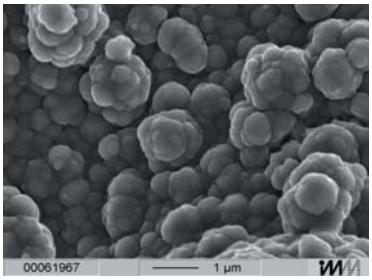

SEM image of polypyrol/PS
(details in MNT-Bulletin V3, no.3)

NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT IN MICROTECHNOLOGIES (IMT-BUCHAREST)

General manager: *Prof. Dan Dascalu* (dascalu@imt.ro)
Address: Erou Iancu Nicolae 32 B, 72996, Bucharest, Phone +40-21-4908412, Fax: 40-21-4908238;
http//www.imt.ro

● **CENTRE OF NANOTECHNOLOGY**

Centre affiliated to the Romanian Academy (of Sciences) and financed by the National Programme "Relansin" (2001-2004) as a Centre of Excellence in Nanotechnologies;
Head of the centre: ***Dr. Irina Kleps*** (irinak@imt.ro)
Main activity: Theoretical studies and experimental technologies in nanomaterials and nanostructures, with main areas of expertise: silicon nanoelectrode arrays, low-frequency noise in nanostructured materials; porous silicon layers; field emission nanostructures; biofunctional nanostructures and interfaces. Partner in national networks: NANOTECHNET and BIONANONET (2001-2004); Member of the Virtual centre of research in nanobiotechnologies CENOBITE (2002-2005); Contractor of the Consultancy Centre in nanotechnologies, nanostructures and nanomaterials, (2001-2004); Partner in international networks: "Network of Excellence on Nanoelectronics (Phantoms)"; Member of the thematic network entitled S-E Europe Regional "Network of Excellence: Nanosciences and Multifunctional Materials".

● **CENTRE FOR MICROSTRUCTURES AND MICROSYSTEM FOR BIO-MEDICAL AND ENVIRONMENTAL APPLICATIONS**

Head of the centre: ***Dr. Carmen Moldovan*** (cmoldovan@imt.ro)
Design and manufacturing of microsensors for biomedical and environmental applications and development of new micromachining technological processes for research and optimization of micromachining technologies for customers. Development of microstructures and microsystems dedicated to complex determination in vivo, in situ and in vitro of biological activity, with regard both to living systems and technological systems using biomimetic principles.

NATIONAL INSTITUTE FOR LASERS, PLASMA AND RADIATION PHYSICS

Address: PO Box MG-54, RO-76900, Bucharest-Magurele; Phone: +40-21-4574491, Fax: +40-21-4574243, +40-21-4574467

● **LASER PHOTOCHEMISTRY LABORATORY (LPL)**

Deputy General Director: ***Dr. Ion Morjan*** (morjan@ifin.nipne.ro)
Laser pyrolysis technique applied to the synthesis of nanopowders and thin films, produced by induced reactions in the gas phase/on a substrate: experimental work, characterization, physical interpretation and applications of the obtained nanostructures. Presently, the main interest is focused on iron oxides and composites (Ti and Mo doped), iron and titanium carbides and carbonaceous nanostructures (including fullerenes). More recently, one of the main research directions of the LPL has been the preparation of carbon nanotubes produced by laser irradiation from the gas phase.

● **LASER-SURFACE-PLASMA INTERACTIONS LABORATORY**

Laboratory head: ***Prof. Ioan N. Mihailescu*** *(mihailes@ifin.nipne.ro)*
The activity is focused on laser-synthesis and deposition of compound thin films of biocompatible and bioactive materials, refractory, piezoelectric, ferroelectric and optical coatings. Biomedical implants are 3-D nanoscale laser machined. The manufacture of biocompatible structures is aimed to substantially improve the quality of existing implants both in orthopaedic and dental surgery. Another purpose is to create new advanced functional materials able to trigger and control cells differentiation.

NATIONAL INSTITUTE OF MATERIALS PHYSICS, LABORATORY OF LOW-DIMENSIONAL SYSTEMS

Head of Laboratory: Dr. Magdalena Lidia Ciurea (ciurea@alpha1.infim.ro)
Contact person: Dr. Cristian-Mihail Teodorescu (teodorescu@alpha2.infim.ro)
Address: Bucharest-Magurele P.O.Box MG 07, 76900 Romania, Phone +40-21-4930047, Fax +40-21-4930195

Experimental facilities: thin film growth; melt spinning alloy elaboration; x-ray diffraction; x-ray photoelectron spectroscopy; transport measurements; magneto-optical measurements; band structure calculations.
Collaborative facilities: molecular beam epitaxy; CVD and PVD; EXAFS and XANES; high-resolution photoemission; x-ray absorption and x-ray magnetic dichroism; electron microscopy.
Research interests: surfaces and interfaces; nanostructured quasicrystals; metal-fullerene thin films; metal-semiconductor interfaces; oxide and nitride layers; nanocrystalline silicon; low-dimensionality magnetism and electronic structure.

Structure investigation of nitride hard coatings for cutting/forming tools.
(details in MNT-Bulletin V3, no.1)

CONDENSED MATTER RESEARCH INSTITUTE TIMISOARA (CMRIT), DEPARTMENT OF THE NATIONAL RESEARCH INSTITUTE FOR ELECTROCHEMISTRY AND CONDENSED MATTER

Director: Ioan Grozescu (grozescu@icmct.uvt.ro)
Scientific secretary: Vlad Socoliuc (socoliuc@icmct.uvt.ro)
Laboratory head: Terezia Nyari (nyarit@icmct.uvt.ro)
Head laboratory: Stefan Novaconi (novaconi@icmct.uvt.ro)
Address: 1 Plautius Andronescu St., 1900 Timisoara, Romania,
Phone/Fax: +40-56-194413

a-SiO_2 single crystals obtained by hydrothermal synthesis (details in MNT-Bulletin V3, no.3)

The activity of CMRIT in nanoscience is focused on research concerning instalations and methods for obtaining micro or nanocristalline materials, thin films with aplications in optical, optoelectronic, phononic domains. The main methods are:

- RF inductiv cuplation plasma,
- hidro and solvothermal at high pressures,
- sol-gel,
- thermic evaporation.

NATIONAL CENTRE FOR ENGINEERING OF SYSTEMS WITH COMPLEX FLUIDS (NCESF) UNIVERSITY POLITEHNICA TIMISOARA (UPT)

Rector of UPT: Prof. Dr. Eng. Ioan Cartis
Director of NCESF: Ass. Prof. Dr. Eng. Romeo Susan-Resiga
Contact person: Ass. Prof. Dr. Eng. Floriana D.Stoian (dstoian@mec.utt.rro)
Address: Splaiul Independentei 296, 77700 Bucharest 17, Romania, Phone: +40-21-239069, Fax: +40-21-2239068,
www.biochim.ro

Research topics: Complex characterization of magnetizable (nano)fluids and composites: vibrating sample magnetometry (VSM), (magneto)rheology, electron microscopy; magnetic fluids as cooling agents: nucleate boiling heat transfer under the influence of applied magnetic field; properties of polymeric (nano)magnetic composites; molecular simulations of fluids; applications.