

Desorption 2010, Mai 30-June 3, Seillac

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1. Presentation of the conference

This conference aims to work in the very active field of the mass spectrometry of biological molecules. The mechanisms of desorption and more generally the production and identification of ions are in the centre of the subjects tackled to define the most efficient ways of producing intact molecular ions, while obtaining, at the same time, complete information on the studied molecules through a controlled fragmentation. A significant part of this conference is devoted to the recent developments of fundamental research on desorption processes, but it will also deal with the necessary instruments to produce, identify and detect molecular ions and their applications in the very broad fields of biology, surface analysis, astro-chemistry and imaging.

The Interdisciplinary Conference "Desorption XX" workshop started in 1992 (Burg Waldeck, Germany) and brings together chemists, biochemists and physicists as well as other specialists for discussions with a subtle balance between instrumentation, applications and fundamental processes. The informal, relaxed and pleasant atmosphere of these meetings always encouraged extended discussions.

The conference organization is based on the participation of 80 international researchers (U.S.A., Canada, Germany, Sweden, United Kingdom, Denmark, Switzerland, Brazil, Russia and France). It will be held in Seillac, close to Blois, May 31-June 3, 2010

A particular effort will be done for the participation of students and young researchers; we hope to reduce their expenses by at least 50%.

2. Topics

The sessions will tackle the usual subjects of the previous conferences with a particular focus on spatial research, desorption-ionization processes in the field of astro-biology, (PAHs, pre-biotic molecules).

The subjects will be the following:

ESI & MALDI (Matrix Assisted Laser Desorption Ionisation)

Cluster SIMS, Massive Cluster Impact

ECD & ETD (Electron Capture & Transfer Dissociation)

Instrumentation: Mass Spectrometry imaging, ToF. & Ion Traps, Ion Mobility

I propose two meetings of technical comparisons and advantages for the biologists and clinicians:

1. Mass Spectrometry Imaging: MALDI, Cluster-SIMS and Nano-SIMS and their application to the biological and biomedical problems.
2. Mass analyzers: ToF, ICR and Electrostatic Trap (in particular Orbitrap,...) with the associated techniques of ionization and fragmentation. This comparison will be carried out within the framework of the applications.

More information is given in the web site : desorption2010.in2p3.fr

Local organizing Committee:

G. Bolbach, - CNRS-UMR7613, Paris; A. Brunelle, ICSN, Gif-sur-Yvette; Mr. Caroff, IGM, Orsay; S. Della-Negra, IPN Orsay; Mr. Fallavier, IPN Lyon; J. Chamot-Rooke, Ecole Polytechnique, DCMR, Palaiseau; R. Thissen, Laboratoire de Planetologie de Grenoble.

International Committee:

Bob Brown (USA), Werner Ens (Canada), Serge Della-Negra (France), Michael Karas (Germany), Roman A. Zubarev (Suède).