2.81, A.P2.82, A.P2.83, A.P2.84, A.P2.86, A.P2.87, E.P1.44, J.P2.119, O.OR4.17	Maria Isabel Felisberti	J.OR3.13, R.P2.54, R.P3.132
Maria Bandeira Barroso	V.P1.26	Maria João Oliveira	B.P1.25
Maria Carolina Blassioli Moraes	R.P2.61	Maria Jose Bell	F.P1.12
Maria C. Asensio	I.OR3.7	Maria José Pontes	M.P1.34
Maria Clara Guimarães	A.P2.121	Maria José Valenzuela Bell	M.P1.17
Maria Pedrosa		Maria Julia Galera Ribeiro	R.P2.122
Maria Cláudia França da Cunha Felinto	C.P1.59, F.P1.14	Maria L. Braunger	L.P1.13, L.P2.120, L.P2.128
Maria das Graças da Silva Valenzuela	A.P2.143, A.P2.148	Maria Letícia Murta Valle	V.P1.44
Maria de Fátima Brito Sousa	J.OR1.2, J.P1.65	Maria Leticia Vega	L.P1.61, L.P2.89
Maria de Fátima Leite	R.P2.97	Maria Lucia Pereira Antunes	J.P1.29, J.P1.31, J.P2.99
Maria do Carmo de Medeiros	L.OR4.13	Maria Luisa Braunger	L.P2.119
Maria do Carmo Gonçalves	B.P1.2, B.P1.35, S.P1.17	María-Luisa García-Betancourt	M.OR5.15
Maria Domingues Vargas	C.OR3.5, C.P1.54	Maria Luisa Sartorelli	L.OR5.18
Maria Eduarda Tedesco Farina	K.P2.116	Maria Luiza de Oliveira Pereira	K.P2.69
Maria Elena Leyva	L.P2.133, S.P1.18, S.P1.24, U.P1.4	Maria Luiza Miranda Rocco	A.P1.28, L.P2.85, O.P1.33
Maria Eleonora Andrade de Carvalho	J.P2.161	Mariana Agostini de Moraes	R.OR6.19
María Esperanza Cortés	R.P1.20, R.P2.75	Mariana Amorim Fraga	J.P1.43, J.P1.6
Maria Eunice Carvalho Tosello	V.P1.37	Mariana Andrade Boense Tavares	N.P1.4, N.P1.8
Maria Euride Cancino	Q.OR3.8	Mariana Banea	I.OR4.20
Maria Fernanda de Souza Ferreira	J.P1.41	Mariana Botelho Barbosa	A.P1.14, R.P2.86
Maria Fernanda Romeu Lino de Souza	J.P2.169	Mariana Charleaux Tabchoury	O.P1.52
Maria Gabriela Nogueira Campos	R.P1.13, R.P2.58	Mariana Couto Siqueira	P.P1.47
Maria Helena Ambrosio Zanin	R.OR3.10, R.OR6.20	Mariana Cuba Faraco	R.P3.137
Maria Helena Andrade Santana	R.P1.39, R.P2.126	Mariana de Mello Timm	F.OR4.11, G.P1.3
Maria Helena Brijaldo	I.P1.15	Mariana de Oliveira Carlos Villas Boas	R.P2.124
Maria Helena Carvalho da Costa	C.P1.47, C.P1.56	Mariana de Oliveira Silva	R.P3.184
Maria Helena Piazzetta	L.P2.80, N.P1.23	Mariana de Souza Magossi	J.P2.155
Maria Iliut	A.P2.140	Mariana de Souza Sikora	I.P1.7, J.P1.77, R.P2.101, R.P2.102, R.P2.106
Maria Inês Basso Bernardi	F.P1.29, F.P1.36, F.P1.49	Mariana Dias de Matos	L.P1.57
Maria Inês Bruno Tavares	B.P1.34	Mariana Fachin Lopes	J.P1.72
Maria Inez Graf de Miranda	V.P1.42	Mariana Felix Iastrenski	N.P1.32, N.P1.48
		Mariana Gava Segatelli	A.P1.18, A.P2.109, J.P1.17, N.P1.32, N.P1.48, N.P1.49, N.P1.51
		Mariana Helena Chaves	R.P1.47
		Mariana Marina Brito De Carvalho	A.P1.18
		Mariana Martins de Oliveira Netto	L.P1.6
		Mariana Mazetto Gazola	K.P1.10
		Mariana Moraes Góes	V.P1.6
		Mariana Motisuke	S.P1.19

Mariana Nica Zavarize Nica	N.OR4.16, N.P1.11	Marina Sparvoli	A.OR6.22, A.OR7.27, O.P1.17
Mariana Oliveira Diniz	N.P1.63	Marina Sparvoli de Medeiros	A.P1.55
Mariana Paola Cabrera	R.P3.161	Marin van Heel	F.OR3.9
Mariana R. Camilo	P.P1.38	Mário Almeida Araújo	R.P2.91
Mariana Riboli Nava	J.P2.156	Mario Cannas	R.OR4.12
Mariana Richelle Pereira da Cunha	L.P2.91	Mario Cilense	E.OR6.21
Mariana Rodrigues Xavier	R.P3.161	Mario de Oliveira Neto	B.P1.31
Mariana Xavier Milagre	J.P1.56	Mario Edson Santos Sousa	A.P1.61
Mariandry dell Valle Rodriguez	P.P2.71, P.P2.72	Mario Galhiane	J.P2.93
Mariane Alves de Andrade e Silva	J.P2.109	Mario Henrique Gonzalez	V.P1.15
Marianna Teixeira de Pinho Favaro	R.P2.83	Mário Lúcio Moreira	M.P1.20, M.P1.6, N.OR2.4, N.P1.28, N.P1.66, O.P1.5
Mariano Andrés Arbelo	A.OR9.32	Mario Moda Piva	C.P1.11, C.P1.12, C.P1.20, C.P1.72, C.P1.73, C.P1.9
Marian Rosaly Davolos	J.OR1.3	Mario Santoro	D.OR2.4
Mariany Ludgero Maia Gomes	A.P2.98, A.P2.99	Mário Sérgio de Carvalho	I.OR1.2
Maria Palmira Daflon Gremião	B6CW	Mazzoni	
maria paula peixoto	A.P1.41	Mario Ueda	I.P1.26
Maria Quintana	A.P1.2, A.P2.141	Marisa Masumi Beppu	A.P2.138, I.P1.4, R.OR6.19, R.OR6.21, R.P3.160, R.P3.183
Maria Raquel Natali	Q.OR3.8	Marisa Raquel Rodrigues	A.P2.93
Maria Rita de Cássia Santos	N.P1.20	Marisol Maril	F.P1.19
Maria Roberta de Oliveira Pinto	S.OR2.5	Maristela Olzon-Dionysio	J.P1.33
Maria Rosana E. Silva	O.P1.60	Marivalda Magalhães Pereira	R.P2.97
Marie-Ingrid Richard	N.OR4.15	Mariza Fernandes Fernandes	J.P1.68
Mariela Alves e Silva	R.OR9.34	Marizilda Escudeiro Oliveira	J.P2.92
Mariela Nolasco	L.P2.131	Marjorie Benegra	J.OR3.8
Marilene Henning Vainstein	S.P1.25	Mark Lindsay	R.OR3.7, R.OR9.35
Marilene Morelli Serna	O.P1.19	Markus Niederberger	E.OR2.5
Marília Evelyn Rodrigues Oliveira	J.P2.157	Markus Strobl	G.OR3.7
Marília J. Caldas	A.OR3.11, H.P1.41	Marli Ferreira	L.P2.122, L.P2.126
Marília Oliveira Goulart	L.P1.23, L.P1.27, L.P1.31	Marli Leite de Moraes	J.P2.168, R.P2.71
Marília Páscoa Pirralho	N.P1.12, N.P1.17, N.P1.29, N.P1.4, N.P1.43	Marlo Costa Oliveira	K.P1.26, K.P1.43, K.P2.73
MARILZA SAMPAIO AGUILAR	R.P3.148	Marlus Koehler	L.P2.77, L.P2.85, O.P1.2, O.P1.40, O.P1.59
Marina Fernandes Cosate de Andrade	A.P1.21, A.P2.123	Marly Eiko Osugi	J.P1.74
Marina Ferreira de Souza Machado	E.P1.35	Maroanne Farinácio Dos Santos	R.P2.59, R.P2.63
Marina Fuser Pillis	J.P2.171, J.P2.97	Marta Elisa Rosso Dotto	L.P2.137
Marina G Martins	A.OR9.34	Marta E. R. Dotto	L.P2.126
Marina Gomes Murta Moreno	M.P1.2	Martina Ramella	R.OR4.12
Marina Judice Silva	A.P2.142	Martin Cruickshank	A.OR9.34
Marina Moraes Tófilo	F.OR1.2, F.OR1.3	Martin Eduardo Espitia	F.OR2.6, F.P1.60, H.P1.7
Marina Ribeiro Batistuti	R.OR3.7, R.OR9.35	Martín Eduardo Saleta	C.P1.20
Marina Richena	P.P2.70	Martin J. Hytch	N.OR3.11
Marina S Leite	M.OR1.3, O.OR2.3		

Martin Mendoza	L.OR6.20	Mauricio Ribeiro Baldan	A.P1.5, A.P1.54, A.P2.98, A.P2.99, J.P1.15, J.P1.19, J.P2.94, K.P2.68, P.P1.25, P.P2.68, P.P2.69, R.P2.57, R.P2.80, R.P3.156
Maryanna Nobre Cavalcante	F.P1.73	Maurício Ribeiro Baldan	A.P1.1, A.P2.94, C.P1.21, J.P2.132, P.P2.54, P.P2.66
Maryanne Trafani de Melo	R.P1.35, S.P1.16	Maurício Silva Nascimento	K.P1.1, K.P1.46
Mary Cristina F Alves	J.P2.127, J.P2.152, J.P2.162	Maurício Sousa Pereira	O.P1.9
Maryline Guilloux-Viry	J.OR4.16	Mauricio Terrones	A.P2.134
Marystela Ferreira	L.P1.16, L.P1.9, L.P2.119, R.P2.71	Mauricio Vicente Donadon	A.OR9.32
Marzena Kmiec	B2VE	Maurizio Musso	F.P1.38, F.P1.69
Massahiro Miyamoto	D.P1.9	Mauro Bertotti	A.P2.102
Massilon O. Luizon	I.P1.9	Mauro Carlos Costa Ribeiro	D.P1.6
Matej Mayer	F.OR4.12	Mauro Cesar de avila	A.P1.71
Mateus Borba Cardoso	R.P2.115	MAURO CESAR TERENCE	A.P2.125
Mateus Botani Dias	E.P1.4	Mauro Coelho dos Santos	J.OR5.19
Mateus Dassie Maximino	L.P1.15, R.P3.172	Mauro Ernesto Júnior	C.P1.24
Mateus Gallucci Masteghin	E.OR6.20, E.P1.17, E.P1.36	Mauro Meliga Wysard	J.P1.45, J.P1.50
Mateus Vinicius de Paiva	A.P2.114, K.P2.104, K.P2.117, R.OR5.16	Mauro Pedro Peres	J.P1.37
Matheus Carlos Romeiro	R.P2.74, R.P2.98	Mauro Pinheiro Silva	A.OR7.27, A.P1.55
Miranda		Mauro Vanderlei Amorim	H.P1.37
Matheus Deister Veiga	A.P1.14	Mauro Vestena	B.P1.6
Matheus Eiji Ohno Bezerra	E.P1.48	Mawin J. M. Jimenez	L.P1.13, N.P1.23
Matheus Feres Freitas	L.P1.29	Max G. Lagally	N.OR4.15
Matheus Guthemberg Setter	L.P2.129	Maximilian da Rosa	P.P1.27
Matheus Machado Silva	B2VE	Bretschneider	
Matheus Radaelli	C.P1.11, C.P1.12, C.P1.20, C.P1.72, C.P1.9	Maximiliano Delany Martins	A.OR6.25, I.OR1.3, I.P1.3, R.P1.51, R.P2.87
Matheus Santos Pereira	L.P1.15	Maximiliano Segala	J.P2.160
Matheus Serra de Holanda	O.OR4.12	Maxim Korytov	N.OR3.11
Mathias Bernhard Steiner	I.OR4.19, L.OR1.2	Máximo Siu Li	A.P1.73, A.P1.74, A.P1.76, A.P2.86, F.P1.21, N.P1.15, N.P1.24, N.P1.58, O.P1.61
Mathias Strauss	F.P1.1, Q.OR1.3, Q.OR2.4, Q.OR2.6	Maxímo Siu Li	E.P1.21
Mathieu Kociak	N.OR6.25	Maxi Neidhardt	RIG.1
Mathilde Champeau	R.OR4.13, S.P1.17	Max Passos Ferreira	A.P1.10
Matias Eliseo Melendez	L.P1.10, L.P1.5, L.P1.7	Maya Dayana Penha da Silva	A.P1.75
Matias Eliseo Menlendez	L.P1.59, L.P1.8	Mayanny Gomes da Silva	P.P1.1
Matjaz Spreitzer	E.OR6.18	Mayara Carla Uvida	J.P2.142
Matt Bergren	M.OR3.8	Mayara de Brito Dias	V.P1.10
Matteo Ceppatelli	D.OR2.4	Mayara dos Santos Amarante	E.P1.22, F.P1.4
Matteo Pasquali	S.OR1.3	MAYCON JHONY SILVA	V.P1.24
Mattia A Lucchini	E.OR2.5	Maycon Motta	C.OR6.21
Maurício Antonio Pereira da Silva	H.P1.22, M.P1.1, M.P1.32	Maycon Rotta	A.P2.91, C.P1.13
Mauricio Arias	M.P1.3	Mayelli Dantas de Sá	R.P1.26, S.P1.10
MAURICIO DAVID	S.P1.12, S.P1.13		
MARTINS DAS NEVES			
Maurício Eiji Camilo	M.P1.35		
Maurício Pamplona Pires	F.P1.22, I.OR3.12		
Maurício Pinheiro de Oliveira	J.P2.131, S.P1.3		

