



Symposium L: Structure-Property Relationship of Ceramic Materials: Theoretical and Experimental Aspects

Scope of the Symposium

This symposium aims at discussing the impact of joining studies in the theoretical and experimental areas in the control and understanding of intrinsic and extrinsic properties of solid state. The main idea is to promote discussions that involve the fundamental and technological aspects of the materials that may lead to the improvement, understanding and foreseeing of the properties of technological devices.

Historical notes:

This symposium had its first edition in 2004, at Foz do Iguaçu. In this occasion, the national organization was done by Prof. Dr. Elson Longo known by his innovative personality in science area. Prof. Longo invited Profs. Julio Ricardo Sambrano and João Batista Lopes Martins to organize the symposium.

The second symposium was realized in 2006 at Florianópolis and organized by Profs. João Batista Lopes Martins and Julio Ricardo Sambrano with about 80 abstracts submitted.

The third edition was realized at Natal/RN with an interdisciplinary format in agreement to the SPBMat philosophy. In this edition a higher interaction between theoretical and experimental researches was proposed and a higher amount of works were submitted, with 198 abstracts and 10 national and international speakers.

In 2008, the symposium was maintained due to its importance and capacity to join researchers, always with high level speakers and works presented by recognized researchers, with the coordination of Prof. Julio Ricardo Sambrano.

In 2009, during the ICAM, the symposium was presented one more time, with the same high level, being coordinated by Prof. Dr. Carlton Taft.

In 2010, the symposium received about 500 abstracts, ~ 60% of the total number of abstracts of the entire Congress, once again being coordinated by Prof. Sambrano and Profa. Ieda M. G dos Santos.

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

- Application of simulation in the understanding of physical and chemical properties of nanostructured materials, surfaces and bulk;
- Theoretical analysis on energetic and dynamic factors in technological materials;
- Development and application of art state methodologies (classic, statistic and quantic) applied to new materials;
- Influence of synthesis and processing in the extrinsic properties controlled by grain boundary, by material structure and by characteristics of inorganic systems;
- Materials with potential application in energy generation and environment;
- Nanomaterials with differential extrinsic properties – theoretical and experimental aspects;
- Transport theory related to devices and electronic structure in molecular scale;
- Processing and applications as biosensors and electronic, chemical and photonic devices.

X Encontro da SBPMat

Gramado-RS

25 a 29 | setembro
2011



X Brazilian MRS Meeting 2011

Tentative list of invited speakers

Danilo Suvorov (University of Ljubljana, Eslovênia), **Valerie Bouquet** (Université de Rennes, França).

Main organizers

Carlos Pérez Bergmann (UFRGS)
Elson Longo (UNESP)

Co-organizers

Julio Ricardo Sambrano (UNESP)
Juan Andrés (Universitat Jaume I, Spain)
Wilson Acchar (UFRN)
Valerie Bouquet (Université Rennes1, France)
Shay Reboh (CEMES, Toulouse, France)