

Symposium F: Organic Electronics and Bioelectronics: Fundamentals, Applications and Emerging Technologies

Scope of the Symposium

The Symposium intends to bring together chemists, materials scientists, biologist, physicists, and engineers from both academia and industry to share information on the organic- and bio-related materials for devices application and emerging technologies in organic electronics field. It includes all types of organic/inorganic functional materials, as well as their electronic and optoelectronics properties towards applications. The research topics comprise all types of synthesis, processing techniques (molecular crystals, multilayers, self-assemblies, printing techniques, and thin films), compounds (polymers, small molecules, composites, blends, nanoparticles, liquid crystals, hybrid), micro- and nano-fabrication, interfaces, spectroscopic characterization (linear and non-linear), surfaces (conducting, flexible, transparent substrates), electronic, and photonic properties. In addition, the symposium is equally opened for any type of electronic, photonic and hybrid devices, such as: light-emitting diodes (LEDs), field-effect transistors (FETs), MIS capacitors, diodes, electrochemical cells and transistors, photovoltaics (PVs), thermoelectrics, supercapacitors, integrated circuits, non-volatile memories, batteries, sensors, actuators & detectors. In this context, the Symposium aims to discuss the future of Organic Electronics and Bioelectronics to argue our current understanding and to define future trends of this exciting field.

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

- Synthesis and characterization of conjugated molecules and polymers, hybrid, and compounds
- Natural/biocompatible electronic materials
- Synthesis and characterization of functional liquid crystals and their applications
- Mixed ion-electron conduction
- Interfaces and bulk properties: advances in material processing
- Photonic, photophysics, and photochemistry of conjugated molecules and polymers
- Electronic, photonic, hybrid and carbon-based devices
- Micro- and nano-fabrication of organic or hybrid materials
- Organic sensors, biosensors and interfacing biology to electronics
- Theoretical modeling of conjugated molecules or polymers and organic devices

Tentative list of invited speakers (To be confirmed)

Jeffrey Kettle (Bangor University) Andy Monkman (Durham University) Harald Bock (Centre de Recherche Paul Pascal) Paulo Rocha (University of Bath) Matthias Lehmann (University of Wrzburg) Antonio Riul Jnior (Universidade Estadual de Campinas).

Symposium Organizers

Juliana Eccher (Universidade Federal de Santa Catarina) Marystela Ferreira (Universidade Federal de So Carlos) Douglas Jos Coutinho (Universidade Tecnolgica Federal do Paran) Eduard Westphal (Universidade Tecnolgica Federal do Paran).

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