Maykel dos Santos Klem	L.P2.106, L.P2.112, L.P2.136	Miguel Adriano Inácio	J.P1.84
Maykol Damasceno Oliveira	L.P1.61, L.P2.93	Miguel Angel Cobos	K.P2.66
Mayrane Carla Nascimento	L.P1.23, L.P1.27, L.P1.31	Miguel Angel Gonzalez Balanta	N.P1.16, O.P1.23
Maysa Terada	K.P2.118	Miguel Angelo do Amaral Junior	A.P1.5, P.P1.25, P.P2.69
Mbela Mabaya	A.P2.149	Miguel Angel Ramírez Gil	V.P1.3
Meg Carolyn Moraes dos Santos	K.P2.100	Miguel A. San-Miguel	I.OR2.6, I.OR3.11
Mehrad Ahmadpour	O.OR3.6	Miguel Henrique Boratto	N.P1.10
Meike Stöhr	B2DY	Miguel Jafellicci Júnior	A.OR8.29, J.OR1.3, J.P2.101, R.P1.13
Meire Noriko Hosokawa	V.P1.5	Miguel Ramos Jr.	R.OR6.18, R.P2.111
Meirinalva Batista Miranda Coelho	E.P1.57, E.P1.58	Miguel Tayar Galante	P.OR3.7
Melina Espanhol Silva	R.P1.42	Miguel valentin Iginó	J.P1.38
Melina Mituo	A.P1.21	Mikaela Darós	A.P1.71
Melissa F. Siqueira Savedra	U.OR3.7	Mikaelly Daiany Ferreira Borges	C.P1.36
Méri Domingos Vieira	N.P1.19	Mikhail Yablonskikh	B2DY
Mérlin Cristina dos Santos Fernandes	K.P1.40, R.P2.58	Milady R. Apolinário Silva	V.P1.13
Meryem Tyrasch Ok	R.P2.83	Mildred Awuor Airo	L.OR7.28
Messai A. Mamo	L.OR7.28	Milena Martelli Tosi	B.OR2.3
Mian Abdul Ali	L.P1.18	Milena T. Pelegrino	R.OR1.3
micael maximo almeida	K.P1.4	Milton Mori	IN.3
Michael Beierlein	S.OR1.3	Milton Sergio Fernandes de Lima	K.P1.52
Michael Cabrera Baez	B6NB, C.P1.50	Milton S. Torikachvili	G.P1.1
Michael Engel	L.OR1.2	Min Bag	R.OR3.6
Michael Fokine	M.P1.29	Mirabel Cerqueira Rezende	A.P1.26
Michael F Rubner	R.OR6.21	Mircea Guina	N.P1.16
Michael Jackson Vieira da Silva	R.P3.149, R.P3.192	Miriã Cristina Santos	S.P1.14
Michael Jones Silva	B.P1.13	Mirian de Lourdes Noronha Motta Melo	B6RV, K.P1.2, K.P1.3, K.P1.37, K.P1.49, K.P1.50, K.P1.51, K.P1.54, K.P1.58, K.P2.65, K.P2.70, K.P2.72, K.P2.74, K.P2.81, K.P2.83, K.P2.97
Michael Maquera	S.OR1.1	Mirosław Maczka	D.P1.1
Michael Peterson	P.P2.95, R.P1.28	Mirta Ines Aranguren	C.P1.7
Michael S. Roberts	A.P1.48	Mirtânia Antunes Leão	S.P1.22
Michel Chaves	N.P1.21, N.P1.35	Mitsuo Lopes Takeno	K.P2.100
Michele Gastaldo	A.OR6.25	M K Chattopadhyay	C.OR6.19
Michele Munk Pereira	Q.P1.26, Q.P1.27	Mohamed Henini	J.P2.110, N.P1.16, O.P1.23
Michele Odnicki da Silva	O.P1.36, O.P1.37	Mohammad Kabbani	A.OR3.10
Michele Rocha Rezende	R.P1.16, R.P1.17	Mohammad Reza Dousti	M.P1.14, M.P1.33
Michele Stanziola Knychala	K.P2.88	Mohammed ELMASSALAMI	D.OR1.3
Michelle Chizzolini Barbosa	R.P3.181	Moises Renato Nunes Ribeiro	M.P1.34
Michelle Franz-Montan	R.P2.128	Mônica Akemi Bando	A.P2.124
Michelle Santos	I.OR4.18, J.P1.54, J.P1.55	Monica Alberto	A.P2.140
Michelle S. M. Pinheiro de Oliveira	N.P1.27, N.P1.68		
Michelle Sostag Meruvia	B.P1.14, R.P2.79		
Michel Muálem de Moraes Alves	R.P1.47		
Michel Venet Zambrano	E.P1.13, E.P1.28, E.P1.29		
Miguel Abbate	I.OR3.13		

Mônica Alonso Cotta	F.P1.6, N.OR4.16, N.P1.11, N.P1.22, N.P1.44, R.OR7.25	Natália Sabatini	P.P1.48
Monica Barroso	P.P2.90	Natália Sabes Sabatini	P.OR3.7
Mónica Cristina García	H.P1.4	Natal Nerímio Regone	B6WQ, R.P1.3
Mônica Cristina Melquíades	L.P2.114	Nataly Cristine Campos	R.P3.148
Monica Lira-Cantu	O.P1.6	Natana Aparecida Jesus	R.P2.78
Mônica Sumie Hieda	E.P1.4	Natan Mendes Casero	N.P1.28
Monica Yamauti	R.P1.33	Natan Roberto de Barros	R.P2.74
Monique Camille Camargo	C.P1.64	Natasha A. D. Yamamoto	O.P1.59
Monique Osorio Talarico da Conceição	F.P1.17	Natasha D.A. Yamamoto	O.P1.51
Monize Martins Silva	L.P1.53	Natasha Mirela Inhã Godoi	J.P1.25
Morten Madsen	O.OR3.6, O.OR3.9	Nathalia Barone Oliveira	P.P2.49
Muhammad Sufaid Khan	P.P1.44	Nathália B. Tomázio	J.P2.137, L.OR1.3
Munir Salomao Skaf	H.OR3.8, H.OR3.9	Nathalia Caroline Ferreira	A.OR9.34
Murillo Longo Martins	G.P1.5	Menezes	
Murilo de Araújo	J.P1.27	Nathália de Souza Giolo	F.P1.8
Murilo Fernando Gromboni	P.P2.75	Nathalia Marinho Costa	D.P1.1
Murilo Ferreira Marques Santos	I.P1.11, V.P1.1	Nathália Oliveira Braga	L.P1.32, R.P1.24
Murilo Henrique Moreira	A.P2.111, A.P2.126, A.P2.130	Nathalia Peixoto	S.OR1.1
Murilo Pires de Lima	A.P2.114, K.P2.104, K.P2.117, R.OR5.16	Nathalie de Oliveira Lunardi	L.P1.44
Murilo Santhiago	N.OR3.9	Natielly Andressa da Silva Souza	J.P2.108
Murilo Velo	B6TQ, C.OR5.15	Navadeep Shrivastava	C.OR3.8, C.P1.35, C.P1.5, C.P1.59
<b>N</b>			
Nadia Guerra Macedo	A.P1.22	Nayra Reis Nascimento	A.P2.107
Nádia Regina Jaste Cardoso	K.P2.113	Nazir Monteiro dos Santos	I.P1.26
Nadine Pébère	I.P1.31	Neftalí Lenin Villarreal Carreño	B4ZA, E.OR5.15
Nadine Witkowski	O.OR3.6	Neide Aparecida Mariano	K.P1.40, K.P1.44, R.P2.58
Naiara Letícia Marana	N.P1.35	Neidenei Gomes Ferreira	A.P1.59, A.P2.130, P.P2.51, P.P2.52
Naiara Zambianco	L.P1.12	Neil John Coville	L.OR7.28
Naira Maria Balzaretto	D.OR4.8, D.P1.23, D.P1.30, D.P1.4, D.P1.5, D.P1.7	Neil McKeown	O.OR3.11
Nanlin Zhang	M.OR3.7	NEILO M TRINDADE	N.P1.35
Nara Regina de Souza Basso	A.P1.27, A.P2.112	Nelcy Della Santana Mohallem	J.OR2.4, J.P1.75, J.P2.124
Narcizo Souza Neto	D.OR3.6, D.OR3.7, D.P1.29	Nelcy D. S. Mohallem	H.P1.42, J.P1.69, O.P1.30
Nardiny Diego Souza Alves	K.P2.84	Nelida Simona Marín Huachaca	A.P1.3
Natália Cristina Silva	B.OR2.3	Nelson Betolucci	J.P2.93
Natália de Faria Coutinho	O.P1.34	Nelson Durán	Q.OR3.7, Q.P1.3, Q.P1.6, Q.P1.7
Natália Ferreira Braga	R.P3.153	Nelson Fabian Villegas Borrero	M.OR6.20, O.P1.29
Natalia Kondo Monteiro	E.P1.32, E.P1.35	Nemitala Added	F.OR4.12
Natália Marassi Martinelli	R.P2.122	Neri Alves	E.P1.43, L.P2.100, L.P2.106, L.P2.107, L.P2.110, L.P2.112, L.P2.136, U.P1.5
Natália Neto Pereira Cerize	C.P1.58	Neus G. Bastús	C.OR3.6
Natália Noronha Ferreira	B6CW	Neusmar Junior Artico Cordeiro	L.P2.127, N.P1.47
Natalia Romero de Oliveira	R.P3.135		

