
On behalf of the

Science College CMS

Vienna Computational Materials Laboratory
and Center for Computational Materials Science

we cordially invite you to the following seminar

Prof. Dr. Jiri Dedecek

Institute of Physical Chemistry, Academy of Sciences of the Czech Republic, Prague

UV-Vis-NIR diffuse reflectance spectroscopy. A promising tool for the characterization of local structure of solids on the nanoscale.

Recent developments of the instrumentation as well as of quantum chemical calculations resulted in the insertion of UV-Vis-NIR diffuse reflectance spectroscopy between powerful methods of structural analysis. Optical spectra reflect energetic of valence electron and, thus, are highly sensitive to the local arrangement of the investigated system and it dynamic both in crystalline and amorphous materials. This will be demonstrated on the application of UV-Vis-NIR diffuse reflectance spectroscopy of transition metal ions for the structural analysis of heterogeneous catalysts. Both absorption and emission experiments will be discussed. Emphasis will be placed on the explanation of the experimental methodology and its relation to the interpretation of experiments.

Date: Monday, May 16, 2011 16:00
Location: Josef-Stefan-Hörsaal,
Strudlhofgasse 4, 3rd floor, 1090 Wien