Ústav fyzikální chemie J. Heyrovského, v.v.i. Akademie věd České republiky

zve všechny zájemce na ústavní seminář, na kterém promluví

Professor Tim Albrecht

(Department of Chemistry, Imperial College London)



Charge transport at the nanoscale

Seminář se koná v pondělí 4. října 2010 od 14:30 hodin v budově ÚFCH JH – v Brdičkově posluchárně (Praha 8, Dolejškova 3).

My presentation will cover two areas that we currently pursue in my research group with nanoscale charge transport as a common denominator. First, I will give an overview of our work on using integrated electrode structures of different dimensions and in different arrangements with individual solid-state nanopores. The ultimate goal for these activities includes single-biomolecule sensing, ultimately perhaps even DNA sequencing. Secondly, I will present some of our results from single-molecule charge transport experiments in electrochemical environments. These include data on "simple" inorganic transition metal complexes and Au nanoparticles in aqueous and ionic liquid environments. Different charge transport mechanisms will be discussed in an attempt to better understand the molecular processes in a redox-active tunnelling junction.

Těšíme se na Vaši účast. Hosté jsou vítáni.





