Av. Països Catalans, 16, Campus Sescelades (St. Pere i St. Pau), Tarragona. Tel. 977920200

Nanochemistry at Surfaces – From Single Molecules to Novel Functionalities and Complex Ensembles

Prof. Johannes Barth

Technische Universität München (Germany)

Wednesday 11th June, 2014. ICIQ Auditorium, 12 p.m.

Professional Career

Johannes Barth studied Physics at Ludwig Maximilians Universität in Munich. He obtained his Ph.D at the Fritz-Haber-Institut in Berlin in 1992 for STM work on gold surfaces and their response towards alkali metal adsorption under the supervision of Prof. G. Ertl. He carried out a postdoctoral stay (1993 –1994) at the IBM Almaden Research Center in San Jose studying ultrathin magnetic films. Back at the Fritz-Haber-Institut he focused on surface chemistry and mobility phenomena, which interests were further explored along with epitaxial growth studies at the Institut de Physique Expérimentale, Ecole Polytechnique Fédérale de Lausanne (Team Leader from 1996 – 2000). Subsequently he was Consultant at the Max-Planck-Institut für Solid State Research in Stuttgart and Docent at Ecole Polytechnique Fédérale de Lausanne. In 2003 he was nominated a Canada Research Chair at the Departments of Chemistry and Physics & Astronomy at the University of British Columbia, Vancouver, followed by an Adjunct Professorship from 2007-2012. Since 2007 he holds a Chair in Molecular Nanoscience and Surface Chemical Physics at the Phyics-Department of Technische Universität München.

Research Interests

The general topic of his current research is the understanding and control of matter at the molecular scale, notably by exploring functional molecular species and designing supramolecular architectures or other atomistically defined structures at interfaces.

Scanning Tunneling Microscopy and Spectroscopy – Advanced Materials – Surface Physics and Chemistry – Supramolecular and Biomolecular Self-Assembly – Dynamics of Adsorbed Species – Interfacial Coordination Chemistry – Molecular Manipulation.