

SUMMER SCHOOL – NN08, 12-18/7/2008

PRELIMINARY PROGRAM

Saturday 12/7/2008 (<i>Supervisors of the 1st day: Frangis N., Lioutas C.</i>)	
08:00 – 9:00	Registration
Day 1	
Subject 1: Nanoscale Materials – Properties & Techniques I	
09:00 – 09:15	Welcome (Prof. S. Logothetidis, Physics Department, AUTH)
09:15 – 10:30	Nanotechnology and Applications (Prof. S. Logothetidis, LTFN, Physics Department, AUTH)
10:30 – 10:45	Coffee Break
10:45 – 12:00	Laser Ablation for nanoparticles: Synthesis & Characterization (Dr. N. Semaltianos, University of Liverpool, Department of Engineering, Liverpool, U.K.)
12:00 – 13:15	Nanostructured organic and hybrid materials for flexible photovoltaics (Prof. J. Kallitsis, Chemistry Department, University of Patras)
13:15 – 14:30	Lunch
14:30 – 15:45	Organic Electronics (Prof. G. Malliaras, Dept. of Materials Science and Engineering, Cornell University, USA)
15:45 – 17:00	Organic Electronics (Prof. G. Malliaras, Dept. of Materials Science and Engineering, Cornell University, USA)
17:00 – 17:15	Coffee Break
17:15 – 19:30	SEM-TEM, Electron microscopy Lab (Assoc. Prof. N. Frangis, As. Prof. Ch. Lioutas, Physics Dep., AUTH)
End of Day 1	

Sunday 13/7/2008 (<i>Supervisors of the 2nd day: Kassavetis S., Zyganitidis I.</i>)	
Day 2	
Subject 2: Nanoscale Materials & Processes: From Lab to Industry	
09:00 – 10:15	SPM & Nanoindentation Techniques (Dr. S. Kassavetis, I. Zyganitidis, LTFN, Physics Dep., AUTH)
10:15 – 11:30	SPM & Nanoindentation Techniques (Dr. S. Kassavetis, I. Zyganitidis, LTFN, Physics Dep., AUTH)
11:30 – 11:45	Coffee Break
11:45 – 13:00	Porous silicon for Electronics and Sensors (Dr. A. Nassiopoulou, Director of Institute of Microelectronics, DEMOKRITOS, Athens, Greece)
13:00 – 14:15	Laser processes for the growth and patterning of nanomaterials (As. Prof. P. Patsalas, Dep. of Materials, Univ. of Ioannina, Greece)
14:15 – 15:30	Lunch
15:30 – 16:45	Organic Vapour Phase Deposition (OVPD) Techniques (Dr. Nico Meyer, Aixtron, Germany)

16:45 – 17:15	Dr. A. Zoubir, HJY
17:15 – 17:30	Coffee Break
17:30 – 19:00	Visit to Lab Thin Film Technology (LTFN: PVD, UHV Lab, Nanometrology Lab)
End of Day 2	

14-16/7/2008, Attendance of the 5th INTERNATIONAL CONFERENCE ON “NANOSCIENCES & NANOTECHNOLOGIES” – NN08

Thursday 17/7/2008 (Supervisor of the 6th day: Papadopoulos G.)	
Day 6	
Subject 3: Nanoparticle Technology	
08:30 – 11:45	Visit to CPERI at CERTH Nanoparticle Technologies for Energy and Emission Control (Assoc. Prof., Director of CPERI, A. Konstandopoulos) Visit to Labs
Subject 4: Carbon-based Materials: Theory & Experiment	
12:00 – 13:15	Carbon nanomaterials & their potential in emerging nanotechnologies (Dr. K. Porfyraakis, Department of Materials, Oxford University, UK)
13:15 – 14:30	Nanotubes: from symmetry to technology (Prof. M. Damnjanovic, Faculty of Physics, Belgrade University)
14:30 – 15:30	Lunch
15:30 – 16:45	Dirac and Klein-Gordon particles in one-dimensional periodic potentials (Prof. P. Vassilopoulos, Department of Physics, Concordia University)
Subject 5: Nanobiotechnology I	
17:50 – 18:05	G. Kousoulas (Division of Biotechnology and Molecular Medicine, Louisiana State University, USA)
18:05 – 18:15	Coffee Break
18:15 – 19:30	Simulations and Molecular Theories of Membrane Proteins (Dr. A. Baumgaertner, Forschungszentrum Julich, Germany)
19:30 – 20:45	Protein-Protein Interactions and Docking (Dr. G. Papadopoulos, Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece & Physics Dept. AUTH)
End of Day 6	

Friday 18/7/2008 (Supervisor of the 7th day: Choli – Papadopoulou T.)

Day 7

Subject 6: Nanoscale Materials – Properties & Techniques II

08:30 – 10:00	Modelling of Mechanical properties of Nanostructures (Assoc. Prof. H. Polatoglou, Physics Dep., AUTH)
10:00 – 11:15	Probing the Nano-scale with First-Principles Calculations (Dr. L. Tsetseris, Physics Dep., AUTH and Dep. of Physics and Astronomy, Vanderbilt University, USA)
11:15 – 11:30	Coffee Break
11:30 – 13:00	Optical properties of materials (Dr. M. Gioti and Dr. A. Laskarakis, LTFN, Physics Department, AUTH, Greece)
13:00 – 14:15	Investigation of the Structure and Dynamics in Polymer Nanocomposites (Prof. S. Anastasiadis, Chemical Engineering Dept., AUTH)
14:15 – 15:15	Lunch
Subject 7: Nanobiotechnology II	
15:15 – 16:15	Interactions of Nanoparticles with living cells (Prof. M. Arsenakis, Biology Dep., AUTH)
16:15 – 17:15	Protein Engineering towards biofunctionalization (Assoc. Prof. T. Choli – Papadopoulou, Chemistry Dep., AUTH)
17:15 – 17:30	Coffee break
Subject 8: Nanoscale Materials – Properties & Techniques III	
17:30 – 18:30	Polymers on surfaces studied by atomic force microscopy (Dr. V. Koutsos, Institute for Materials and Processes, School of Engineering and Electronics & Centre for Materials Science and Engineering, The University of Edinburgh, UK)
18:30 – 19:30	Introduction to Optical Tweezers (Dr. Eirini Theofanidou, School of Physics, University of Edinburgh, UK)
19:30 – 20:00	Multiple choice test
20:00 – ...	Certificates -- Farewell event
End of Day 7	