

DIRECTION DES SCIENCES DE LA MATIERE,
DEPARTEMENT DE RECHERCHE SUR L'ETAT CONDENSE,
LES ATOMES ET LES MOLECULES,
SERVICE DE PHYSIQUE ET DE CHIMIE DES SURFACES ET DES INTERFACES

SEMINAIRE *

Mercredi 13 Décembre 2006 à 11h00

Bâtiment 466, salle 111 - CEA Saclay, 91191, Gif sur Yvette

Surface Science Aspects of Carbon Related Materials: Present Status and Future Trends

Prof J.A. Schaefer

*Institute of Physics & Institute of Micro and Nanotechnologies,
Technical University of Ilmenau, Germany
and*

Department of Physics, Montana State University, USA

Invité par P. Soukiassian

Abstract:

Reactions on solid surfaces on an atomic scale are of practical interest in many areas such as electronics, catalysis, electrochemistry, tribology, materials processing.

With the development of many surface sensitive analytical techniques in the past, great advances have been reached in the understanding of surface reactions at the atomic and/or molecular level. After a number of model systems on single crystalline material have been understood, similar approaches we have applied to small organic molecules, ionic liquids, fullerenes, carbon nanotubes, silicon carbide and diamond like carbon. In addition from an application point of view two examples will be given, PEM fuel cells and nanopositioning machines.

The relevance of surface modifications will be exemplified and some promising future directions will be briefly discussed.

*** SERA PRECEDE D'UNE PAUSE-CAFE A PARTIR DE 10H30**