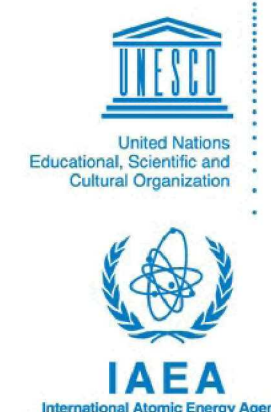




The Abdus Salam
International Centre for Theoretical Physics



WORKSHOP on BASIC RADIATION MATERIALS SCIENCE

10 - 21 November 2008

Miramare, Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (ICTP, Trieste, Italy), in cooperation with the International Atomic Energy Agency (IAEA, Vienna, Austria), is organizing a Workshop on the Training in Basic Radiation Materials Science and its Applications to Radiation Effects Studies and Development of Advanced Radiation-Resistant Materials, to take place in Trieste from 10 to 21 November 2008.

Background:

Growing requirements on nuclear fuel performance parameters (e.g. higher burnup, residence time, operation temperatures) increasingly demand the introduction of technical innovations and advanced materials. The testing of such materials by direct irradiation carries an increase in cost and duration of these studies. Within this context, it is clear that the development of theoretical models of radiation effects and nuclear fuel behavior acquires a prominent role. Radiation materials science provides the basic understanding of the nature of radiation damage, and allows for an adequate comparison and interpretation of simulation experiments against data collected in accelerators and other irradiation devices.

Content Description:

The Workshop is intended to provide participants with basic information about present and future requirements on nuclear materials, modeling and simulation of radiation effects, advanced experimental tools and modern approaches for development of radiation-resistant materials. Specific topics include:

- Operational conditions and requirements for nuclear materials
- Physics of radiation damage and radiation effects
- Modern post-irradiation examination techniques and methods
- Modeling of radiation effects and nuclear fuel behavior under irradiation
- Applications of accelerators for modeling of radiation damage
- Development of materials subject to high dose irradiation

Participants are encouraged to present their work in a Poster session to be held during the first week of the Workshop. A few posters will be selected, and their authors will be offered the opportunity to give a brief oral presentation.

Participation:

The invitation to the Training Workshop is directed to scientists and managers in academia, industry and possibly in the governmental sector who are involved in research in the general area of radiation damage of materials subject to very high dose radiation, e.g. materials used in nuclear reactors.

Applicants from all countries who are members of the UN, UNESCO or IAEA may apply. As the Workshop will be held in English, participants must have a good working knowledge of that language. Although the main purpose of the Centre is to help research workers from developing countries, through a programme of training activities within a framework of international co-operation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

As a rule, travel and subsistence expenses of the participants should be borne by the home institutions. However, limited funds are available for some participants who are nationals of, and working in, a developing country and who are not more than 45 years old, to be selected by the Organizers. As scarcity of funds allows travel to be granted only in a few exceptional cases, every effort should be made by candidates to secure support for their fare (or at least half-fare) from their home country. It is stressed that participants whose travel expenses are paid by ICTP are required to attend the entire activity. For logistics reasons, the total number of participants is limited. There is no registration fee for this activity.

The Application Form is obtainable from the ICTP WWW server: http://cdsagenda5.ictp.it/full_display.php?id=a07178 (which will be progressively up-dated), or from the activity Secretariat. It should be completed and returned before **10 JULY 2008** to:

Workshop on Basic Radiation Materials Science (smr1969)
the Abdus Salam International Centre for Theoretical Physics
(c/o Elizabeth Brancaccio)
Strada Costiera 11, I-34014 Trieste, Italy

The decision of the Organizers will be communicated to all candidates as soon as possible.

If sending your applications by e-mail: smr1969@ictp.it
(please save and send file attachments in RFT format)

Telephone: +39-040-2240284
E-mail: smr1969@ictp.it

Telefax: +39 040 224163
ICTP Home Page: <http://www.ictp.it/>

in cooperation with

International Atomic Energy Agency
Vienna

DIRECTORS

V. INOZEMTSEV
(IAEA, Vienna)

J. KOHANOFF
(Queen's University, Belfast)

LOCAL ORGANIZER

S. Scandolo
(ICTP, Trieste)

DEADLINE
for requesting participation

10 July 2008