

Wrocław University of Technology – University of Malaga

NANOSCIENCE WORKSHOP

18 – 19 January, 2011

Senate Hall (room 127), WRUT Main Building (A1)

Tuesday, 18 January

- 9.00 – 9.15 Workshop opening
Vice-Rector of WRUT – **Prof. Cezary Madryas**
Vice-Rector of University of Malaga – **Prof. Jose A. Narvaez Bueno**
- 9.15 – 9.35 **Prof. Andrzej Dziedzic**, Faculty of Microsystems Electronics and Photonics, WRUT
Microelectronics research at WRUT
- 9.35 – 9.55 **Prof. Regina Paszkiewicz**, Faculty of Microsystems Electronics and Photonics, WRUT
III- V semiconductor nanostructures for advanced devices applications
- 9.55 – 10.15 **Dr. Grzegorz Jóźwiak**, Faculty of Microsystems Electronics and Photonics, WRUT
Metrology of micro and nanostructures
- 10.15 – 10.35 **Dr. Robert Kudrawiec**, Institute of Physics , WRUT
Bandgap engineering in III-V semiconductor heterostructures dedicated for laser applications: Design and experimental verification by modulation spectroscopy
- 10.35 – 10.55 **Dr. Grzegorz Sęk**, Institute of Physics , WRUT
Semiconductor quantum dashes: optical properties and application prospects
- 10.55 – 11.15 Coffee break
- 11.15 – 11.35 **Prof. Jose Ramos Barrado**, University of Malaga
The Nanotechnology Unit of Malaga University
- 11.35 – 11.55 **Dr. Juan Casado**, University of Malaga
Molecular nanostructured materials for molecular electronics and photonics
- 11.55 – 12.15 **Dr. Francisco Martín**, University of Malaga
Nanostrutured materials and coating for energetical applications
- 12.15 – 12.35 **Dr. Manuel López**, University of Malaga
Nanotechnology and Organic Synthesis
- 12.35 – 12.55 **Dr. Santiago Palanco**, University of Malaga
Tailored generation of nanoparticles by laser irradiation of micro-droplet stream
- 12.55 – 14.00 Lunch
- 14.00 – 14.20 **Prof. Antoni Mituś**, Institute of Physics, WRUT
*Electric field nano-poling of octupolar molecules:
Statistical Mechanics and Monte Carlo analysis*

- 14.20 – 14.40 **Dr. Artur Podhorodecki**, Institute of Physics, WRUT
Optical spectroscopy of nanocrystalline materials
- 15.00 Visit to the Laboratory of Optical Spectroscopy of Nanostructures, Institute of Physics

Wednesday, 19 January

- 9.00 – 9.20 **Dr. Daniel Collado**, University of Malaga
Biomimetic dendrimers for medical applications
- 9.20 – 9.40 **Dr. Tomas Cordero**, University of Malaga
Nanoparticle from carbon materials
- 9.40 – 10.00 **Prof. Andrzej Miniewicz**, Institute of Physical and Theoretical Chemistry, WRUT
Photochromic polymers, liquid crystals and biopolymers studied by nonlinear optical techniques
- 10.00 – 10.20 **Dr. Krzysztof Janus**, Institute of Physical and Theoretical Chemistry, WRUT
Organic Field Effect Transistors: optoelectrical switches, semicrystalline polymers and all solution made devices
- 10.20 – 10.40 **Dr. Marcin Nyk**, Institute of Physical and Theoretical Chemistry, WRUT
Nanoparticles for nanophotonics
- 10.40 – 11.00 **Prof. Grażyna Gryglewicz**, Division of Polymer and Carbonaceous Materials, WRUT
Synthesis of fishbone-type carbon nanofibers by catalytic decomposition of methane
- 11.00 – 11.20 Coffee break
- 11.20 – 11.40 **Dr. hab. Antoni Chyla**, Institute of Physical and Theoretical Chemistry, WRUT
Enzyme immobilisation for sensoric purposes (in Langmuir-Blodgett layers)
- 11.40 – 12.00 **MSc. Joanna Olesiak-Bańska**, Institute of Physical and Theoretical Chemistry, WRUT
Liquid crystalline phases of DNA
- 12.00 – 12.20 **Prof. Marek Samoć**, Institute of Physical and Theoretical Chemistry, WRUT
Femtosecond laser studies of third order nonlinear optical properties of organometallic compounds
- 12.20 – 13.30 Visit to the laboratories of the Institute of Physical and Theoretical Chemistry:
 Laboratory of Material Characterisation,
 Laboratory of Nonlinear Optics,
 Laboratory of NLO spectroscopy,
 Laboratory of Thin Molecular Films
- 13.30 – 14.30 Lunch
- 14.30 Visit to the Laboratory of Microelectronics and Nanotechnology,
 Faculty of Microsystems Electronics and Photonics, WRUT