



## IT Girls – Great careers for great women

European Commission initiative in Information and Communication Technologies (ICT) domain.

“IT Girls – Great Careers for Great Women” is an important initiative taken by the *European Commission* to convey the message that rewarding career opportunities in the ever-growing domain of *Information and Communication Technologies (ICT)* exist for both men and women. To encourage young girls to choose a career in the ICT sector, the *European Commission* coordinated the organization of **Shadowing Days in ICT** companies and institutions.

**Delia Dogaru, Adina Corbu, Irina Damascan and Luiza Cicone**, from the “**Tudor Vianu**” National College, shadowed four female engineers throughout the day as they carried out their regular professional commitments. They spent the day seeing the seniors in action in some of the main departments of IMT and visited the main technological facilities, including the clean room:

- **Carmen Moldovan** – Wafer Processing
- **Gabriela Dragan** – Mask Fabrication
- **Monica Simion** – NanoBioLab
- **Raluca Gavrilă** – Atomic Force Microscopy
- **Oana Nedelcu** – CAD Design & Simulation

Within IMT, 40% of the researchers are women proving exceptional qualities for research and development in nanotechnology area. The event was a great experience for the IMT’s researcher women and for the young girls spending a full working day inside the microfabrication facility and trying to use the new software programmes or new equipments. The girls were very impressed by the activities within IMT, and declared that research is, from now, a domain to think about when choosing their future careers.

**A few impressions of the four young students:**

**Delia Dogaru:** “I witnessed the beginning process of microchips used in microsensors to determine the compensation of a certain substance. These tiny things create the bridge between technology and environment. I do find the R&D work quite appealing and I take this in consideration for a future job.”

**Adina Corbu:** “I could observe the deformation the material had when it was tested under extreme temperatures and pressures.”

**Irina Damascan:** “I had the most interesting day here at IMT. I started to understand how new technology works in the field of creating masks.”

**Luiza Cicone:** “I discovered how we can find out the rugosity of some materials at nanoscale level with a special microscope.”



Irina Damascan (left) and Gabriela Dragan (right) - Mask Fabrication Shop

The **IMT’s activity** is devoted to “*Development of research activities in the field of micro/nano-technologies, with strong impact on the development and competitiveness of the Romanian Industry*” [www.imt.ro](http://www.imt.ro). With unique research facilities in Romania, IMT is a major player in the area of micro and nanotechnologies for **MEMS/MOEMS, RF-MEMS, bioMEMS** with applications in industry, automotive, communications, biomedical and environment monitoring.

As an innovative, leading edge research institute, *IMT is interested in attracting new, young people (students, PhD students) in the micro and nanotechnology field*. This is why this event was a nice opportunity for us to meet young girls, interested in a technical career.

## INTERDISCIPLINARY PLATFORM FOR MASTER PROGRAMME IN NANOSCIENCE AT UNIVERSITY OF BUCHAREST

The programme “**Master in Nanoscience**” will be jointly developed by three faculties from **University of Bucharest: Physics, Biology and Chemistry** and by partnership with many specialised laboratories from Research & Development institutes and industry from Bucharest and country. The development of a new Curriculum in a performing and modern domain (as concerning human resources and equipment) was possible only by infrastructure enhancement at Univ. of Bucharest and by applying a modern methodology and an educational strategy capable to guarantee the formation of specialists, as well as competitiveness on “European educational market”.

*The development of the interdisciplinary platform by enlargement of existing experimental facilities and the development of this new Master programme by using TUNING methodology will offer the best solution for success.*

A consortium of 4 research centres from the Faculties of Physics, Chemistry and Biology in Univ. of Bucharest was successful in the competition organized by Romanian Ministry of Education, Research and Youth, in 2006, for projects of infrastructure development as interdisciplinary platforms for research and formation.

*The organization of the interdisciplinary Platform at Univ. of Bucharest for “Master Programme in Nanoscience” will allow*

*the development of a research master programme based on a high performance equipment basis*. The existing equipment in the departments involved in accomplishing the programme “**Master in Nanoscience**” was enlarged by new and specific instruments for studies, at nanometer scale, of materials and structures important for applications in electronics, new sources of energy, medicine and environment. The faculties are cooperating for Curriculum design and development and for the accomplishment of all activities. The Master programme is based on modules: intensive teaching periods (theoretical and laboratory courses mainly in university) and practical stages (of min 3 months) in specialised laboratories from university and partner institutions. The main characteristics are: *interdisciplinarity and flexibility* (66% of total 120 ECTS being optional).

The **2 years “Master programme in Nanoscience”** will start in the academic year 2008/2009. By developing this new, modern and interdisciplinary programme of study, the educational offer at University of Bucharest will be enriched and also the enhancement of student recruitment for the second and third cycles is envisaged.

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