

Joint ICTP-IAEA International School on Nuclear Waste Actinide Immobilization



10 -14 September 2018
Trieste, Italy

Further information:
<http://indico.ictp.it/event/8333/>
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Nuclear waste management is a core issue for sustainable development and long-term viability of nuclear energy as energy supply. The main goal of this school is the dissemination of knowledge on optimal methods of synthesis and study of crystalline and glass-crystalline wasteforms for the immobilization of actinides and other long-lived dangerous radionuclides. It aims on transferring experience of ceramic and glass-composite materials fabrication from leading experts to specialists interested in reliable immobilization of toxic nuclides.

Directors:

Michael I. Ojovan
(IAEA-Vienna, Austria)
Boris E. Burakov
(Radium Institute, S. Petersburg, Russian Federation)

Description:

The school will bring together researchers from the area of materials science with a focus on crystalline and vitreous materials for nuclear energy. The school will assist experts to better understand the wide range and full potential of material science applied to radioactive waste immobilization and technology tools and methods devoted to immobilization and properties of crystalline and glass-crystalline materials. Knowledge transfer will be facilitated between individuals from developed and developing countries, and can be used to develop further the internationally sponsored development of nuclear waste immobilization using crystalline and glass-crystalline wasteforms. Participants should return from the school with a richer understanding of actinide immobilization technologies and the range of techniques to investigate actinide-containing materials.

Topics:

- Fundamentals of actinide immobilization;
- Radiation damage effects in actinide-doped crystalline materials and glasses;
- Leach behaviour of actinide-doped ceramics and glasses;
- Advanced materials based on durable actinide host-phases;
- New types of Pu fuel and targets for actinide transmutation;
- Interaction of actinide wastes and geological environment;
- Modelling of actinide migration in geological environment;
- Actinide behaviour during severe nuclear accident (Chernobyl, Fukushima, etc.) and nuclear tests.

Local Organizer:

Antonello Scardicchio
(ICTP - Trieste, Italy)

How to apply:

Online application:
<http://indico.ictp.it/event/8333/>

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee

Deadline:

10 June 2018

