



“High technologies, innovation policy and regional development”
First MINOS-EURONET Strategy Forum on the impact of converging technologies

The event took place in Bucharest, on 18-19 May 2006, at the Chamber of Commerce and Industry of Romania (CCIR), “Al. Ioan Cuza” hall. *Local organisers:* National Authority for Scientific Research (ANCS) from the Ministry of Education and Research, Council for Scientific Research in Universities (CNCSIS), Executive Unit for Financing Research in Universities (UEFISCU), Chamber of Commerce and Industry of Romania (CCIR) *in cooperation with* National Institute for R&D in Microtechnologies (IMT-Bucharest, www.imt.ro), coordinator of MINOS-EURONET, *with support from the European Commission*, Directorate general Information society and media, Directorate Components and Systems.



General Director Ionel Andrei, Ministry of Education and Research (Romania)

The first day was devoted to Research, innovation and competitiveness Europe.

Policies, programmes, initiatives will be presented, in the context of the 7th Framework Programme and of the Competitiveness and Innovation Programme of the EU. The experience of NMS and ACC in RTDI strategies and programmes, including technology transfer and innovation was also presented.

From Agenda of the first day:

- **Ion Pop**, Director for Strategy and Interdepartmental cooperation, Chamber of Commerce and Industry of Romania: Welcome speech.

- **Dr. Stephan Pascall**, Advisor, Information Society and Media Directorate- General, European Commission, spoke “The Development of the Knowledge Society in the EU-12” among the topic was underlined: the EU Policies and ICT, Structural Funds (2007-13), FP7 Structure Specific Programmes Financing

- **Andrei Ionel**, Director General National Authority for Scientific Research, Romania “Overview on Romanian RTDI policy”

- **Prof. Ioan Dumitrache**, President of the National Council for University Research and Prof. Adrian Curaj, Director of UEFISCSU, Romania “Developing the strategy for the Romanian RTDI system”

- **Timothy Harper**, Cientifica, UK “The economics of nanotechnology”

Panel discussion including the above speakers, as well as **Prof. Robert Plana**, LAAS and University Paul Sabatier, Toulouse, France; **Gisele Roesems**, European Commission; **Elena Maria Gaspar**, Advisor, Ministry of Economy and Commerce; and general discussion (questions and comments from the audience). Moderators: **Prof. Dan Dascalu** (MINOS-EURONET coordinator)

Note: A poster exhibition were available through the first day. The posters contained info about participation to EU programmes, national and regional infrastructures for research and innovation etc. The participants benefited by supplementary information distributed in a package of printed documents (in English).

The second session: Micro- and nanotechnologies: infrastructures for research and for innovation Moderated by **Dr. Cornelia Rotaru**, Secretary General, Chamber of Commerce and Industry (CCIR)

- **Gisele Roesems**, Unit of nanoelectronics, Directorate Components and Systems, INFISO/G, European Commission “Eco-zones and European Technological Platforms in Nanoelectronics (ENIAC) and Photonics (Photonics21)”

- **Ana Almansa**, ARC Seibersdorf research, GmbH, Austria “Towards an European Technology Platform on Micro- and Nanomanufacturing”

- **Waclaw J. Bialkowski**, STTPE, Poland “Science and Technology Park Poland - East: activities for Regional Development”

- **Henne van Heeren**, Enabling MNT “Success factors for MNT-Clusters- A Dutch perspective”

- **Valentinas Snitka**, Kaunas University of Technology “National Innovation System in Lithuania - hidden threats”

- **Dan Dascalu**, IMT-Bucharest “From networking to technology transfer: infrastructures in Romania”

- **Piotr Dumania**, Piotr Grabiec, Institute of Electron Technology, Poland “Micro- and Nanotechnology Scientific Networks in Poland”

- **Frantisek Uherek**, Slovak University of Technology in Bratislava “Current Status of Micro- and -Nano-technology R&D Activities at STU Bratislava and Trends in Slovakia”.

The second day of the Forum was devoted to the potential of integrating/converging technologies (micro-nano-bio-info) for economic growth. Examples of applications have been given.

Third session: Applications of converging (mixing) technologies. Moderator: Dan Dascalu

- **Griet Van Caenghem**, Unit Micro- and Nanosystems, Directorate Components and Systems, INFISO/G, European Commission: “ Micro-nano technology and microsystems: A decade of European progress and outlook for the future”

- **Joan Ramon Morante**, University of Barcelona “Material and devices for energy and power MEMS applications”

- **Denis Hodgins**, ETB Ltd, UK “Applying micro- and nano-technologies in the health sector: opportunities and barriers”

- **Tauno Vaha –Heikkila**, VTT Finland, “Microsystems for telecommunication applications”

- **Carles Cane**, CNM, Barcelona “ MNT for food industry”

- **Timothy Harper**, Cientifica, UK, “Nanotechnologies and the environment: balancing the (potential) risks and rewards”

- **Helen Hailing Yu**, Centre for Technology Management, Innovation and Entrepreneurship Department of Materials at Queen Mary, University of London, UK, “The impact of nanotechnologies on traditional industries: How Nanotextiles became an \$11 billion dollar market within five years”

- **Hakan Urey**, Koç University- Istanbul, Turkey, “Industrial Collaborative Research at Koç University: MEMS Spectrometers and Scanners”

- **Petr Louda**, Technical University of Liberec, Czech Republic, “Application of nanotechnology at automotive industry”

For foreign participants (over 20 people) on 19th May 2006 was set up a visit to IMT-Bucharest after the closure of MINOS-EURONET Forum. Were visited the technological facilities, clean room, IMT Laboratories and spaces from MINATECH-Ro scientific Park (see pages 10-11).

Participation to the forum: **157 Romanian participants** (Univ., SME, National R&D Institutes, Gov/public institutions) and **24 Foreign participants**, plus **3 representatives of the European Commission**. Total **184 participants**.

On this occasion **two brochures** have been distributed:

- the first one presenting *Centers from Eastern European countries* (represented at the forum): Bulgaria, Czech Republic, Hungary, Lithuania, Poland, Romania, Slovakia, Turkey.

- the second one presenting the *International projects, National and International networks* from: Austria; Belgium; Denmark; France; Germany; Hungary; Ireland, Lithuania, Poland, The Netherlands; Spain; Romania; Turkey; United Kingdom. Further details and on-line registration are available on www.minos-euro.net.

Importance of the Forum at the national level (Romania).

The conclusions have been used indirectly by Romanian participants in preparing the motivation for a priority called “Nanoelectronics, photonics and micro-nanosystems” in the new national R&D plan. The selection of this priority was possible as a result of a Delphi survey conducted at the national level.

As far as the technology transfer and European technology platforms are concerned, the Forum provided an excellent background and motivation for the participation of officials and specialists to two events organized by IMT (MINOS coordinator) in Bucharest, namely: a) launching of the Science and technology park for micro- and nanotechnologies MINATECH-RO (27th of June, 2006 see pages 10-11); b) launching of the Romanian Collaboration Platform for Nanomedicine RCP-NANOMED, focused on the European Technological Platform for Nanomedicine (4th of July, 2006).



Tim Harper, Cientifica (United Kingdom)



Prof. Valentinas Snitka (Lithuania) visiting the Laboratory of Atomic Force Microscopy (AFM), IMT-Bucharest on 19th May 2006