LABORATORY OF MAGNETIC FLUIDS (LMF), CENTRE FOR FUNDAMENTAL AND ADVANCED TECHNICAL RESEARCH (CFATR), ROMANIAN ACADEMY-TIMISOARA BRANCH (RA-TB)

President of RA-TB: Prof. Dr. Eng. Toma Dordea, member of RA,
Director of CFATR: Prof. Dr. Eng. Ioan Anton, member of Romanian Academy,
Contact person: Dr. Ladislau Vekas, head of the Lab. MF (vekas@flumag2.mec.utt.ro)
Address: Bd.Mihai Viteazul 24, Timisoara, 1900 Romania, Phone/Fax:+40-256-403700

Research topics: Magnetic nanoparticles and magnetizable complex fluids -smart nanomaterials with fluid properties : magnetic nanoparticle/magnetic (nano)fluid synthesis ;magnetizable emulsions, magnetizable polymeric nano/micro-composites (gels) and biocompatible/ bioactive composites, magnetorheological fluids; theoretical modeling and numerical simulation of magnetic fluid properties; applications.

NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT OF ISOTOPIC AND MOLECULAR TECHNOLOGIES

General manager: Dr. Mircea Bogdan (mircea@L30.itim-cj.ro)
Contact person: Dr. Gheorghe Mihailescu (gigim@oc1.itim-cj.ro)
Address: 3400 Cluj-Napoca, Str. Donath 71-103, Fax: +40-26-4420042,
Phone: +40-26-4184037, www.itim-cj.ro

Expertise in nanotechnologies:
- preparation of metallic and semiconducting nanomaterials in aluminum oxid template
- production of nanocarbon by chemical vapor decomposition (SWNT, MWNT, VGCF).

INSTITUTE OF BIOCHEMISTRY OF THE ROMANIAN ACADEMY, MOLECULAR GLYCOBIOLOGY LABORATORY

Director: Dr. Stefana Petrescu (Stefana.Petrescu@biochim.ro)
Deputy Director: Dr. Anca Roseanu (roseanu@biochim.ro)
Address: Bd.Mihai Viteazul 1, Timisoara, 1900 Romania,
Phone/Fax: +40-256-403700

The Laboratory is currently involved in the development of biotechnologies destined to cultivate living cells on nanoporous silicon and hydroxyapatite - titan. Visualization of adherent cells grown on nanomaterials by immunofluorescence microscopy is been successfully carried out in our group.

UNIVERSITY OF BUCHAREST

Rector of the University of Bucharest: Prof. Dr. Ioan Mihailescu
Address: 1 Plautius Andronescu St., 1900 Timisoara, Romania, Phone/Fax: +40-56-194413

- **FACULTY OF PHYSICS, THERMAL PHYSICS DEPARTMENT**

Dean of the Faculty of Physics: ***Prof. Dr. Antohe Stefan***,
Contact person: ***Associate Professor Valeriu M. Filip*** (filip@digitalnet.ro)
Address: Bucharest-Magurele 76900, P.O. Box MG-11, Fax : +40-21-4574521
Applied theoretical studies in electron field emission from solid/composite surfaces. Examples: calculations of field emission current density from n-Si through injection in N-doped diamond; modeling of the electron field emission from carbon nanotubes and fromsion from carbon nanotube films. Applied theoretical design of: micron-size mass spectrometry devices with field emission electron sources; orbitip vacuum gauges; pressure sensors based on arrays of collector assisted field emission triodes etc.

- **FACULTY OF PHYSICS, THE LABORATORY OF ATOMS AND MOLECULES**

Dean of the Faculty of Physics: ***Prof. Dr. Antohe Stefan***
Contact person: ***Associated Professor Mircea Bercu*** (mbercu@Olimp.fiz.infim.ro)
Address: Str.Atomistilor Nr.10 Bucharest-Magurele, Romania, Phone: +40-21-4574550 ext.1046
Asummed research themes related to nanotechnology and nanoscience: I-Atomic Cluster Models On Insulator / Si Interface based on HF (Hartree Fock) and DFT (Density Function Theory); II- Models and Calculation On Atoms and Molecules interaction with carbon and silicon surface for sensors applications; III-Characterisation of LPCVD Thin Layers Deposited on Si Based On Optical Spectroscopy: i) Extraction of physical parameters based on of UV-Vis spectra simulation, ii) FT-IR investigations and chemical structure assignment based on expert program and quantum simulation approach; IV - Characterisation on implanted Si/SiO2 structures and nanoporous Si reached in absorbed molecular species by using FT-IR ; UV-Vis and EPR (Electronic Paramagnetic Resonance Spectrometry.