Newton Adriano dos Santos Gomes	P.P1.25, P.P2.69	Oleksii Ivashchenko	B2DY
Newton Martins Barbosa Neto	A.P1.61, L.P1.52, L.P1.53, L.P1.55	Oliver G. Schmidt	M.P1.39, N.OR4.15
Newton Soares Silva	R.P1.5	Olivia Carr	L.OR6.21, L.P1.10
Ney Mattoso	F.P1.31	Olivier Cambon	D.OR2.4
Nguyen Ngoc Duy	C.OR6.21	Oneide Chire Quispe	E.P1.49
Nicele Brito Pimentel	P.P2.93	Orisson Ponce Gomes	R.P2.85
Nicola Pugno	H.OR3.11	Orlando Fatibello Filho	A.P2.139
Nicolas P. Vizarim	C.P1.2	Orlando Lima Ferreira	J.P1.38
Nicolau Molina Bom	D.P1.31	Orlando Rodrigues Jr.	P.P2.60
Nicolle Ruppenthal	L.OR5.18	Orleancio Gomes Ripardo Azevedo	S.P1.21
Niels Resandt Wijnaendts Van Resandt	EXP4.8	Oscar Ávalos Ovando	N.P1.13
Nikifor Rakov Gomez	M.P1.23	Oscar Ferreira de Lima	C.OR6.20
Niko Churata Mamani	P.P2.92	Oscar Gomis	D.OR2.5
Nikolay Cherkashin	N.OR3.11	Oscar Moscoso Londoño	C.OR3.10, C.OR3.8, C.P1.30, C.P1.33, C.P1.34, C.P1.37
Nikos Tsierkezos	O.OR3.9	Oscar Olimpico Araujo Filho	J.P2.171
Nilo Cano	D.P1.9	Oscar Samuel Cajahuaringa Macollunco	H.OR3.10, H.P1.19
Nilo Francisco Cano	G.P1.7	Osmar R. Bagnato	C.P1.31, J.P1.8, K.P2.98
Nilsa Toyoko Azana	A.OR2.4	Oswaldo Antonio Serra	R.P1.36
Nilson Cristino Cruz	B.P1.18, I.P1.6, J.P1.29, J.P1.30, J.P1.31, J.P1.42, J.P1.46, J.P1.47, J.P1.61, J.P2.153, J.P2.172, J.P2.99, R.P2.103, R.P2.123, R.P2.55	osvaldo freitas	A.P1.41
Nilson T. C. Oliveira	R.P2.56, R.P2.88	Oswaldo L Alves	Q.P1.16
Nilton Alves	V.P1.50	Oswaldo Novais Oliveira Jr	B6AN, J.P2.168, L.OR6.21, L.P1.10, L.P1.22, L.P1.24, L.P1.5, L.P1.59, L.P1.7, L.P1.8, L.P2.96, M.OR5.12, ME.2, N.OR2.5, O.P1.26, R.OR3.8, R.P1.2, R.P1.48, R.P3.138, R.P3.165
Nilton Francelosi Azevedo Neto	J.P1.83, N.P1.18, P.OR5.15, R.OR8.28, R.P2.85	Oswaldo Luiz Alves	A.OR6.18, A.P2.132, Q.P1.24
Niravkumar Jitendrabhai Joshi	L.P1.59, N.OR2.5	Oswaldo Nunes-Neto	L.P2.113
Nivia Salles Santos	R.P1.40	Otávio Alonso Freire Alves	L.P2.82
Noboru Hioka	R.P1.30	Otávio Fernandes Lima da Rocha	K.P1.20, K.P1.26, K.P2.113, K.P2.73, K.P2.84
Norbert Koch	O.OR1.1	Otávio Vilaça Mesquita	U.P1.12, U.P1.13
Norma E Marcovich	C.P1.8		
Norma Maria Pereira Machado	P.P1.17		
Nosipho Moloto	L.OR7.28		
N. Pugazhenthiran	O.P1.28		

## O

Obaid-Allah Adami	C.OR6.21
Odair Gonçalves Oliveira	E.P1.11, E.P1.8
Odila Florencio	A.P2.131, E.P1.28
Odilio Assis	L.P1.22
Odilio B. G. Assis	B.OR2.3
Oigres Daniel Bernardinelli	S.P1.15
Oleksandr Voznyy	M.OR4.9

## P

Pablo A. Venegas	C.P1.14, C.P1.2
Pablo Bruno Paiva Leão	K.P2.76
Pablo D. Borges	H.P1.15
Pablo Forlam Ribeiro Batista	C.P1.43, C.P1.44
Pablo Henrique Menesez	N.P1.46

Pablo Roberto Rovani	D.OR4.8, D.P1.27, D.P1.7	Patricia Vilhena Dias Andrade	Q.P1.26, Q.P1.27
Pablo Santana Lemos	N.P1.27, N.P1.3, N.P1.36, N.P1.61, N.P1.68	Patrick Conti	B.P1.36, C.P1.63
Pablo Tancredi	C.P1.34, C.P1.37	Patrick Verdonck	J.P1.63
Pablo Tobosque	F.P1.19	Pau Güell	C.OR3.6
Paloma Bispo Coelho	S.P1.20	Paula Andreia Petrini	N.P1.52
Pamela Cristina Smecellato	P.P1.22	Paula Aragão Lima	Q.P1.3, Q.P1.6, Q.P1.7
pamela saavedra	K.OR4.17	Paula Caldas	F.P1.22, F.P1.46, M.P1.29
Pâmela Sabrina Bento	F.P1.16, J.P2.166	Paula Cardoso Lauar	K.P1.52
Pamela Thais Sousa Melo	A.P1.36, A.P1.37	Paula Cristina Faria-Tischer	R.P2.53, V.P1.8
Pâmella Rayo de Luar Campos Gonçalves	E.P1.57, E.P1.58	Paula C. Rodrigues	L.P1.34, L.P1.48, L.P1.61
Pãmyla Layene dos Santos	A.P1.23	Paula do Patrocínio Dias	V.P1.20
Paola Ayala	F.OR6.17	Paula Fabiana Santos Pereira	J.P2.116, J.P2.167, N.P1.27, N.P1.36
Paola Corio	M.P1.30	Paula Fabíola Pantoja Pinheiro	B2VG
Paola Egert Ortiz	J.P2.89, V.P1.10	Paula Kekes Aal	F.P1.43
Paola Gay dos Santos	M.P1.6	Paula Lins	Q.OR3.8, Q.P1.22
Paras Prasad	L.P2.130	Paula Maria Gabriela Leal Ferreira	P.P2.61
PASCAL ROUSSEL	E.OR1.3	Paula Martins da Silva	T.P1.3, T.P1.6
Pascoal G. Pagliuso	B2VY, C.P1.11, C.P1.12, C.P1.18, C.P1.19, C.P1.20, C.P1.25, C.P1.48, C.P1.60, C.P1.72, C.P1.73, C.P1.9, D.P1.28	Paula Mendes Jardim	F.OR2.4, F.OR2.5, F.P1.17
Pascoal José Giglio Pagliuso	C.OR6.20	Paula Nascimento	A.P1.52
Patrícia Alejandra Merino Figueredo	J.P1.79	Paula Oliveira Braga	N.P1.12, N.P1.4, N.P1.43
Patrícia Alexandra Antunes	R.P2.104, V.P1.37	Paula Pereira Campos	R.P2.71
Patrícia Almeida	R.P1.19	Paula Pereira Janusonis	K.P2.112
Patrícia Beneditini Martelli	A.P2.100, A.P2.95	Paula Ruhnke Valério	V.OR1.3
Patrícia Capellato	R.P2.96	PAULA SALINO RIBEIRO	A.P1.46
Patrícia Carvalho Garcia	T.P1.3, T.P1.6	Paula Sevenini Pinto	F.P1.61
Patrícia Corrêa	R.OR8.28	Paula Silvia Haddad	Q.OR1.2, R.OR1.3
Patrícia Cristiane Santana da Silva	A.P2.129	Paulo Alliprandini Filho	F.P1.69, L.P1.52, L.P2.78
Patrícia de la Presa	K.P2.63, K.P2.66	Paulo Augusto Nardi	N.P1.2
Patrícia Fernanda Andrade	B.P1.35	Paulo Augusto Raymundo Pereira	L.P1.24, L.P1.7
Patrícia Francatto	J.P1.78, J.P1.79	Paulo Barbeitas Miranda	O.OR2.4, R.P3.165
Patrícia Léo	C.P1.58	Paulo César Borges	I.P1.22, I.P1.29
Patrícia L Souza	A.OR3.7, F.P1.22	Paulo César de Camargo	P.P1.2
Patrícia Lustoza Souza	I.OR3.12	Paulo Cesar Rabelo	J.P1.20
Patrícia Mariana Alves Caetano	F.P1.28, F.P1.61, R.P1.32	Paulo Cesar Reis Filho	E.P1.19, V.OR2.6
Patrícia Mendonça Pimentel	C.P1.31, K.P2.98	Paulo Cesar Soares Jr	D.P1.23
Patrícia Oliveira de Andrade	R.P3.142	Paulo de Tarso Cavalcante Freire	D.OR3.7, U.P1.7
Patricia Prediger	A.P2.137	Paulo de Tarso Vieira Rosa	R.P3.159
Patricia Rivas	C.P1.37	Paulo Ernesto Marchezi	O.P1.32
Patrícia Salvador Tessaro	O.P1.49	Paulo Ferreira	F.OR3.7
Patricia Santos Lopes	A.P1.48	Paulo F. P. Fichtner	C.P1.64, F.OR4.11, G.P1.3, O.OR3.6
		Paulo Franzen	M.P1.28
		Paulo Freitas Gomes	B6YF

Paulo Henrique Assis	R.P3.147	Pavlina Ruleova	D.OR2.5
Paulo Henrique Camani	J.P2.143	Pawan Jolly	R.OR3.7, R.OR9.35
Paulo Henrique de Sousa Picciani	L.P1.32, R.P3.164	Pedro Akiama Couto Borges	K.P1.27
Paulo Henrique Dias Ferreira	J.P2.110, M.OR6.19	Pedro Akira Bazaglia Kuroda	K.P2.105, R.OR8.27
Paulo Henrique Michels Brito	J.P2.145	Pedro Alejandro Orellana	N.P1.13
Paulo Henrique Paulista	K.P1.17, K.P1.18	Pedro Alves da Silva Autreto	A.OR3.10, A.OR3.9, H.P1.27, I.OR2.5
Paulo Henrique Pereira	O.P1.22	Pedro A. P. Nascente	I.OR3.10, I.P1.1, R.OR9.31, R.P2.56
Paulo Henrique Rappl	N.P1.12, N.P1.29, N.P1.4, N.P1.43, N.P1.8	Pedro Arthur Castro	A.P2.106
Paulo Henrique Vaz Silva	A.P2.118	Pedro Augusto de Andrade Novaes	R.P3.191
Paulo Henrique Xavier	P.P2.92	Pedro Barquinha	B.P1.19
Paulo Inácio da Costa	A.P2.120	Pedro Bell Santos	K.P2.116
Paulo Inforcatti Neto	R.P1.26, R.P2.79	Pedro Carrilho Inácio	L.OR4.13
Paulo José Pereira de Oliveira	H.P1.20	Pedro Cicolin Leme	L.P2.95
Paulo Junho Oliveira	K.P1.49	Pedro da Silva Craidy	K.OR3.8
Paulo Lourenço Monteiro Junior	K.P1.42, K.P1.9, K.P2.84	Pedro de Freitas Façanha Filho	D.P1.2
Paulo Noronha Lisboa-Filho	J.P1.83, N.P1.18, P.OR5.15, Q.P1.5, R.OR7.25, R.P1.1, R.P2.85	Pedro de Souza Ciacco	K.P2.70
Paulo Pedro Kenedi	I.P1.24, K.OR2.5, K.P1.21	Pedro Estrela	L.OR6.19, R.OR3.7, R.OR9.35
Paulo Ricardo Garcia	B6BK	Pedro Flório	R.P2.84
Paulo Roberto Bueno	L.OR6.22	Pedro G. Demingos	L.OR5.16, L.P1.39, M.OR2.6
Paulo Roberto da Silva Ribeiro	J.P2.158, J.P2.159	Pedro Henrique Benites Aoki	J.P2.144, R.P3.138, R.P3.168, R.P3.177
Paulo Roberto dos Santos Salbego	R.OR3.11	Pedro Henrique Cury Camargo	M.P1.40, R.P3.158
Paulo Roberto Gomes Alves	J.P2.111	Pedro Henrique de Oliveira Nogueira	O.P1.62
Paulo Roberto Mei	J.P1.40	Pedro Henrique Pereira	A.OR3.7
Paulo Roberto Ranzan Britto	G.P1.4	Pedro I. Paulin Filho	R.P2.56
Paulo Rogério Catarini da Silva	P.P1.15, P.P1.18, P.P1.20, P.P1.21	Pedro Ivo Cunha Claro	B.OR3.7, B.P1.26, B.P1.4
Paulo Sergio Calefi	K.P2.86	Pedro Ivo Rodrigues Moraes	H.P1.1, H.P1.9
Paulo Sérgio da Silva Junior	A.P2.131, E.P1.13, E.P1.28, E.P1.29	Pedro K. Kiyohara	C.OR2.3
Paulo Sergio de Paula Herrmann Jr	F.P1.56	Pedro L. G. Jardim	N.P1.28, O.P1.5
Paulo Sérgio Marques	S.P1.24	Pedro Lima Forster	F.P1.14
Paulo Sérgio Soares Guimarães	M.P1.39	Pedro Luis Grande	F.P1.47
Paulo S. G. Magalhães	L.P1.13	Pedro Manoel de Lima	D.P1.19
Paulo S. Gonçalves	V.P1.24	Quintanilha Mantas	
Paulo Souza Souza	D.P1.15	Pedro Mendoza Zelis	C.P1.1, C.P1.7
Paulo Tambasco Oliveira	R.P1.4, R.P2.84	Pedro Migowski	F.P1.74, J.P2.123, J.P2.150, N.P1.26
Paulo Tarso Freire	D.P1.3	Pedro Monteiro Cônsoli	L.OR3.11
Paulo Trindade Araujo	A.P1.61, L.P1.55	Pedro Orellana Dinamarca	C.OR6.17
Paulo Wilmar Barbosa Marques	A.P2.131	Pedro Rezende Gonçalves	I.OR1.2
Paul S Weiss	PS006.7	Pedro Roberto Goulart	K.P1.34
Pavel Zhurauski	R.OR9.35	Pedro Schio de Noronha Muniz	C.P1.23, C.P1.66, C.P1.68, J.P1.24, J.P2.95
		Pedro Tendrih Sodré	A.P2.82

