

The MINAEAST-NET project (www.minaeast.net) is organizing in Athens, on 15th of July 2005, a **Second MINAEAST-NET Workshop** aiming to intensify the collaboration with Eastern Europe in the micro-nanotechnologies domain. The participants will present recent research results obtained in the MNT domain and also the human and material potential, together with possibilities for cooperation. The presentations will be then disseminated through publications and project website.

The workshop will be held at the **National Centre of Scientific Research "Demokritos", Institute for Microelectronics, Athens, Greece**, which is also the event organizer.



Institute of Microelectronics - NCSR "DEMOKRITOS"
"Center of Excellence in Micro, Nanotechnologies & Microsystems"

Background and current situation

IMEL has been established in the year 1986 as one of the eight Research Institutes of NCSR Demokritos, a medium size, multidisciplinary Research Center under the General Secretariat for Research and Technology of the Ministry of Development.

Through a history of 20 years of research and technology in Microelectronics, IMEL has developed experience and expertise, as well as unique technological advantages, which place it among the main EU Research Institutes in the field of Silicon (Si) technologies. The strong advantages of IMEL are as follows:

- ◆ Its excellent staff, composed of a small number of experienced senior scientists, surrounded by a large number of young researchers, all fully devoted to their work
- ◆ Research facilities in Silicon Processing, Micro and Nanofabrication, characterization and testing, which are unique in Greece
- ◆ Important expertise and know-how, as well as important proprietary background technologies, materials and devices. Its intellectual property (IP) portfolio continues to expand and opens important possibilities for collaboration with industry and transfer of know-how.

Mission and main objectives

The main objectives of IMEL are as follows:

- ◆ Long term research into understanding phenomena, mastering processes and developing research tools.
- ◆ Development of fundamental knowledge
- ◆ Development of novel high added-value technology products and production processes
- ◆ Development of human potential by education and training activities
- ◆ Services in advanced technology
- ◆ Transfer of technology and know-how

Research activities

IMEL's focus in Research activities is in the following fields:

A. MICRO and NANOFABRICATION

- ◆ Lithographic Polymers and Processes
- ◆ Plasma Processing and Simulation for Micro and Nano Patterning
- ◆ Front-end Processes for Micro and Nanodevices
- ◆ Thin Films by Chemical Vapor Deposition (CVD)

B. NANOSTRUCTURES and NANOELECTRONIC DEVICES

- ◆ Low Dimensional Semiconductors Science, Technology and Applications
- ◆ Silicon Nanocrystal Memories
- ◆ Molecular Materials as Components of Electronic Devices

C. SILICON SENSORS and MICROSYSTEMS

- ◆ Micromachined Silicon Sensors and Microsystems
- ◆ Bio-microsystems
- ◆ Thin Film Devices for Large Area Electronics
- ◆ Circuits and Devices for Optoelectronic Interconnections