- **FACULTY OF CHEMISTRY, PHYSICAL CHEMISTRY DEPARMENT, RESEARCH CENTRE FOR APPLIED AND TEORETICAL PHYSICAL CHEMISTRY,**

Head of the Centre: ***Prof. Mihaela Olteanu*** (oltmi@gw-chimie.math.unibuc.ro, oltmi@hotmail.com)
Address: 4-12 Elisabeta Blvd., 70346 Bucharest, Romania, Phone: +40-21-3131120,
Fax: +40-21-3159249
Areas of Nanotechnology Research: Nano(bio)technology for medical applications: Drug encapsulation (Encapsulation of hydrophilic and hydrophobic drugs in various colloidal drug delivery (liposomes, micelles, nanoparticles, microemulsions); Targeted drug delivery (Obtaining targeted drug delivery systems for hydrophilic drugs); Nano(bio)materials: Nano and micro materials from natural non-toxic polymers (Obtaining of nano and microstructured material with special properties for pharmaceutical, opto electronics, and other applications); Self-assembly: experimental and theoretical studies (Self-assembling in colloidal systems as micelles, lyotropic liquid cristals, monolayers and multilayers at various interfaces).

- **FACULTY OF BIOLOGY, MOLECULAR BIOLOGY CENTRE (MBC)**

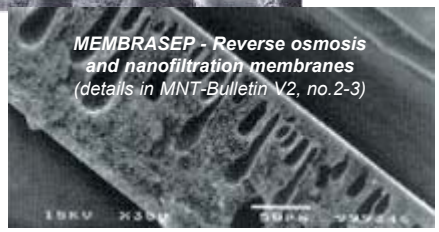
Dean of the Faculty of Biology: ***Prof. Calin Tesio*** (tesio@bio.bio.unibuc.ro)
Centre Director: ***Associated Professor Marieta Costache*** (costache@bio.bio.unibuc.ro)
Address: 91-95 Splaiul Independentei Street, sector 5, Bucharest, 76201,
Phone/Fax: +40-21-4119901, Web: http://www.bio.bio.unibuc.ro.
MBC is a multi-user research center that offers excellent facilities for co-operation with national and international universities and research institutes. It is a self-sufficient unit with organizing, exploitation and utilizing autonomy of the material and financial resources. MBC include seven laboratories in the field of: molecular biology, cell culture, biochemistry, cellular biology, biotechnology and nanobiotechnology. MBC is open to research programs and can offer all the facilities for a good research in the field of cellular and molecular biology, plant and animal biology, medicine, ecology, agricultural sciences, etc.

RESEARCH CENTRE FOR MACROMOLECULAR MATERIALS AND MEMBRANES COMERCIAL SOCIETY

Managing Director: Eng. Marin Radu,
Contact person: Dr. Gabriel Bujor Albu
Address: Spl. Independentei 202B, sector 6,
79611,
Bucharest, POB 15-143 Romania,
Phone: +40-21-2248351, Fax: +40-21-2229131,
email: macromol@rnc.ro, www.membrane.rnc.ro

The RCMMM is a research centre having as object of activity basic and applied research in the domain of membranes and membrane processes. In nanoscience & nanotechnology the main research topics are:
- composite nanofiltration and pervaporation membranes obtained by plasma and / or interfacial polymerization (cooperation with INFLPR Bucharest);
- composite membranes with MCM-41 type molecular sieves inclusions for environmental protection (cooperation with ICF Bucharest);
- composite membranes obtained by the laser ablation deposition of nanoparticles on ceramic supports (cooperation with INFLPR Bucharest);
- preparation and characterization of inorganic membranes used in environmental protection and catalytic processes.


MEMBRAFIL - Micro and ultrafiltration membranes (details in MNT-Bulletin V2, no.2-3)


MEMBRASEP - Reverse osmosis and nanofiltration membranes (details in MNT-Bulletin V2, no.2-3)