



Center for
Science Education
and Training



**INTERNATIONAL WORKSHOP
SCIENCE EDUCATION IN SCHOOL**
October 11 – 14, 2007

First Announcement

Dear Colleagues,

A 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** (<http://education.inflpr.ro>), 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, the national coordinator of the educational network “**Hands-on Science - Romania**”, 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.

WORKSHOP VENUE

- Bucharest
- «Science Fair Hands_on_Science@Moisil.ro»: at Liceul Teoretic «Grigore Moisil», Bucharest
- Training course «Hands-on Science Experiments in Primary Schools»: at Casa Corpului Didactic, Bucharest

SPONSORS

- Romanian National Agency for Scientific Research (http://www.mct.ro/ancs_web/index.php), CEEX contract no.58/ 2006 « Science Education and Training in a Knowledge-based Society”
- European Union funded Project Pollen (<http://www.pollen-europa.net>)
- Microsoft Romania (<http://www.microsoft.com/romania/>)

WORKSHOP LANGUAGE

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

TOPICS:

- Hands-on Experiments in Science Education
- Real and Virtual Experiments in Science Education
- New Means and Aids for Science Teaching in Physics, Chemistry, Biology, Environmental Sciences, etc.
- Contribution of ICT in Science Teaching
- E-learning and Virtual Reality in Science Education
- Teaching Knowledge and Skills for Science
- New Science Curriculum in Schools across Europe
- Science Teachers Training
- Formal, Informal and Non-formal Science Education in Schools
- Inquiry-Based Science Education (IBSE) and Problem-Based Learning (PBL)
- Student Centered Science Education
- Active Learning Methods in Science Education
- Project-based Science Teaching
- Enlarged Participation in Science Education (local communities, industry, research institutes, universities, parents)
- Set Standards and Students Assessment
- Science Courses Accreditation
- The EU's Lifelong Learning 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 (Liceul Teoretic “Grigore Moisil” din Bucuresti)

TRAINING COURSE ORGANIZERS

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

ABSTRACT

- Workshop : an abstract (see abstract template) of maximum 2 pages in English has to be sent at dan.sporea@inflpr.ro or timustina@yahoo.com; the deadline is 01.09.2007. The authors will be notified about the paper acceptance by e-mail, until 15.09.2007. The final paper (see final paper template), in English, has to be sent at dan.sporea@inflpr.ro or timustina@yahoo.com in order to be included on the workshop CD; the deadline is 01.10.2007.
- Science Fair : an abstract (see abstract template) of maximum 2 pages in Romanian has to be sent at mihaela_garabet@yahoo.com; the deadline is 20.09.2007 The final paper (see final paper template), in Romanian, has to be sent at mihaela_garabet@yahoo.com in order to be included on the event CD containing the papers; the deadline is 01.10.2007.

TRAINING COURSE REGISTRATION

- The registration for the training course «Hands-on Science Experiments in Primary Schools» has to be made by filling the form (see registration form) and sending it by e-mail at: dan.sporea@inflpr.ro or at Casa Corpului Didactic Bucuresti, fax : 313 49 27; the deadline is 25.09.2007.

PARTICIPATION FEE

- Workshop: 80 euro (the workshop fee includes: access to the workshop activities, workshop materials and CD, 2 lunches, coffee breaks, and welcome cocktail). The maximum number of participants: 40.
- Science Fair: no participation fee. The maximum number of participants: 100.
- Training course : no participation fee. The maximum number of participants: 50

IMPORTANT DEADLINES

01.09.2007 : submission of abstracts for the workshop

15.09.2007 : information to authors about acceptance of abstracts for the workshop

01.10.2007 : final paper submission for the workshop

20.09.2007 : submission of abstracts for the science fair

01.10.2007 : final paper submission for the science fair

25.09.2007 : registration for the training course “Hands-on Science Experiments in Primary Schools”

THE WORKSHOP PROGRAM

October 11-12: Workshop

October 13: Science Fair Hands_on_Science@Moisil.ro

October 14: Round table

October 11-13: Training course «Hands-on Science experiments in primary schools»

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