

# Joint ICTP-IAEA International School on Radioactive Waste Cementation



**14 October - 25 November 2020**  
**A Joint ICTP-IAEA Virtual Meeting**  
**Trieste, Italy**

Further information:  
<http://indico.ictp.it/event/9129/>  
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The workshop will bring together researchers from materials sciences focusing on the design of cement-based materials to enhance durability of nuclear waste immobilisation for disposal.

## Description:

Information presented will assist other experts from nuclear energy research sectors, materials science and waste management departments regarding properties of cementitious materials and potential of cement science and technology for the long-term immobilisation of radioactive waste.

## Topics:

- Basics of cement chemistry (including curing mechanism);
- Different cement phase-waste interactions (designing of cement matrix for waste composition);
- Formulation and characterization of cement-based matrices;
- Technological approaches of waste cementation (advantages and drawbacks of the different types of processes);
- Chemical durability and long-term performance: experimental and modelling approaches;
- Retention of radionuclides by cementitious materials;
- Behaviour of cement-based materials under irradiation;
- Influence of geochemistry of disposal site on durability of disposed cementitious matrixes;
- Potential of alternative binders (alkali activated binders, phosphate binders, calcium aluminate and sulfoaluminate binders) for the conditioning of deleterious wastes.

A number of short oral presentation slots will be available for some of them upon selection.

## How to apply:

Online application:  
<http://indico.ictp.it/event/9129/>

Female scientists are encouraged to apply.

## Directors:

C. CAU DIT COUMES, CEA, France  
I. A. GORDON, IAEA, NEFW, Austria  
W. MEYER, IAEA, NEFW, Austria  
M.I. OJOVAN, Imperial College London, UK  
R. A. ROBBINS, IAEA, NEFW, Austria

## Local Organizer:

S. SCANDOLO, ICTP, Italy

## Speakers:

R. O. ABDELRAHMAN, AEA, Egypt  
M. ASMUSSEN, PNNL, USA  
C. CAU DIT COUMES, CEA, France  
L. CHOMAT, CEA, France  
C. LANGTON, Savannah River National, USA  
W. MEYER, IAEA, NEFW, Austria  
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V. G. PETROV, MSU, Russia  
J. PROVIS, The University of Sheffield, UK  
N. RAKHIMOVA, Kazan State University, Russia  
A. P. VARLAKOV, VNIINM, Russia

## Deadline:

**21 September 2020**



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