

Symposium L

Surface Characterization: Techniques and Applications

Scope:

This Surface Characterization symposium deals with the physical principles, instrumentation, and applications of the main techniques used in surface characterization: X-ray photoelectron spectroscopy (XPS), Auger electron spectroscopy (AES), low energy electron diffraction (LEED), secondary ion mass spectroscopy (SIMS), atomic force microscopy (AFM), photoelectron diffraction (PeD), and x-ray absorption spectroscopy (XAS). It also includes synchrotron-based spectroscopy and spectro-microscopy. The program encompasses the development and application of experimental, theoretical, and simulation surface analysis techniques to investigate technologically relevant materials. Understanding the structure and chemical composition of surfaces and interfaces is essential in important fields such as catalysis, corrosion protection, electronic and photonic materials processing, energy, and environment. Invited talks will be delivered by renowned researchers: Anouk Galtayries, from the Ecole Nationale Supérieure de Chimie de Paris (Chimie ParisTech), France; François Reniers, from the Université Libre de Bruxelles, Belgium; and Carsten Westphal, from the Technische Universität Dortmund, Germany. We will have oral and poster sessions which will provide an opportunity for personal exchange and discussion of results with colleagues.

Session Topics:

- Metal Surfaces
- Oxide Surfaces
- Ceramic Surfaces
- Polymer Surfaces
- Catalysts
- Nanomaterials
- Biomaterial Surfaces and Interfaces
- Thin Films and Coatings
- Surface Analysis Methods
- Magnetic surfaces and spintronics

Invited Speakers:

Anouk Galtayries, Ecole Nationale Supérieure de Chimie de Paris (Chimie ParisTech), Laboratoire de Physico-Chimie des Surfaces, France; François Reniers, Université Libre de Bruxelles, Faculté des Sciences, Belgium; and Carsten Westphal, from the Technische Universität Dortmund, Germany.

Symposium Chair:

Pedro A. P. Nascente, Universidade Federal de São Carlos, Centro de Ciências e Tecnologia, Departamento de Engenharia de Materiais, Brazil.

Symposium Vice-Chair:

Maria Luiza Rocco, Universidade Federal do Rio de Janeiro, Instituto de Química, Departamento de Físico-Química, Brazil.

Symposium Committe:

Caio M. C. de Castilho, Universidade Federal da Bahia, Instituto de Física, Departamento de Física do Estado Sólido, Brazil.

Abner de Siervo, Universidade Estadual de Campinas, Instituto de Física "Gleb Wataghin", Departamento de Física Aplicada, Brazil.

Vagner E. de Carvalho, Universidade Federal de Minas Gerais, Instituto de Ciências Matemáticas, Departamento de Física, Brazil.

Renata A. Simão, Universidade Federal do Rio de Janeiro, Escola Politécnica, Departamento de Engenharia Metalúrgica e de Materiais, Brazil.

Edmar A. Soares, Universidade Federal de Minas Gerais, Instituto de Ciências Matemáticas, Departamento de Física, Brazil.

Jonder Moraes, Universidade Federal do Rio Grande do Sul, Instituto de Física, Departamento de Física, Brazil.