

National events in the "nano" field at the Romanian Academy A RETROSPECTIVE

- The national seminar organized by IMT- Bucharest on 27th of January 2004 (with the support of the ROMNET-ERA project) is in fact the 3rd of this kind, following **the first on 4th of February 2000 and the second on the 16th February 2001**.
- The first seminar was anticipating the introduction of new multidisciplinary topics in the R&D Programme "Horizon 2000", whereas the second was preceding the establishment of the new R&D programme for **"New materials, micro and nanotechnologies"** (MATNANTECH).
- Both events were organized by Academician Dan Dascalu (IMT-Bucharest).
- The MATNANTECH seminars took place regularly, twice a year, in parallel with micro-nanotechnologies at CAS (www.imt.ro/CAS) and other international and national events taking place in Romania. Papers in nanotechnology presented on these occasions (starting with the first seminar mentioned above) are published in volumes of the **"Micro and nanoengineering"** series, at the Publishing House of the Romanian Academy.
- The new national seminar at the Romanian Academy (27th of January, 2004 - see page 10), comes after an intense networking in the field at the national scale, as well as after starting the participation in FP6.

The first national seminar was organized by the National Agency for Science, Technology and Innovation (ANSTI), and the Romanian Academy (Commission for Science and Technology of Microsystems). It was called:



Micro-and Nanostructures Possibilities and Perspectives

and took place in **Aula Magna of the Romanian Academy**, February 4th, 2000

The opening address of Acad. Maya Simionescu - vice-president of the Romanian Academy, Director of the Institute of Cellular Biology and Pathology (European Centre of Excellence).

The Address of Prof. Dr. Eng. Lany Szabolcs, President of ANSTI (1999-2000).



The second national seminar was:

"Micro and Nanotechnologies: Between National Priorities and European Co-operation"

and took place again in **Aula Magna of the Romanian Academy**, February 16th, 2001



Welcome by the President of the Romanian Academy, Academician Eugen Simionescu



Paper presented by Prof. Ecaterina Andronescu, Minister of Education and Research (2001-2003), now Rector of the University "Politehnica" of Bucharest



Archive of the second national seminar (February 2001)

Proposal for The Integrated Network of Education, Research and Innovation in "Micro-and Nanotechnologies" (Dan Dascalu, IMT-Bucharest)

A survey of evolutions in scientific research recommends the strengthening of co-operation among various units and groups, as concerns education, research and innovation using a network structure. The rationale may be explained as follows.

Technology is based, to an ever-greater extent, on science and the scientific discoveries are more rapidly applied in practice.

The multidisciplinary character of research has become more prominent and the cycle education-research-innovation has been shortened and its stages are interdependent. As a result, we can speak about both horizontal integration (interaction of activities carried on in various disciplines) and vertical integration (among various types of activities such as: education/instruction, scientific research/technological development, and, respectively, technology transfer/ innovation). This integration appears both at the level of institutions and at the national or the international level. The heterogeneous network structure, in a permanent and rapid evolution, is the most adequate model, also supported by the new means of communication (in an explosive and unpredictable development), allowing the setting up of virtual laboratories, centres and institutes.

The suggested "micro-and nanotechnologies" network mainly aims at training specialists and using them, to an ever greater extent, for research, technological development and innovation carried on in the country, as well as for integrating these activities in an international, European and regional context. The network already exists in Romania, in an incipient form, as a research network.

An extension of the existing network is suggested. It will be used also in education and in the technological development and innovation, with the support of the Ministry of Education and Research, and perhaps of the Ministry of Industry and Resources, the Ministry of Communications and Information technology, the Ministry of Small and Medium-Sized Enterprises (SME) but also of professional associations, the Chamber of Commerce and Industry and private enterprises. Such a network can be rapidly and efficiently integrated in the European and international activities. It is compatible with the ideas underlying the "European research area", a concept officially launched, at the European Commission's proposal, by the European Presidency Conclusions (Lisbon, March 2000).

AFTER 3 YEARS...



Prof. Dan Dascalu, General Manager is explaining to the Commissioner for Research, Mr. Philippe Busquin, during his visit at IMT-Bucharest (February 2004): IMT is a "hub" of national networks in micro and nanotechnologies (with 43 different partners). The project ROMNET-ERA (SSA for ACC) provides support for further networking on a few FP 6 priorities, including nanotechnologies.