ANNEX 10

Structural funding projects - IMT 2011

Structural funding. In 2010 IMT started three projects financed from structural funding. They are briefly presented below.

- (1) Project Title: "Research center for integrated systems nanotechnologies and carbon based nanomaterials" CENASIC, Priority Axis 2: "Competitiveness via research, technological development and innovation" Intervention field: D.2.2 "Investments in CDI infrastructure and development of administrative capability". Operation: O2.2.1. "Developing the available C-D infrastructure and creating a new C-D infrastructure". Financing unit: The increase of economic competitiveness (POS CCE). Timeframe: September 2010- September 2013 (36 months); Grant: 20.000.000 RON. The objective is the creation of a new center within IMT. The center will have modern facilities and laboratories designed for the development of new research areas with high application potential, in concordance with EU models and strategies. The mission of the CENASIC Center is to become a national and European excellence centre in the area of applied research in integrated micronanotechnologies using carbon based materials. This new centre will be of crucial importance for completing the technological facilities and attracting new researchers. When the proposal was put forward such centres devoted to carbon-based nanomaterials (a very hot topic) existed only in USA, Japan and South Korea.
- (2) Project Title: "Microfluidic Factory for "Assisted Self- Assembly" of Nanosystems" MICRONANOFAB. Project thematic area: Innovative materials, products and processes. Operational programme: POS CCE Priority Axis 2 Research, Technological Development and Innovation for Competitiveness. Duration of contract: 36 months (July 2010- July 2013). Operation: O.2.1.2 "Complex research projects fostering the participation of high-level international experts". Grant: 7.071.000/5.900.000 RON. The main objective of this project is the realization of a prototype of an integrated microfluidic system able to dose, encapsulate and deliver different chemicals for medical treatment. The idea is to develop some microfluidic technological platforms, under the form of flexible and modular technologies such that with the same modules to perform different tasks like transportation, manipulation, and structural analysis of biological samples. A new laboratory (for "micro- and nanofluidics") was developed in IMT. The project will create a technological platform for fabricating microfluidic components. New fabrication and testing equipments have been purchased with this purpose.
- (3) Project Title: "Human resources development through postdoctoral research in micro and nanotechnologies domain". Priority Axis 1: Education and training in support for growth and development of a knowledge based society. Intervention field: 1.5 "Doctoral/Post-doctoral Programme for research support". Financing unit: Sectoral Operational Programme Human Resources Development 2007-2013 (SOP HRD). Timeframe: April 2010 March 2013 (36 months); Grant: 10.072.499 RON. This project has the objective to provide financial support to 35 PhD researchers, through grants for scientific research in Romania, traineeships abroad, and attendance to scientific events, in a postdoctoral programme for the micro- and nanotechnologies domain. Only 17 postdoctoral students are from IMT, the other are from universities and research institutes.