Pedro Victor Valadares	C.P1.38	Priscila Sayoko Silva	L.P2.125
Romanholo		Wakabayashi	
Pedro Vinicius de Assis Bueno	R.P1.14	Priscila Tamiasso Martinhon	R.P1.31
Pedro Vitor Dixini	P.P1.10, V.P1.7	Priscilla Braga Bedor	R.P2.117
Pedro Vitor Morbach Dixini	F.OR4.13, F.P1.41, J.P1.13, P.P1.11, P.P1.19, P.P1.22, R.OR5.17	Priscylla Ferreira Santos	K.P1.28, K.P2.82
Pedro Yoshito Noritomi	R.OR3.9	Prof. Dr. Sanjay Mathur	E.OR6.17
Pei Jen Shieh	A.OR2.4	Pulickel Ajayan	A.OR3.10, P.P2.55
Persio Mozart Pinto	K.P2.85		
Person Pereira Neves	C.P1.57, C.P1.62, P.P2.92	<b>R</b>	
Peter Hammer	A.OR9.36, I.P1.13, J.OR5.18, J.P1.76, J.P2.142	Rachel Bharbara Maccheronio	R.P1.19
Peter Jürgen Tatsch	A.OR9.31	Dalmaso	
Peter Lund	O.OR4.16, O.P1.7, P.P2.76	Rachel Faverzani Magnago	J.P2.89, V.P1.10
Peter Mascher	N.OR5.19	Rachel Santos Mendes	J.P1.35
Peterson Ferrandini	K.P1.11, K.P1.13, K.P1.14	Radovan Borojevic	U.OR3.6
Petra Rudolf	B2DY	Rafaela Cristina Sanfelice	A.P2.111, A.P2.126, J.P2.130, J.P2.136, J.P2.137
Petru Apostol	L.P2.103	Rafaela Moos	F.P1.44
Petrus d'Amorim Santa-Cruz	A.OR7.28	Rafael Aparecido Ciola	A.P2.81, A.P2.84
Phabyanno Rodrigues Lima	L.P1.23, L.P1.27, L.P1.31	Amoresi	
Phelippe De Araújo Pereira	I.OR4.20	RAFAEL ARTHUR	K.P2.119
Philippe Pocidonio Silva	S.P1.7	GIORJAO	
Philippe Ohresser	BAAK	Rafael Bento de Sousa	J.OR2.6
Pierre Basílio Almeida	F.P1.59, O.P1.53	Rafael Bergamo Trinca	R.OR1.2, R.P3.132
Fechine		Rafael Besse	H.OR4.15, H.P1.16
Pierre-François Brevet	M.OR5.11	Rafael Bianchini Nuernberg	P.P2.94
Pietro Ciancaglini	R.P2.77	Rafael Bonacin de Oliveira	E.P1.16
Pilar Aranda	A.P1.47	Rafael Borges Merlo	O.OR3.8, O.P1.34, O.P1.57
Pilar Gregory Vianna	M.OR1.2	Rafael Camargo Bertinotti	E.P1.36
Pilar Hidalgo Falla	O.P1.62	Rafael Cardoso Toledo	K.P2.68
Pin-Chu Chen	L.OR3.9	Rafael Cartoni Monteiro	P.OR6.21
P. M. Franci	J.P2.112	Rafael Cintra Hensel Ferreira	K.OR4.18, L.OR2.5
Pol De Pape	EXP6.10	Rafael C Trentin	C.P1.42
Poliana Lima Rocha	N.P1.53	Rafael da Costa Brito	O.P1.12, O.P1.50
Pollyana Francielli Oliveira	R.P2.78	Rafael da Silva	E.P1.8, I.P1.14
Polyanna Bruna Alves Oliveira	O.P1.23	Rafael dos Santos	M.P1.40
Pragya Jain	P.OR4.11	Geonmonond	
Prasana Sahoo	N.OR4.16	RAFAEL FERREIRA	K.P1.7
Prasun Banerjee	E.OR4.14	FERREIRA	
Priscila Alessio	L.P1.15, R.P3.172	Rafael Furlan de Oliveira	N.OR1.2, N.OR1.3, N.OR3.8, N.P1.23, N.P1.52
Priscila Dias Mendonça	R.P1.38	Rafael Grande	B.P1.3, V.P1.30, V.P1.32, V.P1.33, V.P1.49
Priscila Ferrari Silveira Rosa	C.P1.72	rafael Jesus gonçalves Rubira	A.P1.43, F.P1.2, J.P2.126
Priscila M.S.C. Leite	J.P2.149, J.P2.169	Rafael Kakitani	K.OR3.12, K.OR3.13, K.P1.29, K.P1.39
Priscila Rodrigues Verneck	K.P1.6		
Priscila Romagnoli	A.OR4.14		

Rafael Lavagnolli	A.P1.60	Raphael Antonio Caface	P.P2.82
Germescheidt		RAPHAEL APARECIDO	N.P1.62
Rafael Lemos dos Santos	P.P2.71, P.P2.72	SANCHES NASCIMENTO	
Rafael Lopes de Souza	I.OR1.3, I.P1.3	Raphael Bianchi de Vicente	K.P2.103
Rafael Louzada	J.OR3.14	Raphael da Silva Alvim	I.OR2.4
RAFAEL MARINHO	K.OR3.10	Raphael Euclides Prestes	A.P1.29
BANDEIRA		Salem	
Rafael Natal L de Menezes	R.P2.54	Raphael Longuinhos Monteiro	A.P1.15, A.P1.16
Rafael Nunes Gontijo	A.OR6.20	Lobato	
Rafael Oliveira	T.P1.2	Raphael Lucas Sousa Silva	F.P1.21
Rafael Pacheco Evangelista	S.P1.22	Raphaell Willian Myzaell dos	F.P1.53
Rafael Parra Ribeiro	I.P1.6, J.P1.29, J.P1.46, J.P1.47, J.P1.61, R.P2.123	Santos	
Rafael Plana Simões	H.P1.30	Raphael Moral Moral	O.P1.46
Rafael Resende Lucas	J.P2.146	Raquel Alves Santos	R.P1.23
Rafael Rodrigues	L.OR7.28	Raquel Aparecida Domingues	L.OR5.17, L.P2.129
Rafael Rodrigues Del Grande	I.OR4.19	Raquel A. Ribeiro	C.OR6.22, C.P1.41
Rafael Silva	R.P1.2	Raquel Couto de Azevedo	R.P2.73
Rafael Silveira Mourão	I.P1.19, I.P1.20	Gonçalves Mota	
Rafael Tomaz da Silva	C.P1.57	Raquel de Moraes Lobo	V.P1.45
Rafael Uarth Fassbender	F.P1.71, M.P1.6	Raquel Giulian	C.P1.27
Rafael Vieira Perrella	F.P1.62	Raquel Luiza Mageste Fonseca	J.P1.86
Rafael Zadorosny	A.P2.91, C.P1.13	Raquel Riciati do Couto Vilela	F.P1.7
Rafhael De Nez	I.P1.28	Raquel Rubia Bueno	J.P2.149
Raigna Augusta da Silva Zadra	A.P2.122, B2J6, Armond	Raquel Silva Thomaz	F.P1.74, J.P2.123, J.P2.150
	B2XW, B46E, L.P1.36, L.P1.52, L.P1.56, R.P1.8	Rasmus Hartmann-Petersen	G.P1.5
Raimundo Exedito	K.P2.75	Raul de Oliveira Freitas	F.OR5.15, F.OR5.16, L.P2.72, M.OR5.12, M.P1.39, M.P1.41
Vasconcelos		Raúl Eduardo Bolmaro	K.P1.6, K.P2.90
Raimundo Lora Serrano	C.P1.60, C.P1.61, D.P1.28	Raul Fernando Cuevas	E.P1.24, N.P1.38, N.P1.46
Raimundo Ribeiro Passos	J.P1.52, J.P1.53, O.P1.54, P.P2.53	Raul Julian Revelo Tobar	E.P1.26
Raimundo Vicente de Sousa	Q.P1.26, Q.P1.27	Raul Oliveira de Araújo	K.P2.95
Raissa Mendes Silva	N.P1.53	Raúl Rangel Rojo	M.OR5.15
Raíssa Pravatta Pivetta	A.P1.33	Raul Victor Lourenço	S.P1.21
Raja Junaid Amjad	M.P1.14, M.P1.33	Penaforte	
Raj Banerjee	K.OR3.7	Rauni Coelho Costa	F.P1.51
Rajesh Dagupati	M.P1.14	Rayana Marcela Izidoro da	P.P1.39
Raluca Savu	A.OR9.31	Silva Santos	
Ramalinga Viswanathan	O.P1.28	Rayane Dantas da Cunha	J.P2.117
Mangalaraja		Ray LaPierre	N.P1.31
Ramon dos Santos	A.OR5.16	Rayssa de Souza Lopes	R.P2.95
Ramon Moreira Peres	J.P1.37	Rebeca da Rocha Rodrigues	L.P1.45
Ramón Raudel Peña Garcia	C.P1.28, C.P1.29, H.P1.29, H.P1.35	Rebeca da Silva Grecco	V.P1.4
Ramón Sigifredo Cortés	J.P1.1	Romano	
Paredes		Rebeca Delatore Simões	V.P1.37
Ramon Zarate	M.P1.3	Rebecca Abreu Nascimento	U.P1.12, U.P1.13, V.P1.43
Raonei Alves Campos	J.P1.43, J.P1.6, K.P1.36	Regiane Cristina Oliveira	A.P1.75, P.P2.79
		Regiane Godoy Lima	L.P2.104, R.P3.189, S.P1.4

REGINA CÉLIA REIS NUNES	A.P1.46	Renato Araújo Barros	K.P1.4
Regina Duque Estrada Carvalho	A.P1.10	Renato Baldan	K.P1.5
reginaldo konatu	R.P1.49	Renato Boschilia Junior	E.P1.31
Reginaldo Muccillo	E.OR1.1, E.OR3.10, E.P1.20	Renato B. Pontes	A.OR3.6
Reginaldo T Konatu	R.P1.49, R.P2.110	Renato Chaves Souza	K.P1.23, K.P1.44
Reginaldo Toshihiro Konatu	R.P1.49, R.P2.105	Renato Cruvinel de Oliveira	E.OR3.11
Regina Pekelmann Markus	L.OR6.23	RENATO DE VALENTE VALENTE	P.OR5.14, S.P1.25
REGINA SANDRA VEIGA NASCIEMNTO	A.P1.46	Renato Dourado Maia	R.OR6.23
Regina Teresa Rosim Monteiro	B.P1.32, Q.P1.24	Renato Fernando Caron	F.P1.31
Regivaldo Sobral Filho	J.P2.144	Renato F. Jardim	C.OR2.3, G.P1.1
Reiga Ramalho Ribeiro	R.P1.38	Renato Grillo	R.P1.22, R.P3.154
Reinaldo Gaspar Bastos	R.P3.187	Renato Leonardo De Freitas	S.OR1.2
Reinaldo Souza Miranda	S.P1.23	Renato Luiz Siqueira	O.P1.16, P.P2.81
Reinaldo Yoshio Morita	A.P1.71, A.P2.133	Renato Massaharu Hassunuma	T.P1.3, T.P1.6
Reisla Grasielle Gonçalves	P.P2.71, P.P2.72	Renato Mazin Latini	N.P1.59
Renan Aparecido Fernandes	A.P1.44, R.P2.112, R.P2.90	Renato N. Sampaio	L.P1.53, L.P1.55, O.P1.3
Renan Augusto Lisboa Almeida	O.OR4.13	Renato Sergio Mello Silva	K.P1.49
Renan Augusto Pontes Ribeiro	I.P1.12, N.P1.14, N.P1.33, N.P1.34, N.P1.54, N.P1.64, P.P1.14, P.P1.16	Renato Tillmann Bassini	D.P1.20
Renan Bovoloni Ruocco	V.P1.49	Renato V. Gonçalves	F.P1.56, J.P2.123
Renan Carreiro Rocha	K.P2.91	René Alfonso Nome	M.P1.10
Renan Colucci	L.P2.69, L.P2.70	Rene Collazo Carceller	A.P2.148
Renan Daniel Domingos	B6TQ, C.OR5.15	Rene Pfeifer	R.P1.31
Renan da Silva Fernandes	A.P1.69	Rene Ramos de Oliveira	A.P2.106
Renan Lucas Ribeiro	M.P1.37	Rene Wick	E.P1.37
Renann Pereira Gama	K.P1.4	Renilma de Sousa Pinheiro Fonseca	C.P1.30, C.P1.35, C.P1.36, C.P1.5
Renan Pereira Gama	K.P1.4, K.P2.94	Renivaldo José dos Santos	L.P1.28
Renan Pereira Pedro	L.P2.101	Rero Marques Rubinger	A.P1.12, E.P1.14, E.P1.50, F.P1.20, N.P1.42, O.P1.14, O.P1.52, O.P1.8
Renata Aquino	C.P1.17, J.P2.145	Reynaldo Pugliesi	G.OR3.8
Renata Aquino Carvalho	B.P1.7	Rhauane Almeida Galvão	P.P1.33
Renata Cardoso Roncoleta	O.P1.62	Rhaul Oliveira	J.P1.74
Renata Cerruti da Costa	R.P2.117	Rian Aderne	L.OR7.27
Renata Cristina de Paula	B2J6, B2XW, R.P1.8	Rian Esteves Aderne	L.P2.114
Renata da Silva Magalhães	E.P1.43, O.P1.61	Ribal Georges Sabat	M.P1.25
Renata de Lima	R.P3.154	Ricardo A. Couto	C.OR2.3
Renata Diniz	H.OR1.3	Ricardo A Furtado	R.P2.78
Renata Lang Sala	A.P1.45, R.P3.146	Ricardo Alexandre Amar de Aguiar	A.P2.145, A.P2.149
Renata Lilian Portugal Fagury	V.OR2.6	Ricardo Alexandre Galdino da Silva	K.P2.107
Renata Martins Parreira	R.P1.4, R.P1.5	Ricardo Alex Dantas Cunha	J.P2.117
Renata Santos Seixas	A.P1.34	Ricardo Bortoletto-Santos	J.P2.100, J.P2.102, J.P2.151
Renata Simão	J.OR4.15	Ricardo Cotrin Teixeira	N.OR3.12
Renato Altobelli Antunes	K.OR3.15, K.P1.56, P.P2.49	Ricardo Donizeth Dos Reis	D.P1.29
		Ricardo Flávio Aroca	R.P2.64
		Ricardo Floriano	P.P1.9
		Ricardo Francisco Gouvêa	A.OR9.32

