

INTERNATIONAL WORKSHOP SCIENCE EDUCATION IN SCHOOL

October 11 – 14, 2007

General Information

An European Commission document issued in 2002 (European benchmarks in education and training: follow-up to the Lisbon European Council, Brussels) clearly indicates some paths to follow in the field of education along with some precise targets:

- Europe must do more to encourage children and young people to take a greater interest in science and mathematics, and to ensure that those already working in scientific and research fields find their careers, prospects and rewards sufficiently satisfactory to keep them there.
- By 2010, the percentage of low-achieving 15 year-olds in reading, mathematical and scientific literacy will be at least halved in each Member State, compared to the year 2000.
- By 2010, the EU-average level of participation in lifelong learning should be at least 15% of the adult working age population (25-64 age group) and in no country should it be lower than 10%.

In “a flat world” the school offer has to complain more responsible to the needs of the global labor force market.

In Romania, the Report of Presidential Commission on the evaluation and policies development related to education and research issued on July 6, 2007, underlines that “Romania of 2007 is confronted with major risks as the educational and research systems do not correspond to the minimal requirements of a modern European society and economy, in which the knowledge is the main value and source of economic, social development and personal fulfillment”.

Some relevant conclusions of the report are:

“school has to offer competencies, not only information”; these competencies has to be key competencies, a specific combination of knowledge, skills and attitudes adequate to personal development”

the curriculum has to be a flexible one, “the school offer must reflect in a better way the students needs and the community expectations”

Within this framework, the Center for Science Education and Training (National Institute for Laser, Plasma and Radiation Physics) organizes the workshop “Science Education in School”, which will be held on October 11-14, 2007. This event, organized in collaboration with the European Network “Hands-on Science” (www.hsci.info) follows the previous edition in 2006 “Science Literacy and Lifelong Learning: Europe Towards a Knowledge-based Society”. Center for Science Education and Training is a founder member of the international network « Network for Youth Excellence » (www.nyex.info).

The workshop audience is: researchers in the field of science education, managers and personnel of the institutions directly or indirectly involved in science education (universities, research institutes, science museums, theoretical, technical and vocational schools, education policy makers, non-governmental organizations and local authorities).

SATELLITE EVENTS

- «Science Fair Hands_on_Science@Moisil.ro» with national participation and its audience is: teachers and school students from middle and high school. This will be the third edition.
- Training course «Hands-on Science experiments in primary schools» intended for primary school teachers and kindergarten educators

To take part to any of the events, please fill in the appropriate registration form and send it to dan.sporea@inflpr.ro or fax: 4021-4574243 !

WORKSHOP LANGUAGE

- Workshop: English (no translation will be provided)
- Science Fair: Romanian and English
- Training course: French/ English with simultaneously translation into Romanian

TOPICS:

- Formal, Informal and Non-formal Science Education in Schools
- Inquiry-Based Science Education (IBSE) and Problem-Based Learning (PBL)
- Student Focused and Active Learning in Science Education
- Project-based Science Teaching
- Contribution of ICT in Science Teaching
- Hands-on Experiments in Science Education
- Real and Virtual Experiments in Science Education
- E-learning and Virtual Reality in Science Education
- Teaching Knowledge and Skills for Science
- New Science Curriculum in Schools across Europe
- Science Teachers Training
- Enlarged Participation in Science Education (local communities, industry, research institutes, universities, parents)
- Set Standards and Students Assessment
- Science Courses Accreditation
- The EU's LLL and FP7 Programs and Science Education in Schools
- Science History

- Round-table: Case Studies in Science Education in Schools

WORKSHOP CHAIRS

Prof. Manuel Filipe P.C.M. Costa, University of Minho, Braga, Portugal

Dr. Dan Sporea, Center for Science Education and Training, Bucharest, Romania

SCIENCE FAIR ORGANIZERS

Dr. Dan Sporea and Mihaela Garabet ("Grigore Moisil" High School Bucharest)

TRAINING COURSE ORGANIZERS

Dr. Dan Sporea and Diana Melnic (Director of Casa Corpului Didactic Bucuresti)