

Symposium B

Title:

Inorganic Thin Films – Methods and Applications

Scope:

Flat panel displays, light-emitting sources, efficient-reliable computer (and communication) facilities, energy converters and many other opto-electronic devices represent a small sample of the most outstanding technological achievements of the last decades. In (almost) all of these cases, the Science and Technology of Thin Films played a fundamental role: either providing materials with new properties or the methods to make them real. In fact, the recent need for ultra-fast–low-consumption devices aiming better environmental practices continue pushing the Science and Technology of Thin Films towards the development of novel materials and/or new materials processing techniques. Motivated by this scenario, the present symposium represents an excellent opportunity to follow some of the advancements in the field as well as to present results, discuss ideas and establish future scientific cooperation.

Session Topics:

- Novel materials in the form of films or nanostructures, as obtained by new or standard deposition techniques;
- Alternative or complementary routes for the achievement of novel materials and/or properties;
- Compositional, structural, electronic, magnetic or optical characterization of thin films and their relationship with the deposition/processing methods;
- Theoretical approaches involving the growth or the properties of thin films;
- Optical-electronic devices (construction, characterization, simulation) based on thin films;
- The Science and Technology of Thin Films applied to the development of data processing or storage;

- The Science and Technology of Thin Films applied to the development of energy storage or energy conversion;
- Flexible electronics and hybrid organic-inorganic devices: advances and prospects.

Tentative List Invited Speakers:

Sigurd Wagner, Princeton University, USA

Martin Kordesch, Ohio University, USA

Daniel Schaadt, Clausthal Technical University, Germany

Tanja Cuk, Lawrence Berkeley National Lab, USA

Nader Pourmand, University of California, Santa Cruz, USA

Inez Pereyra, Poli, Universidade de São Paulo, Brasil,

Andre Pasa, Universidade Federal de Santa Catarina, Brasil

Symposium Organizers:

Antonio Ricardo Zanatta, Universidade de São Paulo, Instituto de Física de São Carlos, Brasil

Marcelo Mulato, Universidade de São Paulo, Faculdade de filosofia, Ciências e Letras de Ribeirão Preto, Brasil

José Humberto Dias da Silva, Universidade do Estado de São Paulo, Faculdade de Ciências, Bauru, Brasil