

PAST EVENTS

Workshop on Nanomaterials and nanotechnology organized by the National Science Foundation (USA) on Sept 30-Oct 2, 2002 in Brasov (at the University "Transilvania"). Each day was devoted to a specific topic: 1. Basic underlying science principles and models, 2. Synthesis, characterization of structure and properties, and 3. Applications. The workshop included discussions at the end of each presentation day, as well as evening debates based on poster presentations in the afternoons.

We are quoting a few examples of papers given by American scientists:

- Richard W. Siegel (photo) (Rensselaer Polytechnic Institute, RPI): "Overview of nanoscience and technology"

- Shekhar Garde (RPI): "Making nanotube channels- can we learn from biomolecules?"

- P. M. Ajayan (RPI): "The impact of nanotubes in nanotechnology"

- Valerie Leppert (UCD, University of California, Davis): "Quantum dot biosensors"

- Joanna R. Groza (UCD): "Processing issues in nanocomposites"; and also by Romanian participants:

- Maria Zaharescu (Romanian Academy): "Tailoring sol-gel synthesis for nanocomposites"

- Dan Dascalu: (Romanian Academy) "Nanotechnology in Romania: networking of research laboratories".

The purpose of the workshop (organized by Joanna Groza and Maria Zaharescu, see above) was to discern and enhance the multiplicity of interactions between concepts (e. g., quantum mechanics and biology), fields (e. g., electronics and biology) or materials (e. g., composites of nanoparticles in polymers) in nanoscale materials systems. The focus has been on the critical elements for the rapid progress and advancement of science in critical areas. .

The expectation is to identify the challenges and issues associated with the science and applications of nanotechnology in cross-disciplinary fields, disseminate and exchange information regarding fundamentals, processes and technologies in electronics and biotechnology.



Courses and stages organized by NANOTECH-NET- Network of Research Laboratories in Nanotechnologies

At the beginning of June 2002, the National Institute for Research and Development in Technical Physics, Iasi organized a series of three courses and stages with the following subjects:

1 Powder processing in a controlled environment, mechanical alloying and atoming (short stage of training)

1 Obtaining of thin metallic and dielectric composite films, simple and multiple, by evaporation techniques and cathodic sputtering in vacuum (course)

1 Nanostructured multiphases materials: soft and magnetic hard (course)

Up-to-date information about these subjects together with recent results obtained by the institute were presented by well-qualified specialists: Prof. Dr. Horia Chiriac, Dr. M. Urse, Phys. Melania Marinescu, Phys. Anca Moga.

"Methods and techniques for processing and characterization of nanomaterials in thermal fields" (Sept. 16th -18th 2002), course organized by the National Institute for Research and Development in Electrochemistry and Condensed Matters - Research Institute for Condensed Matters, Timisoara

"Preparing carbon nanostructures on a matrix from porous aluminium filled with metallic catalysts" (Oct. 1st -4th 2002), short stage of training organized by the National Institute for Research and Development in Isotopic and Molecular Technology, Cluj-Napoca

"Optical methods to investigate the structure of magnetic liquids and magnetofluidic composites" (Oct. 14th -18th 2002), course organized by the National Institute for Research and Development in Electrochemistry and Condensed Matters - Research Institute for Condensed Matters, Timisoara

CESME - CENTRE OF SERVICES, TRAINING, AND CONSULTANCE IN MICROENGINEERING

Courses and training: - "Basic course: Introduction in microengineering" (IMT-Bucharest); - "Basic course in design and simulation with CAD Techniques" (IMT-Bucharest); - "MEMS and microfluidics design with CAD Techniques" (IMT-Bucharest); - "Training in microsensors and MEMS" ("Valahia" University of Targoviste); - "New microelectronic architectures: signal processing devices" (University of Pitesti)



FUTURE EVENTS IN 2002

Courses and stages organized by the networks NANOTECH-NET, 3N, BIONANONET, MINAMAT-NET (see pages 8-10):

1 Nov. 4th: course «Modeling the hydrothermal synthesis of nanocomposite materials with applications in the medical field», Dr. Radu Piticescu (National Institute for Neferous and Rare Metals);

1 Nov. 4th-5th: stage «Silicon membranes for biomedical devices, obtained by methods compatible with the microelectronic technology» - Biol. Roxana Vasilco, Phys. Alina Popescu (IMT-Bucharest);

1 Nov. 5th-6th: course "Nanostructures obtained by etching process" (2002), Eng. Mihaela Miu and Dr. Irina Kleps (IMT-

Bucharest);

1 Nov. 5th-6th: course «Modern methods for analysing thin films and interfaces (XPS(ESCA)-AUGER)» - Dr. Petre Osiceanu (Institute for Physical Chemistry).

Courses and training organized by CESME: "Training course in micromachining" (November 2002, IMT-Bucharest and INFILPR-Bucharest); - "Design and simulation of MEMS and microfluidic structures with CAD Techniques" (November 2002, IMT-Bucharest)

Contact person:

Mat. Oana Tatiana Nedelcu (oanant@imt.ro)

Web page: <http://www.imt.ro/cesme>

Editor-in-chief:

Dan Dascalu (dascalu@imt.ro)

Mailing address: PO-BOX 38-160, Bucharest

72225 Romania

tel: +40-1-4908583

fax: +40-1-4908238

<http://www.imt.ro>

Deputy Editor-in-chief:

Marius Bazu (mbazu@imt.ro)

Submission of articles:

We welcome your submissions. Please send your contributions to the Managing Editor or to the Editors.

Advertising:

Sponsors and advertisers are welcome.

Editors:

Cornel Trisca-Rusu (ctrisca@imt.ro)

Magdalena Ciurea (ciurea@alpha1.infim.ro)

Bujor Albu (macromol@mc.ro)

Ion Ardelean (iarde@ibiol.ro)

Assistant Editor:

Stefania Rebegea (stefaniar@imt.ro)

Correspondence:

mnt@imt.ro