

### Séminaire SOLEIL

# Photoelectron Spectroscopy under Ambient Pressure and Temperature conditions at the Advanced Light Source

**Dr. Frank OGLETREE**

(*Director, Imaging and Manipulation Facility, Molecular Foundry  
Materials Sciences Division, Lawrence Berkeley National Laboratory  
Berkeley, California, USA*)

*Invité par Fausto SIROTTI*

**Vendredi 30 Janvier 2009 à 15h00  
Grand Amphi SOLEIL**

We have developed synchrotron-based ambient-pressure photoemission spectroscopy techniques based on a differentially-pumped electrostatic lens concept. By refocusing photoelectrons through differential-pumping apertures, the surface chemistry of solid-vapor and liquid-vapor interfaces can be investigated at pressures up to ~ 1000 Pa. I will describe the design and performance of the first-generation APPES system operating at a bending-magnet beamline, the second-generation system operating at an undulator beamline at the ALS, as well as the general design constraints for APPES. I will also show results of several in-situ catalytic studies on polycrystalline, single crystal and nanoparticle catalysts.

**Formalités d'entrée :** accès libre dans l'amphi du Pavillon d'Accueil. Si la manifestation a lieu dans le Grand Amphi Soleil du Bâtiment Central, merci de vous munir d'une pièce d'identité (à échanger à l'accueil contre un badge d'accès).

SYNCHROTRON SOLEIL

Division Expériences - L'Orme des merisiers - Saint-Aubin - BP 48 – 91192 GIF S/YVETTE Cedex  
<http://www.synchrotron-soleil.fr/portal/page/portal/Soleil/ToutesActualites>  
Secrétariat Division Expériences : [sandrine.vasseur@synchrotron-soleil.fr](mailto:sandrine.vasseur@synchrotron-soleil.fr)