

**Polish-Russian Academies of Sciences
Seminar on Nanotechnologies
Warsaw, October 17-18, 2011**

Monday, October 17, 2011

- 9:30 Opening Address, Director of the Institute of Physics, PAS
- 9:40 P. Przystupski, Institute of Physics, Warsaw, PAS
Proximity effect in oxide ferromagnet/superconductor heterostructures"
- 10:10 A.A. Fraerman, Institute for Physics of Microstructures, Nizny Nowgorod, RAS
Collective Effects in Magnetic Nanostructures
- 10:40 P. Kacman, Institute of Physics, Warsaw, PAS
Structure-Dependent Ferromagnetism in Mn-Doped III–V Nanowires
- 11:10- 11:30 Coffee break**
- 11:30 A.V. Dvurechenskii, Institute of Semiconductor Physics, Novosibirsk, RAS
Dense Array of Ga/Si Quantum Dots: Physics and Application
- 12:00 T. Suski, Institute of High Pressure Physics, Warsaw, PAS
Band gap bowing and anomalous pressure effects in II-V nitride alloys. Role of In-segregation
- 12:30 E.S. Koptev**
Detection of small photon flux in 2D arrey of tunnel-coupled Ga/Si quantum dots
- 13:00-14:30 Lunch (institute restaurant)**
- 14:30 P.B. Sorjkin, Emanuel Institute of Biochemical Physics, Moscow, RAS
New Derivates of Graphene (Fluorographene and Diamane Structures) - Possible Basis of Future Two-dimensional Nanoelectronics
- 15:00 D. Elbaum, Institute of Physics, Warsaw, PAS
ZnO biosensing
- 15:30 L.A. Chernozatonskii, Emanuel Institute of Biochemical Physics, Moscow, RAS,
Quantum Dot, Nanoribbon and Superlattice Structures Based on Graphene: Modelling, Preparations and Applications
- 19:00 Get Together Dinner, in the ‘Przy Trakcie” restaurant in Warsaw,
Corner of Krakowskie Przedmieście and Królewska Street (Królewska 2)

Tuesday, October 18, 2011

- 9:30 P. Kossacki, University of Warsaw, Warsaw
Single dot spectroscopy of CdTe based self organized system
- 10:00 M.V. Maximov, St Petersburg Academic University, Nanotechnology Research and Education Centre, St. Petersburg, RAS
Quantum Dot Injection Lasers for Telecom Applications
- 10:30 M. Bugajski, Institute of Electron Technology, Warsaw
Mid-Infrared Quantum Cascade Lasers for Gas Sensing Application
- 11:00- 11:30 Coffee break**
- 11:30 A.A.Gorbatsevich, Lebedev Physical Institute, Moscow, RAS
“Symmetry breaking in Resonant – Tunneling heterostructures”
- 12:00 Ł. Kłopotowski, Institute of Physics, Warsaw, PAS
Charging Effects in Self-Assembled CdTe Quantum Dots
- 12:30 F.I. Zybov, St. Petersburg Academic University – Nanotechnology Research and Education Center, St. Petersburg, RAS
Simultaneous Ground- and Excited –state Lasing in Quantum Dots
- 13:00-14:30 Lunch (institute restaurant)**
- 14:30 R. Buczko, Institute of Physics, Warsaw, PAS
Modeling PbTe-based low dimensional structures
- 15:00 Yu.V. Kopaev, Physical Institute, Moscow, RAS
Topological Insulators
- 15:30 W. Zawadzki, Institute of Physics, Warsaw, PAS
Zitterbewegung (trembling motion) of carriers in graphene and other systems
- 16:00 Closing address, H. Szymczak