

BIONANONET

BIONANOTECHNOLOGY NETWORK - BIONANONET

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The BIONANONET Project developed in the framework of the Research, Development and Innovation National Plan, the 'Intefacing Living Matter MEMS and Biomimetic MEMS' Action: 'Development of CDI Facilities and Services for New Materials, Micro and Nanotechnology'. Its main task is to promote co-operation among different professional groups (R&D, academics, clinics, SMEs) owing competences in basic and engineering sciences, in order to support multidisciplinary research in the biomedical area. The network focuses on synergistically catalyzing different competences (micro-engineering, physics, biology, chemistry) in Romania, with a view to integrate the 'science without borders' initiative, according to European science policy.

The practical goals of the network are accomplished by mean of theoretical courses and practical training through researcher's mobility. The 2002 main activities are a Summer School dedicated to bioactive and biocompatible thin layers and an international workshop aiming on the P-systems and the computational models of the living cell. Both actions gathered over 90 people interested on the domains interfacing basic sciences and engineering into revolutionary developments. These actions reflected the particular attention paid to broadening of multidisciplinary information and training of younger researchers, as well as support for researchers mobility and encouraging the participation in common scientific activities and the knowledge transfer. As a result, many common research projects have been conceived both for the national programs and FP6.

CENOBITE

A virtual centre of excellence Centre of Research in Nanobiotechnologies (CENOBITE)

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The CEntre of research in naNOBioTEchnology (CENOBITE) is a "virtual" centre of research based upon the strong cooperation and integration of activities of 10 Romanian research centres (research institutes, research groups from universities, small companies). These centres are active in biology, medicine, pharmacology, chemistry, biochemistry, physics, micro and nanotechnologies. The activity will be financed from MATNANTECH (a new project starting in October 2002), with an annual evaluation of results. **The research topic is selected from the 6th Framework Programme of European Union**, with nanobiomaterials included. CENOBITE is financing equipments, visits of foreign scientists in Romania and organization of scientific events. This project is complementary to the financing from the infrastructure projects (networks), which are focused mainly on multidisciplinary training (courses, short stages), exchange of information etc. **The basic model used for conceiving CENOBITE are the Excellence Networks from the 6th Framework Programme** (further details - available later).

MINAMATNET

CHARACTERIZATION OF MATERIALS AND STRUCTURES FOR MICRO AND NANOENGINEERING RESEARCH LABORATORIES NETWORK - MINAMATNET

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MINAMAT-NET is a national Romanian network set-up in October 2001 and co-ordinated by IMT-Bucharest, which groups 8 partners ("Costin D. Nenitescu" Foundation, National Institute for Research and Development for Materials Physics, National Institute for Research and Development for Lasers, Plasma and Radiation, Institute for Nuclear Research, Institute of Physical Chemistry, "I.G. Murgulescu" of the Romanian Academy, University of Bucharest, Faculty of Physics, Advanced Research and Development Institute for Electrical Engineering). The laboratories involved have complementary equipments and expertise in the field of characterization of materials and microstructures for micro and nanoengineering. The activity of the network is supported by the project No.77 (2001-2004) from the Romanian National Programme MATNANTECH.

The main objective of the network is to promote a multidisciplinary research and develop new characterization services related to the characterization of materials, micro and nanostructures.

The main activities of the network are:

- a co-operation in microphysical and chemical characterization, new phenomena and new principles, new characterization techniques, functional characterization, development of dedicated microstructures for specific characterization - lab on a chip, characterization of new materials - nanomaterials;
- teaching activities (lab for students, stages, tutorials, courses), training by research;
- exchange of information with potential users;
- access to the EXTRANET services: data base

In its first year of activity the network identified the partners' resources, organized courses etc.

CESME

CESME - CENTRE OF SERVICES, TRAINING, AND CONSULTANCE IN MICROENGINEERING MATNANTECH Project No. 30/2001 (2001-2004), coordinated by the National Institute for Research and Development in Microtechnologies (IMT-Bucharest), with partners from industry and academia.

The main scope of the CESME project is to increase the range of services of the consortium, as well as to stimulate the interests of users (in micro-electro-mechanical systems and microelectronics) in order to increase the professional competitiveness and to facilitate the access to fabrication.

The consortium is offering: training, assistance and consultancy in: microfabrication; microphysical characterization; - CAD and simulation for MOEMS and microfluidic microsystems; design and simulation in microelectronics; RF-MEMS design and simulation; design in microphotonics; testing and improving reliability.