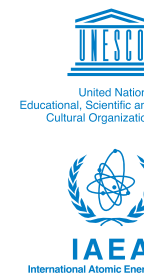




The Abdus Salam
International Centre for Theoretical Physics



**JOINT ICTP-IAEA NUCLEAR SAFETY
ASSESSMENT INSTITUTE WORKSHOP**

4 - 15 June 2012
(ICTP, Miramare, Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, in cooperation with the International Atomic Energy Agency (IAEA, Vienna, Austria) will organize a **Nuclear Safety Assessment Institute Workshop, to be held at ICTP, Trieste, Italy, from 4 to 15 June 2012.**

There are over 442 nuclear power reactors in operation worldwide, and over 65 reactors are under construction. Safety assessment capacity is especially important as one of the primary means for decision-making in support of design, licensing and operation activities. Moreover, concern about nuclear risks, and the increasing demand for nuclear energy, urges the need to increase global safety assessment capacity for new nuclear facilities, and the need to support Member States in the application of an integrated safety assessment approach in order to reach informed safety decisions based on IAEA Safety Standards.

PURPOSE:

The purpose of this Workshop is to provide a continuing technical capacity building opportunity for leaders and decision-makers in nuclear safety on technical evaluation of the safety aspects of nuclear power plants, and in particular, to reach young professionals from developing countries being trained in technical support functions for deterministic and probabilistic safety assessment for new nuclear power programmes. The Workshop will be based on the IAEA Safety Requirements "Safety Assessment for Facilities and Activities (GSR-Part 4) and "Safety of Nuclear Power Plants: Design" (SSR2/1: Revision of NS-R-1).

TOPICS COVERED:

FUNDAMENTAL SAFETY ASSESSMENT KNOWLEDGE

- Scope of Safety Analysis
- Safety Functions
- Defence in Depth
- Acceptance Criteria
- Deterministic and Probabilistic Safety Analysis - Methods and Tools
- Use of Computer Codes - Verification and Validation
- Integrated Risk-Informed Decision-Making
- Design Basis Accidents and Beyond Design Basis Accidents
- Preparation for Licensing and Commissioning
- Periodic Safety Review

ENGINEERING FACTORS IMPORTANT TO SAFETY

- Structures, Systems and Components
- Design Principles
- Safety Classification Scheme
- External Events
- Internal Events
- Suitability of Materials
- Qualification of Equipment Essential to Safety
- Ageing and Life-Limiting Factors

FORMAT:

The Workshop will consist of invited lectures, as well as discussion sessions. Participants are requested to come prepared to discuss particular problems/situations in their home country/region.

PARTICIPATION

Engineers and students from all countries that are members of the United Nations, UNESCO or IAEA may attend the activity. As it will be conducted in English, participants must have an adequate working knowledge of this language. Although the main purpose of the Centre is to help researchers from developing countries through a programme of training activities within a framework of international cooperation, 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 are borne by their 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 of age. Such support is available only to those attending the entire event. Every effort should be made by candidates to secure support for their fare (or at least half-fare). There is no registration fee for attending the activity.

HOW TO APPLY FOR PARTICIPATION

The Application Form can be accessed at the activity website: <http://agenda.ictp.it/smr.php?2343>. Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form. Deadline for receipt of applications: **24 FEBRUARY 2012.**

Secretariat:

Telephone: +39-040-2240305
E-mail: <mailto:smr2343@ictp.it>

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

**in cooperation with the
International Atomic Energy
Agency, IAEA, Vienna,
Austria**

ORGANIZER:

M. MELLINGER-DEROY
(NSNI, IAEA, Vienna, Austria)

P. WELLS
(IAEA, Vienna, Austria)

LOCAL ORGANIZER:

Claudio TUNIZ
(ICTP, Trieste, Italy)

INVITED LECTURERS/SPEAKERS:

P. HUGHES
(IAEA, Vienna, Austria)

I. KUZMINA
(IAEA, Vienna, Austria)

N. TRICOT
(IAEA, Vienna, Austria)

M. MODRO
(Senior Safety Analysis Expert)

M. GASPARINI
(Senior Safety Analysis Expert)

G. JOHNSON
(Senior Safety Analysis Expert)

I. BASIC
(Senior Safety Analysis Expert)

A. DROZD
(Senior Safety Analysis Expert)

R.T. SEWELL
(Senior Safety Analysis Expert)

**DEADLINE for
receipt of applications:**

24 FEBRUARY 2012

(Trieste, updated April 2012)