

The Abdus Salam International Centre for Theoretical Physics www.ictp.it

Joint ICTP-IAEA Workshop on Physics and Technology of Innovative Nuclear Energy Systems for Sustainable Development

29 August - 2 September 2016

ICTP, Miramare - Trieste, Italy

The Abdus Salam International Centre for Theoretical Physics (Trieste) and the International Atomic Energy Agency (Vienna) are organizing the Joint ICTP-IAEA Workshop on Physics and Technology of Innovative Nuclear Energy Systems for Sustainable Development.

PURPOSE: The purpose of the workshop is twofold,

- 1. To provide training and exchange of information on the importance of innovation and continued research and technology development in achieving the full potential of nuclear energy as a long-term, sustainable part of the world's energy mix, and,
- To summarize the status of worldwide innovative nuclear systems and associated advanced fuel cycles.

MOTIVATION: The aim is to impart theoretical foundation of all aspects of innovative nuclear energy systems and to familiarize students with their models and codes for design and safety analysis along with a provision of an active forum for sharing new ideas and brainstorming solutions to existing problems. This will help to stimulate the appreciation of the need of continued R&D and innovation in the areas of nuclear reactor and related fuel cycle science and instigate innovative thinking to create a knowledge base and a network among young scientists, researcher and engineers.

TOPICS: The broad areas of workshop will include:

- Global scenario for nuclear energy;
- Innovative reactor concepts and fuel cycle options,
- Reactor physics of innovative nuclear energy systems;
- Status of advanced primary components and development and qualification of new structural materials,
- New safety approaches, safety requirements and safety design criteria;
- Passive safety systems and other enabling safety technologies;
- Safety analysis including severe accident scenarios;
- Advanced modelling and simulation.
- Status of research and technology development in support of innovative reactor and fuel cycle technologies.

GRANTS: A limited number of grants are available to support the travel and living expenses of selected participants, with priority given to participants working in a developing country and who are at the early stages of their career.

HOW TO APPLY FOR PARTICIPATION

The online application form can be accessed at the activity website

http://indico.ictp.it/event/7632/

Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form.

Activity Secretariat (smr2850)

The Abdus Salam International Centre for Theoretical Physics Strada Costiera 11 34151 Trieste, Italy

E-mail: <u>Smr2850@ictp.it</u> Phone: +39-040-2240540 Fax: +39-040-22407540 Home Website: <u>http://www.ictp.it/</u>



DIRECTORS

S. MONTI (IAEA, Vienna)

V. KRIVENTSEV (IAEA, Vienna)

COORDINATOR

C. BATRA (IAEA, Vienna)

LOCAL ORGANIZER

S. SCANDOLO (JCTP: Triente)

31st May 2016

Application

DEADLINE