

International Conference

Advances in Nanostructured Materials, Processing – Microstructure – Properties

NANOVED 2006 – NENAMAT

Nanoscience and nanotechnologies are new approaches in research and development involving precise manipulation and control of atoms and molecules, applying *nanoarchitectures*, to create novel structures with unique properties. This influential technology requires detailed understanding of physical/chemical/medical processes, across a range of disciplines, at the scale of one billionth of a metre. The goal is to produce new materials, devices and systems tailored to meet the needs of a growing range of commercial, scientific, engineering and biomedical applications – opening new markets and giving dramatic benefits in product performance. These fields open up new possibilities of understanding new phenomena and creating advanced properties that are emerging and will impact on the life of every citizen. We may expect that in the next 50 years much stronger effects will be generated by nanotechnology. Therefore, it's very important for all countries to be involved in the development of nanotechnology and to have experts who may judge the positive effects and the risks of such a deep penetrating technology.

With the above aims have initiated the 6th FP “Network for Nanostructured Materials of Associated Candidate Countries – NENAMAT “and the conferences in Slovakia devoted to nanoscience and nanotechnology “NANOVED”. As their common event, the International conference was organized in May 14-17, 2006 in the Hotel Academia, High Tatras region, Slovakia.

“Advances in Nanostructured Materials – Processing, Microstructure, Properties”.

Scientists and PhD students from 14 Countries participated the Conference to a total number of 170. Invited lectures (3), lectures (45) and posters (81) have been presented on the topics; *Nanotubes, Nanowires, Nanopowders, Theoretical Problems, Education and Application, Metallic Nanostructured Materials, Ceramic Nanostructured Materials, Polymers and Nanostructured Biomaterials, Thin Films and Coatings, Characterization and Testing*.

The presentation will be published in the following scientific journals: Nanopages, Metallic Materials, Powder Metallurgy Progress and Acta Metallurgica Slovaca.

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J. Dusza, L. Biró, F. Simančík
Co-chairmen of the Conference