Ricardo Franco	B.P1.25	Robert E Cohen	R.OR6.21
Ricardo Gaspar	B.OR3.10	Robert Graham	S.OR1.1
Ricardo Geraldo Sousa	R.P3.155	Robert Hurt	Q.OR3.11
Ricardo Henriques Leal	K.P1.27	Roberto Alves de Sousa Luz	R.P3.176, R.P3.178
Ricardo José de Mendonça	R.P2.74	Roberto Bertholdo	J.P2.87, M.P1.2
Ricardo Klaus Kramer	B.P1.33	Roberto Bini	D.OR2.4
Ricardo Lima Guimarães	L.P1.20	Roberto Carlos Corrêa	C.P1.40
Ricardo Luiz Perez Teixeira	V.P1.2	Roberto Dos Reis	O.OR3.6
Ricardo Magno Lopes Silva	N.P1.52	Roberto Escobar	C.P1.67
Ricardo Martins de Martins	V.P1.42	Roberto Hiroki Miwa	A.OR3.6, A.P1.4
Ricardo Meurer Papaléo	C.P1.64, J.P2.123	Roberto Jakomin	F.P1.22
RICARDO Miranda de OLIVEIRA JUNIOR	K.OR3.14	Roberto Koji Onmori	L.P2.68, O.P1.31
Ricardo Nascimento Pombo do Amaral	F.OR2.4	Roberto Luzzi	N.P1.5
Ricardo Noboru Igarashi	C.OR4.12	Roberto Magalhães Paniago	A.OR6.25, R.OR6.23
Ricardo Paupitz Barbosa dos Santos	H.P1.43	Roberto Manuel Torresi	K.P2.124
Ricardo Peixoto Suassuna Dutra	J.P2.141	Roberto Maria Covolan	S.P1.27
Ricardo Rodrigues Urbano	C.P1.19, C.P1.20, C.P1.72	Roberto Mendonça Faria	H.P1.17, L.P2.111, L.P2.71, L.P2.74, L.P2.88, L.P2.90, L.P2.91, L.P2.92, L.P2.97, M.OR5.12, O.P1.35, U.OR1.1, V.OR1.4
Ricardo Santiago de Oliveira Gouvea	R.P2.54	Roberto Nunes Duarte	K.P1.44
Ricardo S. de Moraes	P.P1.38	Roberto R de Avillez	V.P1.34
Ricardo Shindi Hosokawa	J.P2.172	Roberto Ricardo Panepucci	N.OR3.12, S.P1.27
Ricardo Vignoto Fernandes	L.P1.57	Roberto Rivelino	H.OR3.6
Ricardo Wagner Nunes	I.OR3.12	Roberto Tetsuo Fujiyama	F.P1.10, F.P1.3, F.P1.37, F.P1.5, F.P1.58, H.P1.33, V.P1.31
Richard G Compton	M.OR3.7	Roberto Vaz	A.P1.9, I.P1.18, I.P1.20
Richard Landers	I.OR3.10	Roberto Villarroel	P.P2.89
Richardson Leão	S.OR2.4	Roberto Zenhei Nakazato	P.P1.39, R.P2.100, R.P2.110, R.P2.114, R.P2.94
Richart Falconi Calderon	D.OR1.3	Robert P.H. Chang	V.OR1.1
Richelmy Magi Sanches	J.P2.132	Robert Prudêncio Amaral	C.P1.60, C.P1.61, D.P1.28
Ricson Rocha de Souza	D.P1.22	Robert Schennach	B.OR3.8
Rinaldo Caldeira Pinto	L.P2.73	Robert Vajtai	A.OR3.10
Rinaldo dos Santos Araújo	R.P1.33	Robinson Carlos Dudley Cruz	D.P1.19
Rinaldo Trotta	N.OR6.26	ROBSON Guimarães	I.P1.34, S.P1.2
Rita de Cássia Cipriano Rangel	J.P1.42, J.P1.46, J.P1.47, J.P1.61	SANABIO	
Rita de Cássia Lacerda Brambilla Rodrigues	R.P2.67	Robson Lopes Grosso	E.OR1.2
Rita de Cássia Mendonça Sales	A.OR9.32	Robson Raphael Guimarães	O.P1.1, P.OR3.9, P.P1.12, P.P1.13
Ritchelli Ricci	R.P2.122	Robson Rodrigues Moura	F.OR4.13, F.P1.41
Rivaldo Lins Rocha Filho	J.P2.141	Rocío Del Pilar Bendezú Hernandez	K.P1.47
Rivânia Hermógenes Paulino Romero	K.P2.62	Rocío María Tamayo Calderón	N.P1.1
R. Nirmala	C.OR6.23		
Roberson José da Silva	J.P1.58, J.P2.163		
Roberta Alves Gomes Matos	K.P2.72, K.P2.74, K.P2.88		
Roberta Polak	R.P3.160, R.P3.183		
Roberta Viana Ferreira	R.OR9.34, R.P2.120		

Rócio Sánchez-de-Armas	P.OR6.18	Rodrigo Leandro Silveira	H.OR3.8, H.OR3.9
Rodrigo Cury de Oliveira	F.P1.36	Rodrigo Lupinacci Villanova	J.OR3.8
Rodnei Bertazzoli	J.P1.65	Rodrigo Marques Tafuri	J.P1.82
Rodney Capp Pallotta	R.P1.19	Rodrigo Mero Sarmento da Silva	F.P1.73
Rodolfo Bonoto Estevam	A.P2.150, P.P2.50, V.P1.47	Rodrigo Monico Peixoto	L.OR5.18
Rodolfo Franco de Moraes Pantoja	F.P1.58	Rodrigo Neumann Barros Ferreira	L.OR1.2
Rodolfo Minto de Moraes	R.P3.144, R.P3.145, R.P3.147	Rodrigo O. G. Chaves	P.OR1.3
Rodolfo Santos Fonseca	N.P1.29	Rodrigo Ono	K.P2.63, K.P2.66
Rodolfo Thiago Ferreira	A.P2.150, P.P2.50, V.P1.47	Rodrigo Perito Cardoso	J.P1.38
Rodolpho Santos Lepich	C.P1.69	Rodrigo Prioli Menezes	F.P1.22, F.P1.46, M.P1.29
Rodrigo A. Espinoza-González	A.OR4.15, E.OR6.19, N.P1.1, P.P2.89	Rodrigo Queiros Almeida	O.P1.9
Rodrigo Alvarenga Rezende	R.OR3.9, R.P1.26	Rodrigo Ribeiro Andrade	I.OR3.12
Rodrigo Azevedo Reis	H.P1.25	Rodrigo Szostak	O.P1.10, O.P1.58
Rodrigo Barbosa Hilario	J.P1.19	Rodrigo Teixeira Bento	K.P1.53
Rodrigo B Capaz	D.OR1.3	Rodrigo Velasco Christovam	K.P1.13
Rodrigo Bezerra Vasconcelos Campos	A.P1.58	Rodrigo Villares Portugal	F.OR3.9, Q.OR2.5, U.OR3.4
Rodrigo Cardoso de Oliveira	Q.P1.5	Rodrigo Villegas Salvatierra	A.P2.136, O.P1.33
Rodrigo Cardoso dos Passos	F.P1.57	Rodrigo Yokoyama Xavier	K.P1.13
Rodrigo Castanha	Q.P1.10	Roger Borges	J.P2.90
Rodrigo César de Campos Ferreira	I.P1.2	Roger C. Hiorns	L.P2.120, U.P1.3
Rodrigo da Costa Macedo	A.P2.118	Roger Gonçalves	P.OR1.2
Rodrigo Felix Cardoso	F.P1.51	Rogério Bataglioli Bataglioli	R.P3.160, R.P3.183
Rodrigo Fernando Bianchi	L.P1.30, L.P1.32, L.P1.54, L.P2.108, N.P1.63, O.P1.11, R.P1.24, U.OR3.7	Rogério Magalhaes Paniago	F.OR6.18, I.OR1.2, L.P2.82, N.OR4.15, N.P1.30
Rodrigo Fernando Costa Marques	A.OR8.29, J.P2.101, R.P1.13	Rogério Miranda Moraes	L.P2.106, L.P2.107, L.P2.112, L.P2.136
Rodrigo Ferrão de Paiva Martins	B.OR1.2, B.P1.19, B.P1.20, B.P1.25, L.P2.90, V.OR1.2	Rogério Navarro Correia Siqueira	J.P1.51
Rodrigo Ferreira Falci	M.P1.17	Roger Webb	H.OR3.13
Rodrigo Furquim Ghiraldi	A.P2.114, K.P2.104, K.P2.117, R.OR5.16	Roland Hany	L.P2.114
Rodrigo Henrique da Silva Rocha	K.P1.50	Román Alvarez Roca	N.P1.3
Rodrigo Henrique Geraldo	V.P1.16, V.P1.17, V.P1.36	Román López-Ruiz	C.P1.52
Rodrigo Hiroaki Ideyama	A.P1.55	Romario justino da silva	J.P2.115, R.P2.70
Rodrigo José Contieri	K.OR3.7, P.P1.9	Romildo Torres da Silva	R.P1.19
Rodrigo José de Oliveira	J.P2.152	Romulo Augusto Ando	M.P1.30, M.P1.40
Rodrigo José Mossanek	I.OR3.13	Rômulo Ribeiro Magalhães de Sousa	L.P2.124
Rodrigo Kenji de Oliveira	B.P1.22	Ronal de la Cruz Parejas	V.P1.34
Rodrigo Labat Marcos	R.P1.19, V.P1.18	Ronaldo Carvalho da Silva	A.P2.103
Rodrigo Lassarote Lavall	F.P1.27, P.P2.63	Ronaldo Crosio Gennari	E.OR5.16, O.P1.20
		Ronaldo Giro	I.OR4.19
		Ronaldo Junio Campos Batista	R.P2.91
		Ronaldo Sérgio de Biasi	A.P1.34
		Ronaldo Shigueru Sasaki	A.P1.39
		Ronaldo Timm	A.P1.52
		Ronaldo Veronês do Nascimento	R.P1.9, V.P1.12
		Ronald Tararam	F.P1.30

