

## Séminaire du LCPMR

### Séminaire de l'Institut Parisien de Chimie Physique et Théorique (IP2CT)

#### **X-Ray Spectroscopic Methods for structure and dynamics of the interfaces of (oxide) nanolayers study**

Pr. Elena O. Filatova

*Institute of Physics, St Petersburg University, Russia*

E-mail: feo@ef14131.spb.edu

X-ray spectroscopy is one of the effective methods of the analysis of the electronic structure, atomic concentration and chemical phase composition of materials. Advantages offered by synchrotron radiation, have given a new push to the development of the x-ray spectroscopy and now the x-ray spectroscopy includes a whole complex of methods. The progress of spectroscopic methods for nondestructive in-depth profiling analysis of the atomic and electronic structure of thin films and buried interfaces will be reported in the talk. The basics of the main methods (near edge x-ray absorption fine structure (NEXAFS), photoelectron spectroscopy (PES), hard x-ray photoelectron spectroscopy (HAXPES) and soft and hard x-ray reflectometry (S/HXRR)), mathematical analysis of the data obtained by these techniques and their application to study of the surfaces and interfaces of technologically important assemblies will be discussed.

**Lundi 30 novembre 2015 à 15h30**

**Campus Curie – Chimie Physique**

**11 rue Pierre et Marie Curie - 75005**

**Laboratoire de Chimie Physique – Matière et Rayonnement**

**ATTENTION: horaire inhabituel, 15h30**