







# ICTP/IAEA Advanced Workshop on Earthquake Engineering for Nuclear Facilities

## 30 November - 4 December 2009

The Abdus Salam International Centre for Theoretical Physics (ICTP), in collaboration with the International Atomic Energy Agency (IAEA), will organize a Joint Advanced Workshop on Earthquake Engineering for Nuclear Facilities, at the ICTP from 30 November - 4 December 2009.

The IAEA has been implementing a broad range of activities related to securing seismic safety of the world's nuclear installation. In September 2008 the IAEA announced the establishment of an International Seismic Safety Centre (ISSC) in its Division of Nuclear Installation Safety of the Department of Nuclear Safety and Security. The Centre plays the role of focal point for seismic safety-related information. The aim of the activities is international sharing of information and experience, development of Safety Standards, implementation of safety review services and training courses, to assist Member States on the application of the safety standards, development of specific technical projects, and knowledge of management and database.

Following recent effects of major earthquake events on nuclear installations, an IAEA-led team of international experts visited Japans' Kashiwazaki-Kariwa Nuclear Power Plant and other nuclear installations to review the practices and actions taken at the facilities. Since 2007 IAEA has been carrying out a three-year programme on the technical studies of seismic hazard evaluation of existing nuclear power plants. In order to utilize and share information and experience internationally, the IAEA, through the establishment of ISSC, has been reflecting this in the revision of the IAEA Safety Standards. To meet the objectives of the IAEA and ISSC, IAEA-ISSC in cooperation with ICTP, will provide international engineers the opportunity to attend a training course. Some of the topics to be presented will be:

- Safety consideration
- Geological survey
- Geotechnical engineering
- Seismic hazard
- Seismic design (geotechnical engineering, structure, equipment, systems)
- Uncertainty and residual risks
- Risk informed seismic design
- Post earthquake actions
- Experience of real earthquakes
- Tsunamis, land slides and other related phenomena

### Key note lecture:

"Establishment of IAEA's International Seismic Safety Centre and revision of key IAEA Safety Guides (Evaluation of Seismic Safety For Existing Nuclear Installations, and Seismic Hazards in Site Evaluation for Nuclear Installations)" Antonio R. Godoy, Acting Section-Head, Engineering Safety Section, Division of Nuclear Installation Safety, Department of Nuclear Safety and Security, IAEA

### **PARTICIPATION**

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the School. As it will be conducted in English, participants should have an adequate 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 cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend. A degree in Physics, Mathematics, Geophysics (theoretical or computational), Computer Science and/or similar disciplines is required.

As a rule, travel and subsistence expenses of the participants should be borne by the home institution. Every effort should be made by candidates to secure support for their fare (or at least half-fare). 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. Such support is available only for those who attend the entire activity. There is no registration fee.

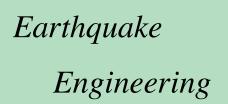
## **Request for Participation**

The application form can be accessed at the activity website <a href="http://agenda.ictp.it/smr.php?2016">http://agenda.ictp.it/smr.php?2016</a>
Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

### **ACTIVITY SECRETARIAT:**

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## Local Organizer

G.F. Panza

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## **Deadline for**:

requesting participation

30 August 2009