Ronan Lebullenger	J.OR4.16	Rubens Martins Moreira	J.P1.86
Rondes Ferreira da Silva Torin	F.P1.25, F.P1.8, J.P2.143, V.P1.21, V.P1.23	Rubens Nunes Faria	O.P1.19
Rondinelle Ribeiro Castro	S.P1.2	Rubia Figueredo Gouveia	A.P1.47, F.P1.1
Rondinelli Donizetti	R.P2.74, R.P2.98,	Rubiane Ganascim Marques	J.P2.156
Herculano	R.P3.169, R.P3.170, R.P3.180	Rudimar Riva	J.P2.149, J.P2.169, K.P1.52
Roosevelt Droppa Jr.	J.P1.34	Rudimylla da Silva Septimio	K.P2.80, K.P2.82
Rosa Corrêa Leoncio de Sá	R.P2.127	Rurik Farias	C.OR2.4, F.P1.11
Rosa Fireman Dutra	A.OR7.28, R.P1.38	Ruth Herta G. Aliaga	D.P1.21
Rosa Maria Rabelo Junqueira	J.P1.60	Kiminami	
Rosa Medeiros Marinho	V.P1.26	Ruth H. G. A. Kiminami	P.P1.2
Rosana de Fátima Gonçalves	A.P1.75, N.P1.15, N.P1.24	Ruth Hinrichs	J.OR3.9
Rosana Silva Xavier	F.P1.4	Ruyan Guo	E.P1.25
Rosane Michele Duarte Soares	R.OR4.14	Ruy Quadros	IN.3
Rosangela Almeida Maia	L.P1.35	Ryota Koizumi	P.P2.55
Rosangela Gonçalves Silva	R.P3.180		
Rosangela Silva Laurentiz	L.P2.104, R.P3.189, S.P1.4	<b>S</b>	
Rosario Vilaplana	D.P1.25	sabir khan	V.OR2.7
Rosdely Quiroz	J.P1.80	Sabrina Aléssio Camacho	J.P2.144, L.P2.118
Roselane Cesconeto	P.P2.95	Sabrina Candido Nunes	J.P1.77
Roselena Faez	B.P1.15, L.P1.37, L.P2.135, P.P2.62	Sabrina da Nobrega Almeida	I.P1.10
Roseli Fernandes Gennari	G.P1.7	Sabrina Faria de Lima	F.P1.8
Rosemeire Santos Almeida	R.P3.185	Sabrina Gonçalves de Macedo	E.OR3.10
Rosendo Parra Milian	P.P1.44	Carvalho	
Rosieli Lemes de Farias	A.P2.117	Sabrina Lara dos Reis	N.P1.9
Rosimara Passos Toledo	J.P1.63, N.P1.42	Sabrina Luiza Zordan	P.OR5.14
Rosinei Batista Ribeiro	F.P1.16, J.P2.166, V.OR2.9, V.P1.38	Sabrina Marinho Kaplum	D.P1.11
Rossano Gimenes	R.P1.42, V.P1.13	Sabrina Neves da Silva	K.P1.35
Rossano Lang	L.P1.42, L.P2.86	Sabrina Nicoleti Carvalho dos	M.P1.12
Rossano Lang Carvalho	E.OR5.16, O.P1.20, P.P1.3	Santos	
Rossemberg Cardoso Barbosa	S.OR2.5	Sabrina Rodrigues Meira	I.P1.22
Rovilson Mafalda	B.OR3.10	Sachetan Tuladhar	L.P2.111
Roy Victor Escobar	J.P1.5, J.P2.138	Saimon Filipe Covre da Silva	N.OR6.21
R. Rajivgandhi	C.OR6.23	Saionara Vilhegas Costa	O.OR3.7
Ruanna Dátila Silva Ferreira	R.P1.45	Sajjad Hussain	V.OR2.7
Rubén Dario Sinisterra	R.P1.20, R.P2.75	Sajjad Ullah	D.P1.10, F.P1.52
RUBENIA SILVEIRA	R.P2.121	Samantha Salomão Caramori	J.OR2.6
MONTE		Samarah Vargas Harb	A.OR9.36, J.OR5.18, J.P1.76
Ruben Oblitas	I.P1.13	Samara Schmidt	D.P1.11, D.P1.8
Rubens Caram	J.P1.10, J.P1.21, K.OR3.7	Samira Esteves Afonso	R.P2.107
Rubens Maciel Filho	O.P1.36, O.P1.37	Camargo	
Rubens Maribondo do	J.P2.141	Sami Vasala	C.P1.74
Nascimento		Samuel de Castro Silva	K.P1.31
Rubens Maribondo	I.P1.34	Samuel de Faria Vieira	L.P1.21
Nascimento		Samuel Gomes Mercena	C.P1.48
		Samuel Oliveira Saturno	E.P1.56
		samuel saire saire	C.P1.49
		Samuel Silveira Martins	P.P2.84
		Samy Almosni	O.P1.23
		Sanaz Asgarifar	L.OR4.13

Sanclayton Moreira	U.P1.7	Sebastian Engmann	O.OR3.9
Sandra Américo do Nascimento	B.P1.29	Sebastian Etcheverry	M.OR5.16
Sandra Andrea Cruz	J.P2.148	Sebastian Michea	C.OR4.13
Sandra Aparecida Alexandre	P.P2.63	Sebastião Carlos da Costa	K.P1.57, K.P2.97
Sandra Aparecida Martins Silva	O.P1.14	Sebastião G. dos Santos Filho	M.P1.24
Sandra Aparecida Silva	O.P1.52	Sebastião Gomes dos Santos Filho	J.P1.63
Sandra Cerqueira Pereira	B.P1.10	Sedinei Leal Guadanhim	L.P1.57
Sandra Giacomini Schneider	R.P1.10, R.P1.21	Sehmus Ozden	A.OR3.10
Sandra Helena Pulcinelli	A.OR9.36, H.P1.15, J.OR5.18, J.P1.76, J.P2.142, K.OR4.19	Seila Rojas de Souza	F.P1.39, P.P2.93
Sandra Jenatsch	L.P2.114	Selma Elaine Mazzetto	R.P3.178
Sandra Nakamatsu	K.P1.40, K.P1.44	Selma Gutierrez Antonio	E.P1.52
Sandra Regina Scagliusi	A.P2.106	Selton de Freitas Leão	D.P1.17
Sandrine Bernardini	E.OR2.5, E.P1.15	Sergey A Fedoseev	C.P1.51
Sandro Campos Amico	P.P1.40	Sergio Akinobu Yoshioka	C.P1.58, S.P1.1
Sandro do Nascimento da Costa	L.P1.55	Sergio Andres Hernandez	H.P1.12
Sandro Fernandes Firmino	F.P1.74, J.P2.123	Sergio Antonio Spinola Machado	L.P1.24, L.P1.7
Sandro Fonseca Quirino	J.P2.132, P.P1.25, P.P2.69	Sérgio Augusto Natali Amaral	E.P1.55
Sandro Griza	K.P1.28	Sergio Brochsztain	N.P1.41
Sandro Metrevelle Marcondes de Lima Silva	K.P2.97	Sergio Carneiro dos Reis	P.P1.7
Sandro Silva	K.P1.14	Sérgio Carvalho de Araújo	J.P2.109
Sandro Vagner de Lima	R.P2.121	Sergio da Silva Cava	N.OR2.4, N.P1.28, N.P1.66, O.P1.5
Sanja Mikulovic	S.OR2.4	Sérgio de Souza Camargo Jr.	A.P1.58, J.P1.45, J.P1.50
Sankler Soares de Sá	L.P1.36	Sérgio dos Anjos Silva	J.P1.21
Santiago J. A. Figueroa	F.P1.48, P.P1.9	Sergio Eduardo Ulloa	N.P1.13
Santiago Sánchez-Cortés	J.P2.126, M.P1.11	Sergio Ferrari	D.P1.24, D.P1.25
Sara Gemini Piperni	U.OR3.6	Sergio Gama	K.P2.107
Sara Guilhon Barboza	A.P2.89	Sergio Gomes Machado Filho	E.P1.26
Sarah Ackermann	A.OR9.37	Sergio Graciano	P.P1.4
Sarah David Müzel	J.P1.2, J.P1.9, J.P2.121, K.P2.106, K.P2.77	Sergio H. Domingues	A.P2.134, M.OR1.2
Sarah Kelly Melo Cavalcante	L.P1.23, L.P1.27, L.P1.31	Sergio Henrique de Toledo e Silva	S.P1.5
Sara Robert Nahra	S.P1.3	Sérgio Henrique Pezzin	O.P1.49
Sara Teresinha Olalla Saad	R.P1.50	Sergio Hiroshi Toma	J.P2.114, P.OR3.9
Saravanan Rajendran	O.P1.28	Sergio Humberto Domingues	M.P1.40
Sarveena -	C.P1.1	Sergio Luiz Mineiro	J.P1.84
Satish Kumar Malik	C.OR6.23	Sergio Luiz Morelhaio	N.OR6.24
Satoru Yoshida	A.P2.124, L.P2.67, L.P2.68, O.P1.31	Sergio Mazurek Tebcherani	D.P1.11, D.P1.8
Saulo Amaral Carminati	P.P2.80	Sérgio Michielon de Souza	D.P1.26, K.P2.100
Saulo Jacobsen	F.P1.30	Sergio Natali Amaral	E.P1.55
Saulo R Silva	Q.P1.26, Q.P1.27	Sérgio Paulo Campana Filho	J.P2.168, R.OR6.21, R.P3.183
Sávio José Zaccaro	A.P1.12, F.P1.20, N.P1.42	Sergio P. Marcondes	C.P1.26
S B Roy	C.OR6.19	Sergio Renato da Silva Soares	D.P1.20
		Sergio Ricardo de Lazaro	I.P1.12, N.P1.14, N.P1.33, N.P1.34, N.P1.54, N.P1.64, P.P1.14, P.P1.16
		Sérgio R. Muniz	M.OR5.13

Sergio Rodrigues Tavares	H.OR4.16, H.P1.1, H.P1.21, H.P1.5, H.P1.6, H.P1.9, N.OR3.13	Silvia Guterres	Q.OR1.1
Sérgio Toshio Fujiwara	J.P2.129, J.P2.91	Silvia Jaeger	A.P1.35
Sérgio Tuan Renosto	C.P1.6	Silvia Janietz	O.OR3.7
Severino L. Urtiga Filho	K.OR3.9	Silvia Leticia Fernandes	O.OR4.17
Shalendra Kumar	C.OR3.8, C.P1.3, C.P1.4, C.P1.5	Silvia Oishi	R.P2.57
Sharon Jose	S.OR1.1	Silvio Buchner	D.OR4.8, D.P1.23
Shena Rafaela Rebouças Padilha	J.P1.72	Silvio de Barros	I.OR4.20, I.P1.24, J.P2.118, K.P1.21
Sherdil Khan	O.P1.50	Silvio Rainho Teixeira	A.P1.43, E.P1.21, E.P1.43, F.P1.2, O.P1.61
Sheyla Maria de Castro	S.P1.1	Simone Araújo Vieira	M.P1.23
Máximo Bicalho		Simone da Silva Simões	J.P2.127, J.P2.162
Shigueo Watanabe	D.P1.9, G.P1.7	Simone de Fátima Medeiros	R.P3.144, R.P3.147
shirley Leite dos Reis	E.P1.18	Simone Dos Santos	V.P1.29
Shudong Wang	H.OR4.14	Bittencourt	
Shu Hui Wang	A.P2.124, L.P2.67, L.P2.68, O.P1.31, R.OR3.10, R.OR6.20	Simone Ramos de Castro	R.P2.128, R.P2.129
Shyam Sundar	C.OR6.19	Simone Souza Pinto	A.P1.26
Sibele Piedade Cestari	V.OR2.8	Simone VENTURIM Bernardino	L.P2.126
Sidnei Antonio Pianaro	J.OR4.17	Simon Oyarzun	C.OR4.13
Sidnei GUERREIRO da Silva	J.P1.3	Sinara Borborema Gabriel	K.P1.5
Sidnei Ramis Araujo	N.OR3.9, N.OR4.16	Sinval Braz Silva Filho	P.P2.62
Sidney Alves Lourenço	L.P1.57, L.P2.87, L.P2.98, N.P1.25, N.P1.47	Sirlene Maria da Costa	R.P2.67
Sidney J.L. Ribeiro	J.P2.137, J.P2.168, M.OR6.21	sivakumar gangala	O.P1.13
Sidney José Lima Ribeiro	B.OR3.9, D.P1.10, P.P2.81	Siziwe Gqoba	L.OR7.28
Sidney Nicodemos da Silva	R.OR9.34, S.P1.7	Sjoerd Hoogland	M.P1.16
Signo Thadeus Reis	E.OR4.12	Sofia Afonso Alves	R.OR7.26
Silésia de Fátima Curcino da Silva	L.P1.36, L.P1.56	Sofia Oliveira Parreiras	A.OR6.25
Silesia de Fatima Cursino da Silva	B46E	Sonia Licia Baldochi	E.P1.54
Silgia Aparecida Costa	R.P2.67	Sonia Maria Alves Bueno	R.P3.182
Silke Paschen	D.OR4.10	Sonia Maria Zanetti	E.OR6.21
Silma Alberton Corrêa	I.OR4.16	Sonia Patricia Brühl	J.P1.16
Silmara Furtado da Silva	V.P1.44	Sonia Regina Biaggio	P.P1.22
Silmar Antonio Travain	L.P1.33	Sônia Regina Sales Barbosa	S.P1.22
Silvana Garcia Viana	V.P1.26	Sônia Simões	A.P1.61
Silvania Lanfredi	A.P2.101, E.P1.7	Sophie Ollivier	J.P2.122
Silvano Leal Santos	K.P2.78	Sorach P. Vidal	E.OR6.19
Silvelene Alessandra Silva	J.P1.41, J.P2.133	S. Quezado	C.OR6.23
Silvério Ferreira da Silva Filho	J.P2.158	Stanislav Moshkalev	A.OR9.31, A.P1.52, A.P2.123, C.OR5.15
Silvia Azevedo dos Santos	J.P1.34	Stanley E. R. Bilatto	L.P1.22
Cucatti		Stefano Gottardi	B2DY
Silvia Denofre De Campos	S.P1.14	Steferson Luiz Stares	R.P1.9
		Steffany Rincon Peters	K.P1.35
		Stella Andreolli Mira de Assumpção	K.P2.106
		Stelvio Tonello	Q.P1.17
		Stephania Capellari De Rezende	K.P1.40
		Stéphanie Blanchandin	K.OR4.19
		Stéphanie Députier	J.P2.122
		Stephanie Goulart Dáquina	O.P1.32

