

# Nové materiály a technológie pre energetiku



**Európska únia**  
Európsky fond regionálneho rozvoja



Agentúra  
Ministerstva školstva, vedy, výskumu a športu SR  
pre štrukturálne fondy EÚ



Podporujeme výskumné aktivity na Slovensku/Projekt je spolufinancovaný zo zdrojov EÚ

## **VEDECKÁ KONFERENCIA**

# ***Materiály a Technológie pre Energetiku***

**25. 3. 2013**

**Ústav experimentálnej fyziky SAV, Watsonova 47, Košice**

Miesto konania: zasadačka č. 101 na 1. poschodí

# PROGRAM

**8:30 – 9:00**

**Growth, microstructure and properties of REBCO bulk superconductors**

P. Diko, D. Volochová, S. Piovarči, V. Antal, M. Radušovská, M. Šefčíková, K. Zmorayová, J. Kováč, K. Jurek\*, M. Jirsa\*  
*Institute of Experimental Physics, Slovak Academy of Sciences, Košice, Slovak Republic*

*\*Institute of Physics ASCR, Prague, Czech Republic*

**9:00 - 9:30**

**Magnetic fluid for power transformer**

M. Timko

*Institute of Experimental Physics SAS, Košice*

**9:30 - 10:00**

**Materiály pre biobatérie, biopalivové články a elektrochemické biosenzory**

M. Antalík

*Ústav experimentálnej fyziky SAV, Košice*

**10:00 - 10:15**

**Specific Forms of User's Interaction with Optical Tweezers**

P. Keša, M. Antalík, Z. Tomori

*Institute of Experimental Physics, Slovak Academy of Sciences, Košice*

**10:15 - 10:30**

**Polymer Self-assembly as a Tool for the Preparation of Progressive Materials**

M. Sedlák, D. Rak

*Institute of Experimental Physics SAS, Košice*

**10:30 - 10:45** Prestávka – diskusia pri posteroch

**10:45 - 11:15**

Modern Heusler alloys prepared by rapid quenching

R. Varga

*Institute of Physics, Faculty of Science, University of Pavol Jozef Safarik, Kosice*

**11:15 - 11:45**

Unconventional method of grain – oriented steel preparation in combination with nano particles VC and strain induced grain boundary motion

F. Kováč, I. Petryshynets, J. Marcin\*, I. Škorvánek\*

*Institute of Materials Research, Slovak Academy of Sciences, Košice*

*\* Institute of Experimental Physics, Slovak Academy of Sciences, Košice*

**11:45 - 12:15**

Medium-field annealing of soft magnetic materials and measurement of their magnetoelastic properties

P. Švec, R. Szewczyk\*, P. Švec Sr., J. Salach\*, J. Hoško, A. Bienkowski\*,

*Institute of Physics, Slovak Academy of Sciences, Bratislava, Slovakia*

*\*Institute of Metrology and Biomedical Engineering, Warsaw University of Technology, Poland*

**12:15 - 12:45**

Soft magnetic materials for power electronic and magnetocaloric applications

I. Škorvánek, J. Marcin, J. Kováč, M. Capik, M. Varga, F. Kováč\*, P. Švec\*\*

*Institute of Experimental Physics, Slovak Academy of Sciences, Košice*

*\*Institute of Materials Research, Slovak Academy of Sciences, Košice*

*\*\* Institute of Physics, Slovak Academy of Sciences, Bratislava*

**12:45 - 13:00** Diskusia pri posteroch