# Joint ICTP - IAEA Workshop on Physics and Technology of Innovative Nuclear Energy Systems



12 - 16 December 2022 An ICTP - IAEA Hybrid meeting Trieste, Italy

**Further information:** http://indico.ictp.it/event/9785/ smr3700@ictp.it

This is a comprehensive workshop reviewing state-of-theart reactor design concepts, nuclear fuel cycle options including design and technological features of various innovative reactors. The unique course provides basic understanding of different innovative nuclear energy systems.

## **Description:**

The participants will receive a theoretical foundation on most important research and technology development areas of the innovative nuclear energy systems and will get familiarized with the modern physical models and simulation codes for the design and safety analysis of the advanced nuclear reactors and related fuel cycles. The workshop aims to engage and stimulate young scientists, researchers, and engineers currently involved in nuclear reactors research, as well as students interested in the field.

Active discussion, group activities, poster session and various blended learning approaches will be used to enhance sharing of new ideas and emphasize the need of continued R&D and innovation in all areas of nuclear reactor and fuel cycle science and technology development.

## **Topics:**

- Global scenarios for nuclear energy;
- Innovative reactor concepts and fuel cycle options;
- Reactor physics of innovative nuclear energy systems;
- Thermal hydraulics of innovative nuclear energy systems;
- Status of advanced primary components and development and qualification of structural materials, coolants, and fuels;
- Passive safety systems and other safety technologies;
- Safety analysis including severe accident scenarios;
- Advanced reactor modelling and simulation;
- Status of research and technology development in support of innovative reactor and fuel cycle technologies.

#### **Directors:**

V. KRIVENTSEV, IAEA, Austria N. MORELOVA, IAEA, Austria

## **Local Organiser:**

N. SERIANI, ICTP, Italy

### Call for Contributed Abstracts:

In the application form, all applicants are encouraged to submit a brief abstract for a poster presentation. A limited number of contributed abstracts will be selected for the poster session. Please note that the participants presenting poster will be given priority to attend the workshop. The best poster will be awarded a certificate of appreciation.

# How to apply:

Online application: http://indico.ictp.it/event/9785/

Female scientists are encouraged to apply.

#### **Grants:**

A limited number of grants are available support the attendance of selected participants, with priority given to participants from developing countries, and to those submitting abstract for poster presentation. There is no registration fee.





for applications needing financial support and/or visa

**15 September 2022** 

for all other applications







