Nano2life Summer school on Methods in Micro – Nanotechnology and Nanobiotechnology

The advanced Nano2life Summer school on *Methods in Micro* – *Nanotechnology and Nanobiotechnology* took place from June 26 to July 7, 2006 in the National Center of Scientific Research "Demokritos", Athens, Greece. Institutes of *Microelectronics*, *Physical Chemistry*, *Material Science* and *Radioisotopes and Radiodiagnostic Products* of Demokritos, as well as the *Foundation for Biomedical Research of the Academy of Athens* collaborated in the organization.

19 participants from several European institutes (16 from Nano2Life) followed the summer school. The educational background of the participants was very high.

The school program including lectures (45 hours) and hands-on experiments (30 hours) covered three sections:

<u>Section 1</u>: Principles of biochemistry, cell biology, physics and microelectronics.

<u>Section 2</u>: Core Nanobiotechnology methods and practices

Unit 2.1: Micro and Nano-fabrication science and technology

Unit 2.2: Nanomaterials for bio-applications, Characterization, Imaging

Unit 2.3: Molecular and Cellular biology and Applications

Section 3: Towards Integrated Nanobiotechnology systems

The instructors of the lectures and laboratories were scientists from the organising institutes. In addition, lecturers from Nano2Life partners and some other academic institutes as well as the industry were invited. The invited speakers were Professor Yoshi Shacham-Diamand (Tel-Aviv University), Dr Martin Bennick (University of Twente), Dr Anna Mitraki (University of Crete), Dr Maria I. Klapa (FORTH, Patra), Dr. Electra Gizeli (University of Crete and FORTH), Professor Elias Eliopoulos (Agricultural University of Athens), Dr Joel Rossier (DiagnoSwiss). Certificates of attendance were awarded to the participants during the closing ceremony by the Director and President of NCSR "Demokritos", Dr D. Niarchos. Directors of Demokritos institutes, Dr. A. Nassiopolulou, Institute of Microelectronics, Dr C. Paleos, Institute of Physical Chemistry, Dr E. Tsilibari, Institute of Biology, greeted the participants at various occasions also.

The participants were really satisfied with the school program and especially with the experience they gained through the laboratory courses. Most of lectures and lab courses were evaluated with very high scores by the participants.

Concluding, the school included social activities that brought the participants close to each other. The excursion to Mycenae-Epidaurus and the one to Cape Sounion, where the school dinner took place, offered them the opportunity to discover some places in Greece. Finally, participants had the chance to socialize in characteristic places of Athens after the course hours.

EVALUATION

On usefulness, understanding, meeting expectations, quality and speed

1=poor, 5=excellent

SECTIONS	AVERAGE
Section 1: Principles of biochemistry, cell biology, physics and	3.91
microelectronics.	
<u>Unit 2.1</u> : Micro and Nano-fabrication science and technology (lectures)	4.04
Unit 2.1: Micro and Nano-fabrication science and technology (labs)	4.44
<u>Unit 2.2</u> : Nanomaterials for bio-applications, Characterization, Imaging	3.69
(lectures)	
Unit 2.2: Nanomaterials for bio-applications, Characterization, Imaging	4.07
(labs)	
Unit 2.3: Molecular and Cellular biology and Applications (lectures)	3.73
Unit 2.3: Molecular and Cellular biology and Applications (labs)	4.25
Section 3: Towards Integrated Nanobiotechnology systems (lectures)	4.02
Section 3: Towards Integrated Nanobiotechnology systems (labs)	4.28

COMMENTS of PARTICIPANTS

Very satisfied by the laboratory experience.

Topics separated in a very careful way.

Very interesting and useful lectures.

High professionalism of the instructors.

Great talks from industry.

Duration maybe tool long, could be reduced to 10 days instead of two weeks