

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

Funded projects

Research at IMEL is carried out within competitive National, European and International projects and direct contracts with industry.

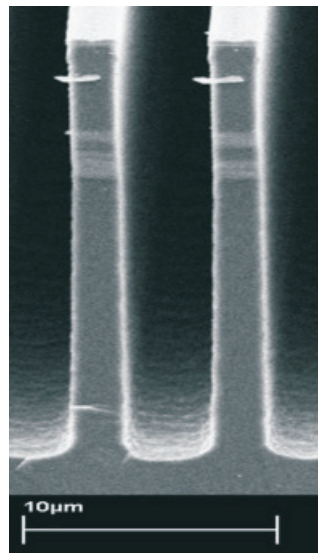
Education / activities

Due to its unique infrastructure at a national level and the important expertise and know-how of its researchers, IMEL plays an important role in post-graduate education. It participates very actively in several educational programmes, in collaboration with Greek universities, by providing special courses and laboratory training.

Laboratories and Central Micro and Nanofabrication Facilities at IMEL

The facilities and equipment of IMEL are unique in Greece. They include a full silicon processing laboratory in a clean room area of 300 m² equipped with lithography and etching tools, thermal and chemical processing facilities, ion implantation, deposition of metals, dielectrics and polynanocrystalline silicon by physical and chemical processes (LPCVD, sputtering, e-gun and thermal evaporation), and process inspection equipment. Its electron beam lithography equipment is also unique in Greece. Satellite laboratories include electrical and optical characterization, micromachining and packaging laboratory, resist development laboratory, Electron Microscopy (SEM, STM/AFM), sensor characterization and testing.

Competitive advantages



Research at IMEL is carried out at EU level through its participation in European research projects and networks of excellence, as well as in initiatives for providing advanced technology services at EU level. EU projects are across a number of EU specific programmes, including mainly Information Society Technologies (IST priority) and Nanotechnology, Materials and Production Processes (NMP priority). IMEL's success in the above peer reviewed R&D funded programmes represents one of the strongest endorsements of IMEL's R&D competence and reflects the world-class standing of the Institute.

On national level the expertise and infrastructure of IMEL are unique in Greece, which makes its role for the country also unique in an effort to develop novel technologies, to transfer technology and know-how to the industry and to develop human potential, which constitutes the principal driving force for an industrial activity in high technology. Furthermore, IMEL developed mechanisms to promote the field at national level through the establishment and coordination of the National Scientific Network in Microelectronics, Microsystems and Nanotechnology (MMN Network) and the Scientific Society Micro&Nano.

Personnel

The personnel of IMEL includes 17 research scientists and engineers, around 10 post-doctoral scientists and 20 Phd students as well as 12 technicians and administrative personnel.



Contact Information

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Dr Androula NASSIOPOULOU received her B.Sc. in Physics from the University of Athens in 1975 and her M.Sc. and Ph.D. from the University of Paris XI (ORSAY) in 1977 and 1980 respectively. She then moved to the University of Reims, France, from where she received the title of "Docteur d'Etat" in 1985. She is with IMEL, one of the eight Institutes of NCSR Demokritos, (the biggest Research Center in Greece) since 1986. In 1997 she has been elected by an international scientific committee as Director of IMEL, which constitutes the Greek National Center of Excellence in Micro, Nanotechnology and Microsystems. In 1997 she has been also elected as member of the board of Directors of NCSR Demokritos. She is member of the Greek National Research Council, an advisory board to the Ministry, and member of the group of experts on Nanotechnology (FP3) of the 6th Framework Programme for Research and Technology of the European Union. She is author or co-author of over 250 publications in International Journals, Reviews, books and Conference Proceedings, with an important number of citations in the citation index. She coordinates an important number of EU and national projects. She chaired or co-chaired several National and International Conferences and Symposia. She is at the Head of two scientific groups at IMEL on a) Nanotechnology and nanoelectronic devices and b) Microsystems and Silicon sensors. She also coordinates the National Scientific Network MMN on Microelectronics, Microsystems and Nanotechnology.