



FRONTIERS Research Meeting, June 23-26 2008, Herakion (Crete)

Program

Monday 23 June

- 14.00 Registration desk open; as of 17:00 Welcome drinks
19.00 **Nanoscale Field-Effect Transistors for Flexible Displays**
Keynote lecture by Hagen Klauk (MPI, Stuttgart)
20.00 Buffet-dinner

Tuesday 24 June

- 9.00 Opening by Vinod Subramaniam
9.10 **Fabrication of Structured Surfaces with Adhesive Properties to Study Cell Behaviour**
Sinem Engin (Karlsruhe - DE)
9.30 **Flow perfusion culture of hMSC on graded polycaprolactone scaffolds - Preliminary results**
Lea Bjerre (iNANO - DK)
9.50 **Control of the rotation at the atomic scale in technomimetic molecules**
Gwenael Rapenne (CEMES - FR)
10.10 Coffee break and poster session
11.00 **Lipid Dip-Pen Nanolithography for functional biomimetic membrane systems,**
Steven Lenhert (Karlsruhe - DE)
11.20 **Interactions of nanoscale protein aggregates with phospholipids – insights into alpha-synuclein toxicity**
Vinod Subramaniam (MESA+ - NL)
12.00 Lunch
13.30 **Comprehensive characterization of molecular interactions based on nanomechanics** Thomas Braun (NCCR – CH)
13.50 **Electrochemical biosensors for small molecule detection: Pros and cons of enzyme- and nucleic-acid based assays for point-of-care diagnostics**
Elena E. Ferapontova (iNANO - DK)
14.10 **Exchange Interaction of Single Magnetic Adatoms**
Peter Wahl (MPI - DE)
15.00 Departure for visit to Knossos (snacks and drinks in the bus)
17.30 Departure for Archanes village (short tour and traditional dinner)
Approx. 22:30 bus returns to hotel

Wednesday 25 June

- 9.00 **Gold and Silver nanoparticles for the optical detection of biological markers**
Hilde Jans (IMEC - BE)
- 9.20 **Plasmon hybridisation at metal nanostructures as a route to sensitive optical detection**
Duncan Sutherland (iNANO - DK)
- 9.40 **Optical microscopy of localized plasmon resonances for optimized optical detector structures**
Ralf Vogelgesang (MPI – DE)

10.00 *Coffee break and poster session*

- 10.50 **Report on the Frontiers Equality and Diversity Survey 2007**
Tabitha Freeman (Cambridge - UK)
- 11.10 **Innovation: where invention and insight surface**
Paul van der Heijden & Arjan Gittenberger (MatureDevelopment & GiMaRis – NL)
- 11.30 **Detection of L-glutamate by use of a bi-enzymatically amplified ENFET**
Danielle Rand (IMEC - BE)
- 11.50 **Electrospray Ion Beam Vacuum Deposition of Organic Molecules and Inorganic Clusters**
Stephan Rauschenbach (MPI - DE)

12.10 *Lunch*

- 13.50 **Microfluidic Free-Flow Electrophoresis for Proteomics-on-a-chip**
Dietrich Kohlheyer (MESA+ - NL)
- 14.10 **Mimicry of natural “structural colours”**
Mathias Kolle (Cambridge - UK)
- 14.30 **Electrical Characterization of DNA using Nanofabrication Techniques**
Paul Rhatigan (Cambridge - UK)
- 14.50 **Solid-supported biomimetic block copolymer membranes**
Ekaterina Rakhmatullina (NCCR – CH)

Short break

- 17.00 **Joint session Nano2Life - FRONTIERS**
Bazaar: actively animated poster session with flash presentations by (young) scientists on their work
- 18.00 *Drinks*
- 18.30 *Speed dating*
- 19.00 **Word of Welcome**
Nano2Life: Patrick Boisseau, Network Coordinator
FRONTIERS: Vinod Subramaniam, Network Coordinator
- 19.30 *Movie Nano2Life*
- 20.00 *Dinner*

Thursday 26 June

Departure after breakfast