

PROGRAM

Tuesday, 31 August 2010

11:00 – 14:00: **Registration**

Location: Hotel Langue

14:00 – 18:00: **School on Crystal Growth**

Location: Lecture Hall

18:00 – 20:00: **Registration**

Location: Hotel Langue

18:30 – 19:30: **Dinner**

Location: Lunchroom

Wednesday, 1 September 2010

10:00 – 10:10: **Opening**

Location: Lecture Hall

10:10 – 11:50: **Wednesday Session I**

Location: Lecture Hall

10:10 – 10:30: Jaromír Drápala and Miroslav Kursá:

Regional Materials Science and Technology Centre in Ostrava

10:30 – 10:50: Ivana Pilarčíková and Ivan Křivý:

Efficiency of physical chemistry teaching in material subjects

10:50 – 11:10: Michal Madaj, Jaromír Drápala, and Miroslav Kursá:

Innovation of teaching aids in the subject “MATERIALS FOR ELECTRO-TECHNOLOGY”

11:10 – 11:30: Jan Lipták, Josef Sedláček, Ivana Pilarčíková, and Václav Bouda:

Dielectrical behaviour of carbon black - polymer composites prepared from solution

11:30	–	11:50:	Alexander Kromka, Oleg Babchenko, Tibor Izak, Marina Davydova, Stepan Potocky, and Bohuslav Rezek: <i>Growth of diamond films and carbon nanotubes over large areas by linear antenna microwave plasma CVD deposition</i>
12:00	–	13:00:	Lunch
14:00	–	15:50:	Wednesday Session II <i>Location: Lecture Hall</i>
14:00	–	14:30:	Marian Koman, Jaroslava Maroszová, Ján Moncoľ, and Dušan Mikloš: <i>Crystal structures of Cu(II) complexes with pyridylmethanols</i>
14:30	–	14:50:	Jaromír Galle, Zdenek Pala, Kamil Kolařík, and Nikolaj Ganev: <i>Determination of the mean value of crystal grain size by X-ray diffraction spot counting</i>
14:50	–	15:10:	Jan Grym and Dušan Nohavica: <i>Challenges in the preparation and application of porous III-V semiconductors</i>
15:10	–	15:30:	Maroš Martinkovič, Roman Koleňák and Katarína Pocisková Dimová: <i>Measurement methods of mechanical properties of solders and soldered joints</i>
15:30	–	15:50:	David Lysáček: <i>Residual stress of thin films of polycrystalline and amorphous silicon</i>
15:50	–	16:10:	Coffee break
16:10	–	17:40:	Wednesday Session III <i>Location: Lecture Hall</i>
16:10	–	16:40:	Nikolaj Ganev, Zdenek Pala, and Kamil Kolařík: <i>Diffraction analysis of residual stresses in thin surface layers of polycrystalline materials</i>
16:40	–	17:00:	Oleg Babchenko, Tibor Izak, Karel Hruska, Martin Ledinsky, Bohuslav Rezek, and Alexander Kromka: <i>Importance of using polymer layers for selective area growth of diamond micro- and nanostructures</i>
17:00	–	17:20:	Petr Kostelník: <i>Selective etching processes for BESOI manufacturing</i>
17:20	–	17:40:	Mária Behúlová: <i>Material models for numerical simulation of material flow in thixotropic state</i>
19:00	–	24:00:	Conference Dinner and Night Discussion <i>Location: Winevault ("U Surmanu")</i>

Thursday, 2 September 2010

08:30 – 10:10: **Thursday Session I**

Location: Lecture Hall

08:30 – 08:50: Martin Hanuš, Miroslav Kučera, Martin Nikl, Karel Nitsch, Petr Průša, Jiří A. Mareš, and Zuzana Onderišinová:

Influence of Sc³⁺ doping on Pr³⁺ emission in epitaxial scintillation garnet layers

08:50 – 09:10: Jan Šik and Petr Kostelník:

Laser scribing on SOI wafer

09:10 – 09:30: Jiří Luňáček, Petr Hlubina, and Dalibor Ciprian:

Measurement of the spectral reflectance ratio of polarized waves used to thin-film thickness determination.

09:30 – 09:50: Milena Luňáčková, Jiří Luňáček, Zdeněk Potůček, and Petr Hlubina:

Alternative method to thin-film thickness determination using the spectral reflectance measurement

09:50 – 10:10: Jiří A. Mareš, Alena Beitlerová, Martin Nikl, Petr Průša, Miroslav Kučera, and Karel Nitsch:

Gamma and alpha spectroscopy of inorganic scintillators, especially those of Pr³⁺ doped

10:10 – 10:30: Coffee break

10:30 – 12:10: **Thursday Session II**

Location: Lecture Hall

10:30 – 10:50: Jiří Šubčík, Ladislav Koudelka, Lionel Montagne and Gregory Tricot:
Combined 31P and 17O MAS NMR and Raman studies of molybdeno-phosphate glasses

10:50 – 11:10: Miroslava Rodová, Antonín Cihlář, Robert Král, Alexej Sveshnikov, and Karel Nitsch:

Thermal properties and crystallization kinetics of Er:LiY(PO₃)₄ glass

11:10 – 11:30: Ladislav Koudelka, Jiří Šubčík, Petr Mošner, and Ivan Gregora:

Structural studies of ZnO-WO₃-P₂O₅ system glasses

11:30 – 11:50: Vladimír Kucek:

Figure of merit of (Sb_{0,75}Bi_{0,25})₂-xIn_xTe_{2,8}Se_{0,2} single crystals

11:50 – 12:10: Zdeněk Potůček, Stanislava Stará, Zdeněk Bryknar, and Jarmila Špírková:

Photoluminescence of copper ions in silicate glass

12:20 – 13:00: Lunch

Location: Lunchroom

14:00 – 17:00: **Joint Meeting**

18:30 – 19:30: **Dinner**

Location: Lunchroom

Friday, 3 September 2010

08:30 – 10:10: **Friday Session I**

Location: Lecture Hall

08:30 – 08:50: Zdeněk Kožíšek, Pavel Demo, Alexei Sveshnikov, and Petra Tichá:
Kinetics of polymer nucleation on active centers

08:50 – 09:10: Neda Neykova, Halyna Kozak, and Alexander Kromka:
Low temperature hydrogen plasma treatment of diamond films by linear antenna microwave PECVD system

09:10 – 09:30: Jaromír Kopeček, Markéta Jarošová, Karel Jurek, Jan Drahokoupil, Dušan Majtás, Silvie Ignácová-Sedláková, and Oleg Heczko:
Cobalt-based ferromagnetic shape memory alloys - preparation, characterization and functional properties

09:30 – 09:50: Alexej Sveshnikov, Pavel Demo, Zdeněk Kožíšek, Petra Tichá, and David Ladman:
Nucleation of portlandite

09:50 – 10:10: Lukáš Válek, Petr Kostelník, and Adam Klimsza:
Impact of crystal-originated defects on manufacturing of electronic devices

10:10 – 10:30: **Coffee break**

10:30 – 11:10: **Friday Session II**

Location: Lecture Hall

10:30 – 10:50: Roman Yatskiv, Karel Zdansky, Jan Grym, and Katka Piksová:
Pd nanolayer for hydrogen sensors

10:50 – 11:10: Tibor Izak, Oleg Babchenko, Alexander Kromka, Karel Hruška, and Miroslav Michalka:
Using of self-assembled gold nano-sized droplets for fabrication of vertically aligned diamond nanorods

11:10 – 11:25: **Closing**

Location: Lecture Hall