

ECCL Meeting 2008

12-16th March

Altis Park Hotel, Lisbon

Programme

All talks will be held in the Sala Atlantico on the 3rd floor of the Altis Park Hotel, Avenida Engenheiro Arantes e Oliveira, 1900-221 Lisboa, Portugal

Thursday 13th March

Session 1

08:50-09:00	<i>Welcome:</i> The meeting will be opened by the Dean of the Faculty of Science & Technology of the New University of Lisbon Prof. Fernando Santana	
09:00-09:40	Electron Controlled Reactions in Gas Phase and Condensed Phase Molecules	Eugen Illenberger (<i>Freie Universtitaet Berlin, Germany</i>)
09:40-10:00	Theory of inelastic electron-molecule collisions. From gas phase to molecules on surfaces	Martin Čížek (<i>Charles University Prague, Czech Republic</i>)
10:00-10:20	Surface Dynamics study during the manipulation of single molecules on Si(100)-(2x1) at 5K	Damien Riedel (<i>Centre Universitaire de Paris Sud, France</i>)
10:30-11:00	<i>Coffee Break</i>	
11:00-11:20	Cold electron collisions with solids	David Field (<i>University of Aarhus, Denmark</i>)
11:20-11:40	Molecular nanostructures on surfaces formed by organic reactions	Trolle Linderoth (<i>University of Aarhus, Denmark</i>)
11:40-12:00	Selective bond cleavage by low energy electron impact on gas phase nucleobases derivatives	Robert Abouaf (<i>Université Paris Sud Centre d'Orsay, France</i>)
12:00-12:20	Investigation of low-energy electron irradiation-induced changes in organic materials by thermal desorption spectroscopy	Elisabeta Burean (<i>Universität Bremen, Germany</i>)
12:30-14:00	<i>Lunch</i>	

Thursday 13th March (cont.)

Session 2

14:00-14:40	First-Principles Simulation of Mechanically Induced Chemistry	Irmgard Frank (Universität Hannover, Germany)
14:40-15:00	Modelling resonant fragmentation in biosystems upon electron attachment	Isabella Baccarelli (Supercomputing Center CASPUR, Italy)
15:00-15:20	Guiding of low-energy electrons through insulating nanocapillaries	Aleksandar Milosavljević (Institute of Physics Belgrade, Serbia)
15:20-15:40	Using electrons to template a dielectric substrate	Geoff Thornton (University College London, UK)
15:45-16:15	<i>Coffee Break</i>	
16:15-16:35	Design of an instrument to identify suitable molecules for ECCL – work in progress	Elias Bjarnason (University of Iceland, Iceland)
16:35-16:55	Thermally Programmed Desorption experiments at very low temperature (10-30K). Desorption and formation of molecular hydrogen on heterogeneous water ice surfaces of different porosity	Lionel Amiaud (Université Paris-Sud/Orsay, France)
18:00-	<i>Welcome reception and poster session</i>	

Friday 14th March*Session 3*

08:30-09:10	Magnetic nanostructures probed on the atomic scale	Cyrus Hirjibehedin (London Centre for Nanotechnology, UK)
09:10-09:30	Electron Induced Molecular Reorganization and Switching at Metal Surfaces	Martin Wolf (Freie Universitaet Berlin, Gemany)
09:30-09:50	Laser-Induced Acoustic Desorption Combined With Electron-Attachment Spectroscopy and Quantum Chemical Methodologies as a Means of Studying DNA Strand Breaks	Iwona Dabkowska (University of Gdańsk, Poland)
09:50-10:10	<i>Coffee</i>	
10:10-10:50	On the behaviour of electron attachment cross sections near zero energy	Harmut Hotop (Technical University Kaiserslautern, Germany)
10:50-11:10	Effective cross sections for low-energy electron scattering from monomolecular films of condensed thymidine	Radmila Panajotovic (The Open University, UK)
11:10-11:30	Optical emission spectroscopy of reactive magnetron discharges.	Andre Wemans (Faculdade Ciencias e Tecnologia/UNL, Portugal)
11:30-12:00	Electronic excitation, single and double ionization of molecules of biological interest using fast electrons and synchrotron radiation	Gerardo de Souza (Universidade Federal do Rio de Janeiro, Brazil)
12:00-12:30	Applications of focused electron beam induced chemical reactions	Klaus Edinger (Carl Zeiss - NaWoTec, Germany)
12:30-14:30	<i>Lunch</i>	

14:30- *Excursion to Queluz National Palace and the conference dinner, with a special tribute to our colleagues.*

The conference dinner will also be attended by the Dean of the Faculty of Science and Technology, New University of Lisbon, Prof. Fernando Santana and the Head of the Scientific Council, Prof. Joao Crespo

Saturday 15th March

Session 4

09:00-09:40	Patterning of surfaces at the 10nm scale and below	Richard Palmer (University of Birmingham, UK)
09:40-10:00	Vibrational excitation of methane by slow electrons revisited: Joint theoretical and experimental study	Roman Čurík (J Hyerovsky Institute of Physical Chemistry, Czech Republic)
10:00-10:40	Scanning Tunneling Microscopy of Adsorbates on Insulating Films: From Manipulation of the Charge State to Imaging of Individual Molecular Orbitals and Bond Formation	Gerhard Meyer (IBM Zurich Research Laboratory, Switzerland)
10:40-11:00	<i>Coffee Break</i>	
11:00-11:20	Current-Induced Conductance Switching of Individual Molecules	Jascha Repp (University of Regensburg, Germany)
11:20-11:40	Atomic Force Microscopy Characterization of Polyelectrolytes Self-Assembly Films Using Dynamic Scaling Concepts	Quirina Ferreira (FCT - UNL, Portugal)
11:40-12:00	Inelastic interactions of electrons with molecules and clusters embedded in superfluid helium droplets	Paul Scheier (Universität Innsbruck, Austria)
12:00-12:20	Absolute electron – molecule cross sections: elastic, vibrational and electronic excitation, and dissociative attachment	Michael Allan (University of Fribourg, Switzerland)
12:30-14:00	<i>Lunch</i>	

Saturday 15th March (cont.)

Session 5

14:00-14:40	The hunt for single atom deposition	Cornelis W. Hagen (Delft University of Technology, Netherlands)
14:40-15:00	STM-driven molecular switches at surfaces: From structure to dynamics	Peter Saalfrank (Universität Potsdam, Germany)
15:00-15:20	Jahn-Teller effect in C ₆₀ molecules studied with the Scanning Tunneling Microscope	Nicolas Lorente (CISC, Spain)
15:20-15:50	Direct quantitative measurement of lateral forces at atomic scale using non- contact Atomic Force Microscopy (nc- AFM)	Ahmet Oral (Sabanci University, Turkey)
15:50-16:15	<i>Coffee Break</i>	
16:15-17:30	General discussion: further input on the "Action Statement"	
17:30-18:00	Final remarks	
18:00-	Steering committee group meeting	