

Wednesday, June 22, Registration 09:00-13:00

Lunch 12:30

14:00 Opening ceremony by Prof. Peter Bury

14:15 Invited lecture by Dr. Eva Majkova

Wednesday, June 22, Session 1B 14:45-16:15 / Thin films

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| 14:45 | K. Shtereva, V. Tvarozek, I. Novotny, M. Milosavljevic, P. Sutta, S. Flickyngerova | Modification of physical properties of sputtered zinc oxide thin films by introduction of gallium and nitrogen |
| 15:00 | K. Shtereva, V. Tvarozek, I. Novotny, P. Sutta, J. Kovac, S. Flickyngerova, M. Netrvalova | Effect of deposition temperature on electrical, optical and structural properties of Ga-N Co-doped ZnO oxide thin films |
| 15:15 | J. Bruncko, A. Vincze, M. Michalka, M. Netrvalova | In-process ZnO thin films doping during pulsed laser deposition |
| 15:30 | T. Brath, D. Buc, J. Kovac, V. Hrnciar, L. Caplovic | Study of sputtered ZnO thin films on SiO ₂ and GaP substrates |
| 15:45 | M. Marton, D. Kovalcik, E. Zdravecka, M. Varga, L. Gajdosova, M. Vesely, R. Redhammer | Effect of substrate bias on electrochemical corrosion of amorphous carbon nitride thin films |
| 16:00 | A. Vincze, P. Michniak, M. Varga, E. Dobrocka, F. Uherek | Development of diamond thin films on various substrates |

Coffebreak 16:15-16:35

16:35 Invited lecture by Prof. Hikaru Kobayashi

17:05 Invited lecture by Prof. Marc Wuilpart

Wednesday, June 22, Session 2B 17:35-18:50 / Optical phenomena

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| 17:35 | N. Tarjanyi, D. Kacik | Light-guiding structure prepared in LiNbO ₃ :Fe:Mn crystal utilizing the photorefractive effect |
| 17:50 | J. Ocenasek, M. Netrvalova, P. Sutta | Determination of optical parameters of thin films from transmittance spectra |
| 18:05 | I. Kubicova, D. Pudis, L. Suslik, J. Skriniarova | Characterization of metal-coated fiber tip for NSOM lithography by tip-to-tip scan |
| 18:20 | P. Tvarozek, D. Liachovicky | Nano-tailoring of photonic crystal fibers |
| 18:35 | D. Seyringer, M. Bielik, M. Kytka | Introduction of a new software tool to design arrayed waveguide gratings |

Welcome party 19:30

Breakfast 7:00

08:30 Invited lecture by Prof. Roberto Morandotti

Thursday, June 23, Session 3B 9:00-10:30 / Simulation methods

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| 9:00 | P. Ballo, L. Harmatha | Quantum tunneling through a very narrow triangular potential barrier, exact and WKB solution |
| 9:15 | P. Pribytny, D. Donoval, A. Chvala, J. Marek, M. Molnar | Analysis and optimization of power diode supported by electro-thermal modeling and simulation |
| 9:30 | J. Priesol, A. Satka, P. A. Shields, D. W. E. Allsopp, D. Donoval, F. Uherek | Study of cathodoluminescence in InGaN/GaN nanostructure by Monte carlo method |
| 9:45 | L. Glod, G. Vasziova, J. Tothova, V. Lisy | Hydrodynamic Brownian motion of particles in a harmonic trap |
| 10:00 | P. Neilinger, M. Trgala, M. Leporis, M. Grajcar | Measurement apparatus for superconducting qubits in GHz range |
| 10:15 | M. Vojs, E. Sipos, V. Rehacek, M. Mikolasek | High stability bismuth-film electrodes for the determination of trace metals by anodic stripping voltammetry |

Coffebreak 10:30-10:50

10:50 Invited lecture by Prof. Pavel Cheben

Thursday, June 23, Session 4B 11:20-12:50 / Solid state characterization and analysis

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| 11:20 | V. Ac, J. Kasala, D. Korytar, Z. Zaprazny, P. Konopka | Practical experiences with X-ray micro tomography of aluminium alloys |
| 11:35 | Z. Zaprazny, D. Korytar, V. Ac, P. Konopka, J. Bielecki | Computerized tomography using high resolution X-ray imaging system with a microfocus source |
| 11:50 | J. Kovac jr., J. Kovac, J. Hotovy, I. Novotny, J. Skriniarova, E. Dutkova, P. Balaz | Electrical characterisation of semiconductor structures using AFM techniques |
| 12:05 | M. Misun, M. Tomaska | Thermal analysis of microwave high-temperature probe station |
| 12:20 | E. Vavrinsky, L. Prusakova, J. Tesar, P. Sutta, V. Tvarozek, P. Benko | Resistivity measurement and conductivity type determination for semiconducting materials using a four-point probe |
| 12:35 | R. Kinder, M. Mikolasek, J. Kovac, M. Tlaczala | Hall and a four point probe for characterization of semiconductors |

Lunch 12:50

14:00 Hike to Zamkovsky cottage and Waterfalls of Studeny potok

Welcome party 19:30

Breakfast 7:00

Friday, June 24, Session 5B 8:30-10:30 / Sensors and detection methods

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| 8:30 | Y. Sarov, R. Andok, V. Sarova, Ch. Bitterlich, O. Richter, E. Guliyev, A. Bencurova, J.-P. Zollner, I. W. Rangelow | Microstructuring of piezoresistive cantilevers for Gas detection and analysis |
| 8:45 | I. Kosc, I. Hotovy, R. Grieseler, V. Rehacek, M. Wilke, L. Spiess | Thin compound oxide films based on NiO and TiO ₂ for gas detection |
| 9:00 | M. Predanocy, I. Hotovy, I. Kosc | Characterization and thermal distribution of platinum microheaters for gas sensors on different substrates |
| 9:15 | M. Sokolsky, M. Kaiser, M. Kusko, J. Cirak | Anthocyanines as light harvesters in the dye-sensitized TiO ₂ solar cell |
| 9:30 | I. Sladek, A. Satka, M. Daricek | Soil volumetric water content measurement system |
| 9:45 | I. Martincek, D. Pudis | Variable liquid-core fiber optical attenuator based on laser heating |
| 10:00 | J. Vlk, D. Chren, B. Sopko | Anodic oxidation of tantalum to tantalum pentoxide for humidity sensors |
| 10:15 | B. Sopko, J. Vlk, V. Sopko, J. Mengler, V. Hynek, J. Dammer, D. Chren | Sputtered type S thermocouples on quartz glass substrates |

Coffebreak 10:30-10:50

12:35 Closing ceremony

Lunch 12:40