Stephanie Roedel	R.P3.166	Tadeu Antônio Fernandes	B.P1.32
Stephany Pires da Silva	P.P1.15, P.P1.18, P.P1.20	Silva Júnior	
Steve Donnelly	G.OR3.9	Táina Zampieri Fermino	R.P1.27
Steven Frederick Durrant	J.P1.61, N.P1.21	Taise Matte Manhabosco	R.P2.91
Steven M. Disseler	G.P1.1	Tais Lopes Brandino	A.P2.144
Suchilla Garcia Leão	A.OR9.34	Taís Orestes Feijó	A.OR6.21, A.OR6.24
Suchismita Guha Guha	L.OR3.10	Takao Hanawa	R.OR9.33
Suelen Castro	N.P1.17, N.P1.56, N.P1.9	Tales José da Silva	H.P1.41
Suelen Christiane Nunes Alves	A.P1.20	Tales Martins Silva	K.P1.23
Sueli H. Masunaga	C.OR2.3	Talita Almeida Vida de Brito	K.P2.82
Suely Patrícia Costa Gonçalves	Q.OR2.4	Talita Galvão Targino	J.P2.117
Su-Huai Wei	H.OR4.15	Talita Mazon	A.OR2.4, A.OR9.35, A.P1.60
Sukarno Olavo Ferreira	O.OR4.13	Talita Nascimento Da Silva	R.P3.164
Sukeri Anandhakumar	A.P2.102	Tamires Isabela Botelho	K.P1.32, V.P1.28
Suman Nandy	B.P1.19	Tamires Lacerda da Silva	B.P1.36, C.P1.63
Sunday Joseph Olusegun	J.P2.124	Tamires Martinhão Machado	M.P1.1, M.P1.32
Supryio Ganguly	K.P2.102	Tamires Rocha Souza	J.P1.25
Surender Kumar Sharma	C.OR3.8, C.P1.1, C.P1.3, C.P1.30, C.P1.35, C.P1.4, C.P1.5, C.P1.59	Tania Maria Cavalcanti Nogueira	I.P1.33
Suringo Sousa Falcão	J.P2.116	Tania Maria Haas Costa	D.OR4.8, D.P1.4, D.P1.5
Susana Ines Cordoba de Torresí	R.P3.158	Tania Regina Giraldi	J.P1.72, P.P2.78
Susan Aki Kitai	L.P1.40, L.P2.134	Tania Rodriguez Moliner	A.P2.143, A.P2.148
Susan B Sinnott	PS003.4	Tanila Penteado de Faria	A.OR9.32
Susanna I. Cordoba de Torresi	J.P1.5	Gonzales Leal	
Sushma Pamulapati	S.OR1.3	Tanna Elyn Rodrigues Fiuza	P.P1.35
Suzana Bottega Peripolli	J.P1.51	Tarcila Sugahara	J.P1.4, K.P1.8
Suzana Mali	R.P3.135	Tarcísio Leão	R.P2.127
Suzana Pereira Hessel	E.P1.25	Tarcísio Micheli Perfecto	A.P1.51, A.P1.53, A.P2.105, A.P2.115
Svemir Rudic	G.P1.5	Tarcísio Santiago Gomes Filho	U.P1.9
Sven Mueller	C.P1.64	Tarciso Silva de Andrade- Filho	D.P1.2
Swami A Maruyama	A.P1.65	Tarcizo Cruz Souza	A.P1.24, A.P2.118
Swami Maruyama	D.P1.13	Tathiana Midori Kokumai	P.OR6.17, P.P1.34
Swarup Kundu	P.P1.17	Tatiana Duque Martins	O.P1.15, T.P1.4
Sweetu Patel	R.OR7.26	Tatiana Martelli Mazzo	J.P2.122, P.P2.79
Sydnei Magno da Silva	B2J6, B2XW, R.P1.8	Tatiana Parra Vello	N.OR1.2, N.P1.57
Sydney Ferreira Santos	K.OR3.15, K.P2.78, P.P1.5, P.P1.6, P.P2.49, P.P2.88	Tatiana pietro	T.P1.1
Sylvio Dionysio de Souza	J.P1.33	Tatiana Porto Santos	R.P3.179
Syme Regina Souza Queiroz	K.P2.75, V.P1.28, V.P1.46	Tatiane Cristina Porfirio	E.P1.20
		Tatiane Martins Lobo	J.OR4.16, J.P1.74
		Tatiane Moraes Arantes	D.P1.12, R.P2.93, R.P2.95, R.P3.153
		Tatiane Strelow Lilge	M.P1.20, O.P1.5
		Tatiani Falvo	D.P1.21, J.P1.8
		Tauany de Figueiredo Neves	A.P2.137
		Tayla Fernanda Serantoni da Silveira	J.P2.164
		Telma Regina Nogueira	A.P2.127
Taciane Alvarenga Perez	B6CW		

## T

TELMO MACEDO ANDRADE	R.P2.107	Thiago Domingues Stocco	R.P1.43
Telmo Macedo de Andrade	R.P2.107	Thiago Duque Estrada da Silva	D.P1.18
Teodorico Castro Ramalho	N.OR3.10	Santos	
Teresa Dib Zambon Atvars	L.OR5.17, L.P2.129	Thiago Eduardo Pereira Alves	C.P1.15, C.P1.16, C.P1.38
Tereza da Silva Martins	A.P1.48	Thiago Ferreira da Conceição	J.P1.11
Tereza Inês Rodrigues Souza	I.P1.20	Thiago Ferreira Gomes	O.P1.62
Tereza Silva Martins	A.P2.146	Thiago Gomes da Silva	F.P1.43
Terezinha Feitosa Machado	F.P1.59	Thiago Henrique Rosales Marques	M.P1.5
Tewodros Asefa	R.P1.2	Thiago José de Almeida Mori	C.P1.23, C.P1.66, C.P1.68, J.P1.24, J.P2.95
Thaianne Esquierdo Silva	J.P2.165	Thiago Martins Amaral	E.P1.31
Thainá Kelly Silva	S.P1.20	Thiago Nunes Palhares	R.P2.108
Thairine Silva Araújo	F.P1.28, F.P1.61	Thiago Sequinel	D.P1.11, D.P1.8
Thaís Ayumi Fukuda Cursino	Q.P1.2	Thiago Soares	K.P1.39
Thais Braga Vieira	A.P1.3	Thiago Soares Lima	K.OR3.14, K.P1.10, K.P1.29
Thaís Chagas Peixoto Silva	I.OR1.2	Thiago Soares Ribeiro	O.P1.9
Thais Cheminski	A.P2.137	Thiago Souza Lamim	I.P1.28
Thaise Almeida Silva	A.P2.103, A.P2.104	Thomas Golin Almeida	A.P2.134
Thais Ferreira da Silva	B.OR3.5	Thomas Jun Obara	K.OR3.12
Thais Marques	J.P1.51	Thomas Stempel Pereira	EXP1.2
Thaís Matiello Gonçalves	J.P1.30, R.P2.123	Thomaz Augusto Guisard Restivo	P.P1.4
Thais Milagres Oliveira	F.P1.26	Thomaz Cabral Rangel	J.OR3.7
Thalappil Pradeep	A.OR3.10	Thompson Júnior Ávila Reis	K.P1.55
Thalita Antoniassi Canassa	L.P2.101	Thuany Garcia Maraschin	A.P1.27
Thalita Centofanti	N.P1.51	Thuany Maraschin	A.P2.112
Thalita Chiaramonte	F.P1.62	Tiago Albertini Albino	R.P3.167
Thalita Pereira da Silva	V.P1.23	Tiago Almeida	A.P2.139
Thamires Andrade Lima	D.P1.6	Tiago Antônio Lima	A.P1.67
Thatyane Morimoto Nobre	R.P3.138, R.P3.165	Tiago Araujo Matias	P.OR3.9
Thayana Furtado Teixeira	A.P1.14, R.P2.86	Tiago Botari	A.OR9.33
Thaylice Cristina Sampaio Cabral	R.P1.32	Tiago Branco Becher	R.OR6.18, R.P1.37, R.P2.111
Thayllan Teixeira Bezerra	R.P1.45, R.P1.47	Tiago Carneiro Gomes	E.P1.43
Thaynara Pinto de Lima	C.P1.5	Tiago Cesar Gimenes	F.P1.63
Thaysa R. M. Ferreira	J.P2.107	Tiago Elias Allievi Frizon	L.P2.125, P.P2.95, R.P1.28
Thays França Naves	R.P2.83, R.P3.167	Tiago F.A. Santos	K.OR3.9
Thayz Ferreira Lima Morais	R.P2.99	Tiago Fiorini da Silva	F.OR4.12, J.P1.81, N.P1.21
Theo Guenter Kieckbusch	S.P1.5	Tiago Hilário Ferreira	R.P1.18, R.P1.32, R.P2.69
Thiago André Salgueiro Soares	P.P1.46, S.P1.20	Tiago José Oliveira	O.OR4.13
Thiago Antônio Paixão de Souza Costa	K.OR3.13, K.OR3.14, K.P1.10, K.P1.28, K.P1.39, K.P2.82	Tiago Moreira Bastos Campos	J.P1.58, J.P1.62
Thiago Bezerra Taketa	I.P1.4, R.OR6.21, R.P3.160, R.P3.183	Tiago Pedroso de Almeida	N.P1.23
Thiago Castro Rozada	P.P1.14, P.P1.16	Tiago Rodrigues	Q.P1.3, Q.P1.6, Q.P1.7, T.P1.1
Thiago Cazati	L.OR7.26, L.P1.47	Tiago Schiller dos Reis	R.P3.174
Thiago Chellapa	I.P1.34	Tiago Serodre	A.P2.128
thiago costa	K.P2.122		
Thiago de Lourenço e Vasconcelos	F.P1.26		
Thiago do Carmo Rufino	J.OR3.13		

