

Joint ICTP-IAEA Essential Knowledge Workshop on Deterministic Safety Assessment and Engineering Aspects Important to Safety

12–23 October 2015
Trieste, Italy

The *Abdus Salam* International Centre for Theoretical Physics (ICTP) in collaboration with the International Atomic Energy Agency (IAEA) is organizing an **Essential Knowledge Workshop on Deterministic Safety Assessment and Engineering Aspects Important to Safety**, which will be held at ICTP, Trieste, Italy, from 12 to 23 October 2015.

The purpose of this two week workshop is to provide regulatory body staff, future operators and technical support organizations (TSOs) in developing countries, working in the area of deterministic safety assessment and performing reactor safety reviews, with an overview of deterministic safety assessment methods and tools including those related to the design extension conditions as well as an overview of the engineering aspects important to safety. This workshop includes material from the IAEA's Safety Assessment Education and Training (SAET) Programme aimed at familiarizing participants with the main concepts and methods of safety assessment in the IAEA safety standards, and will be of particular interest to participants from countries introducing nuclear power programmes.

TOPICS

Week 1: Deterministic Safety Assessment

- Safety assessment purpose and scope
- Introduction to: relevant IAEA safety standards; thermal-hydraulics; reactor physics; and design basis analysis (DBA)
- DBA postulated initiating events (PIEs)
- DBA acceptance criteria
- Design extension conditions (DEC)
- Conservative versus best estimate approaches
- Format and content of the safety analysis report

Week 2: Engineering Aspects Important to Safety

- Design safety requirements
- Introduction to assessment of engineering aspects
- Systems, structures, components and safety classification
- Equipment qualification
- Site characteristics and evaluation
- Assessment of external hazards
- Assessment of internal hazards
- Assessment of major systems: reactor core; coolant; containment; I&C; and electrical
- Assessment of auxiliary and supporting systems
- Human factors
- Aging, life limiting factors
- Assessment of safety over the lifetime of the plant & periodic safety review

PARTICIPATION

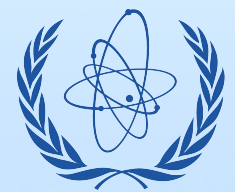
Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend. The School will be conducted in English; participants therefore must have adequate command of this language. Although the main purpose of the Centre is to help researchers from developing countries, 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 should be borne by their home institution. Every effort should be made by candidates to secure support for their fare (or at least half-fare). Limited funds are available for some participants who are nationals of, and working in, a developing country. Such support is available only for those who attend the entire activity. **There is no registration fee.**

HOW TO APPLY

The application form can be accessed via the School website: <http://indico.ictp.it/event/a14286>
Once in the website, comprehensive instructions will guide you step-by-step on how to fill out and submit the online application form. The closing date for receipt of applications is: **30 June 2015**

School Secretariat: Ms. F. Delconte
e-mail: smr2740@ictp.it; phone: +39-04022409932; fax: +39-04022407932
School website: <http://indico.ictp.it/event/a14286> ICTP Home Page: www.ictp.it



IAEA
International Atomic Energy Agency
Atoms for Peace

ORGANIZERS

GREG RZENTKOWSKI
(IAEA)

CORNELIA SPITZER
(IAEA)

PETER B. WELLS
(IAEA)

CLAUDIO TUNIZ
(ICTP)

DEADLINE

for applications

30 JUNE 2015