Tito Jose Bonagamba	I.P1.35, I.P1.36	Valesca Donizeti de Oliveira	E.P1.14, E.P1.50, K.P2.81
Tobias U. Schulli	N.OR4.15	Valesca Donizeti Oliveira	C.P1.40
Tobias Wecker	N.P1.50	Valker Araujo Feitosa	H.P1.4
Tolou Shokuhfar	R.OR7.26	Valmir Antonio Chitta	C.P1.57, C.P1.58
Tomas Calmeiro	B.P1.19	Valmir Fadel	I.P1.16
Tomas Edvinsson	P.OR1.1	Valmir Jacinto Silva	J.OR2.6
Tomas Fiorido	E.OR2.5	Valmor Roberto Mastelaro	E.OR2.4, E.P1.15, N.OR2.5
Tomaz Toshimi Ishikawa	P.P1.8	Valquiria Cruz Rodrigues	J.P2.168, L.P1.5, L.P1.7, L.P1.8
Tomé Mauro Schmidt	A.OR3.6, A.P2.122, H.P1.18	Valquiria Fernanda Lima	M.P1.38
Tom Henning Johansen	C.P1.27	Valter Bezerra Dantas Dantas	I.P1.34
Tongqing Yang	P.P2.83	Vananelia Pereira Nunes	R.P1.48
Tonilson de Souza Rosendo	K.OR2.4	Geraldo	
Tuanan da Costa Lourenço	H.P1.23, H.P1.24	Vander Alkmin dos Santos	E.P1.14, E.P1.50, K.P2.81
Tuan Anh Pham	B2DY	Ribeiro	K.P2.81
Tulio Rocha	I.OR3.8, P.OR6.16	Vander Alkmin Ribeiro Santos	K.P2.64
<b>U</b>			
Uanderson Mezavila Garcia	J.P1.67	Vanderlei Roncato	J.P2.102
Ubirajara Pereira Rodrigues Filho	D.P1.10, F.P1.52, J.P1.82, R.P1.27	Vanessa Barcellos	S.P1.25
Uesley A. Stival	L.P1.48	Vanessa Bolzan Rodrigues	B.OR3.7, B.P1.26
Ueverson Barros Lima	A.OR9.31, A.P2.123	Vanessa Cadan Scheffer	H.P1.32
UILIAN GABALDI	A.P2.92	Vanessa Cristina da Costa	D.P1.17
YONEZAWA		Oliveira	
Ulisses Ferreira Kaneko	B6YF, C.P1.61	Vanessa Delfino Kegler	M.P1.20
Ulisses Saraiva de Oliveira	I.P1.3	Vanessa de Oliveira Arnoldi	P.P2.70
Ury Denver Chacón Hernandez	J.P2.139	Pellegrini	
Uwe Ritter	O.OR3.9	Vanessa Duarte Del Cacho	V.P1.40, V.P1.48
<b>V</b>			
Vagner Eustáquio de Carvalho	F.P1.26	Vanessa Luz e Calil	B.OR3.9
Vagner Zeizer Carvalho Paes	F.P1.47	Vanessa Maria Yae do Rosário	D.P1.17
Valber Albuquerque Pedrosa	J.P1.23	Taketa	
Valberto Pedruzzi Nascimento	K.P2.120	Vanessa Orsi Gordo	J.P2.110, N.P1.16
Valdeci Paula Alvarenga	K.P2.61	Vanessa Piroli	J.P1.57
Valdecir Farias Ximenes	R.P3.130	Vanessa PREVOT	J.P2.90
Valdemir Ludwig	F.P1.12, F.P1.13	Vanessa Priscila Scagion	B.P1.12
Valderi Duarte Leite	J.P2.127, J.P2.152, J.P2.162	Vanessa Salgado	J.P1.44
Valdirene Gonzaga de Resende	A.P2.128	Vanessa Souza Santos	A.P1.6
Valentina Martelli	D.OR4.10	Vanessa Tiemi Kimura	R.OR3.10, R.OR6.20
Valéria Pereira Ferreira	R.P1.26, S.P1.10	Vanessa Yumi Sakai	R.P3.136
Valeria Spolon Marangoni	Q.OR3.8, Q.P1.22, R.P1.44	Vânia Caldas de Sousa	D.P1.22, E.OR3.6
Valérie Bouquet	J.OR4.16, J.P2.122	Vania Emerich Bucco de Campos	R.P2.52, R.P3.140
Valérie Briois	K.OR4.19	Vania Rodrigues Leite-Silva	A.P1.48
		Vânia Duarte Pasa	B.P1.37, B.P1.9
		Varlei Rodrigues	K.OR4.18, L.OR2.5, L.P2.80, N.P1.23
		Vera Dias da Silva	V.P1.28
		Vera Katic	O.P1.54
		Vera Lúcia Arantes	P.P2.84
		Vera Lúcia Dias da Silva	V.P1.46
		Vera Lúcia Othéro de Brito	E.P1.4, F.P1.4

Vera Lúcia Scherholz Salgado Castro	Q.OR2.4, Q.P1.10, Q.P1.14, Q.P1.16, Q.P1.9	Vinícius Gomide Castro	A.P1.28
Vera Regina Leopoldo Constantino	H.P1.26, R.P3.136	Vinicius Grassi	IN.3
Verena Mandorino Kaminagakura	J.P2.92	Vinicius Guilherme Celante	I.P1.23, J.P1.13, P.P1.10, P.P1.11, R.OR5.17, V.P1.7
Verona Biancardi Oliveira	J.P1.3	Vinicius Jessé Rodrigues de Oliveira	L.P2.120
Veronica de Carvalho Teixeira	F.P1.64	Vinicius Lago Pimentel	L.P2.66
Veronica Muniz Couto	R.P2.129	Vinicius Litrenta Medeiros	B4GN, R.P1.29
Vicente Amigó Borrás	J.P1.21	Vinicius Roberto de Sylos Cassimiro	P.OR6.21
Vicente Galber Freitas Viana	L.P2.84	Vinicius Sara Cardoso	Q.P1.20
Vicente Gomes Oliveira	R.P2.76	Vinicius Sousa	P.P2.88
Victor Buratto Tinti	E.P1.39	Vinícius Teodoro	A.OR9.38, A.P2.81, A.P2.86, A.P2.87, J.P2.119
Victor Ciro Solano Reynoso	E.P1.24, N.P1.38, N.P1.46	Vinie Abreu Christino	R.P2.118
Victor Ermakov	M.OR6.20, O.P1.29, O.P1.45	Virgílio de Carvalho dos Anjos	F.P1.12, M.P1.17
Victor Ferrinho Pereira	K.P2.118	Virgílio Pereira Ricci	R.P2.58
Victor Hugo De Oliveira	F.P1.12, F.P1.13	Virginia da Conceição Amaro Martins	R.P2.99
Victor Hugo Rodrigues de Souza	L.P2.85	Vitaliy Bilovol	D.P1.24
Victor Hugo Vitorino Sarmento	C.P1.47	Vitaly V. Chaban	H.P1.28
Victória da Costa Marba	R.P1.3	Vitor Bianchin Pelegati	L.P2.127
Victoria Oliva Dos Reis	B2VE	Vitor Cezar Broetto Pegoretti	P.P1.10, P.P1.19, P.P1.22, V.P1.7
Victor Leibnitz Hipólito	V.P1.10	Vitor Hugo Paschoal	D.P1.6
Victor Manuel Prida	C.OR3.9, C.P1.52	Vitoria Marques Cesar Leite	R.P3.137
Victor Massaru Onoda	R.P2.105	Vitor Pires Martinez	F.P1.52
Victor M. Cardoso	J.OR2.6	Vitor Rafael Coluci	H.OR3.12, H.P1.32, Q.OR2.5
Victor Melles	L.P1.40	Vitor Ribeiro	J.P2.133
Victor M Fuenzalida	A.OR4.15	Vitor Santos Ramos	J.P1.51, R.P3.148
Victor Pederzini	O.P1.17	Vitor Toniato Campana	K.P2.62
Victor Puntos	C.OR3.6	Vitor Toshiyuki Abrão Oiko	K.OR4.18
Victor Raúl Jauja Ccana	R.OR9.32	Viviane Aparecida Guilherme	R.P2.128, R.P2.129
Victor Teixeira Noronha	F.P1.59	Viviane da Silva Vaiss	H.OR1.3, H.P1.1, H.P1.21, H.P1.3
Víctor Vega	C.OR3.9, C.P1.52	Viviane G.A. Pires	A.P1.38
Vida Engmann	O.OR3.9	Viviane Gomes Pereira Ribeiro	R.P3.178
Vidiany Aparecida Queiroz Santos	J.P1.77	Viviane Jandira Van Haandel	J.P2.129, J.P2.91
Vincent Vivier	I.P1.31	Viviane Maciel Almeida	C.P1.57
Vincenzo Esposito	E.P1.35, E.P1.38	Viviane Nogueira Hamanaka	L.P2.66
Vinicius Cardilo Alves	K.P1.27	Viviane Santos Pereira	P.P1.41
Vinícius da Silva Lima	F.P1.14	Viviane Stoeberl	I.OR3.13
Vinicius de Oliveira Splugues	A.OR3.9, I.OR2.5	Viviane Vivas	F.P1.67
Vinícius D.N. Bezzon	D.P1.11, D.P1.8, E.OR6.18, E.P1.52	Vivian Faria Machuca	O.P1.4
Vinicius Duarte Jesus	E.P1.43	Vivian Farias de Lima	J.P1.31
Vinícius Faulin	J.P2.154	Vivian Saez Martínez	R.P2.52, R.P3.139, R.P3.140
Vinicius Ferrari	J.P2.89		
Vinícius Gabriel Antunes	F.OR3.10		
Vinícius Gomes de Paula	D.P1.30, P.P1.1, P.P1.3		



Wing Chung Tsoi	L.OR2.6
Wirland Matheus de Melo Costa	E.P1.19, V.OR2.6
Wislei Riuper Ramos Osorio	K.P2.124
Wyllamanney da Silva Pereira	F.P1.68, J.P2.167, P.P2.77

Z. E. Fabrim	F.OR4.11
Zélia Maria Da Costa Ludwig	F.P1.12, F.P1.13, V.P1.25
Zeus Sales Moreira	L.P1.55
Zhe Li	L.OR2.6
Zhenyu Yang	M.OR4.9
Zhi Li	C.OR3.6
zubair ahmed	L.OR7.27

## X

Xavier Gratens	C.P1.57, C.P1.58
Xavier Maeder	C.OR5.15
Ximena Elizabeth Puentes	T.P1.2
Xiucan Wang	P.P2.83
Xiuting Liu	M.OR3.7

## Y

Yakov Kopelevich	C.OR6.16
Yamê Cavalcanti Bezerra	P.P1.46
Yanela Méndez González	P.P2.83
Yara Galvão Gobato	J.P2.110, N.P1.16, O.P1.23
Yara Sena Pereira	P.P1.7
Yasmim Rafaella Caixeta Pinto	J.P1.70
Yasmin Montero Quispe	R.P2.109
Yendry Corrales Urena	R.OR7.25
Yesid Montoya	H.P1.8
Ygor Morais Jaques	H.P1.40
Yina Faizully Quintero	K.P1.51
Yina Julieth Onofre Ramirez	N.P1.56
Ylich Peter Schmitt	K.P1.12
Yoan Léger	O.P1.23
Yone Vidotto França	E.P1.20
Y. T. Xing	C.P1.22, F.P1.40, F.P1.65, J.P1.48
Yucheng Zhang	C.OR5.15
Yujiro Tazawa	M.OR3.7
Yuri Pussep	N.P1.31, P.P2.82
Yuri Sato Sophia	A.P2.124
Yuset Guerra Dávila	C.P1.28, C.P1.29, H.P1.29, H.P1.35
Yusuke Tsutsumi	R.OR9.33
Yutao Xing	C.P1.45, C.P1.53

## Z

Zahid Ullah Khan	C.OR3.8, C.P1.42
Zaira Clemente	Q.OR2.4, Q.P1.14, Q.P1.16, Q.P1.9
Zeane Vieira Borges	F.P1.35, F.P1.45



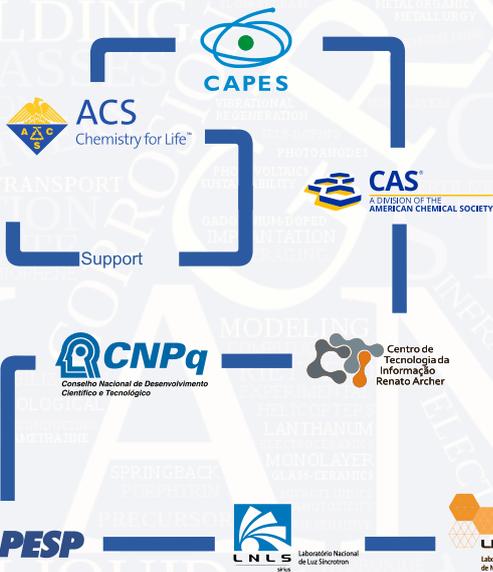


# PRP

pró-reitoria de pesquisa  
unicamp

# SBPMat

Brazil-MRS



Research in  
Germany  
Land of Ideas



Sponsorship - Gold



Agilent Technologies



Leading With Innovation



Instrutécnica

Sponsorship - Silver



O MELHOR RESULTADO

analitica



Scientific Instruments



Anton Paar

ANALOG-LAB



HORIBA



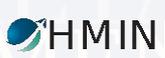
IOP Publishing



BRAUN



JEOL



The Business of Science®



RENISHAW

apply innovation™



TESCAN DO BRASIL



tech scientific



Sibratec NANO



thermo scientific



LiveoTerm

PHOTOVOLTAIC, NANOSTRUCTURES, LITHIUM-ION, SYNCHROTRON, ORGANIC-INORGANIC, SUPERCONDUCTIVITY, MULTIFERROICS, ELECTROSPINNING, HYDROTHERMAL, STRUCTURAL