Training Course:
Assessment of long-term radiological risks from environmental releases: modelling and measurements
6-17 March 2017

CONTACT PERSONS
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Registration deadline:
15 January 2017
(max. 12 participants)

No registration fee.
Participants are expected to cover their own travel and subsistence costs (e.g., hotel, meals, visa if needed).
Modelling and measurement training course, 6-17 March 2017, Roskilde, Denmark

The training course on “Assessment of long-term radiological risks from environmental releases: modelling and measurements”, 6-17 March 2017, Roskilde, Denmark is organised by the Center for Nuclear Technologies at the Technical University of Denmark (DTU) in cooperation with PDC-ARGOS. The training course is co-funded by the European Joint Programme for the Integration of Radiation Protection Research CONCERT.

The course is aimed at providing the participants with an understanding of how to assess by measurements and modelling the long-term radiological risks from releases to the environment of radionuclides. Nuclear power plant accidents will particularly be in focus, but RDD’s will be considered.

The course builds on decades of international research work, e.g., in European projects such as ECP-4, STRATEGY, EURANOS, NERIS TP and PREPARE, including unique experience from extensive practical investigations in contaminated areas and laboratory assessments. It comprises a hands-on introduction to laboratory measurement techniques including state-of-the-art radiochemistry methods for determination of radionuclides that can not easily be determined. It also includes a hands-on decision support modelling session using a state-of-the-art computerised decision support system for nuclear and radiological emergency management.

The course will provide insight into:
- Assessment of long-term radiological risks from releases to the environment
- Theoretical principles of dosimetry
- Implications of different contamination scenario types
- Migration of radioactive contaminants in different types of environment
- Modelling internal dose and specific factors influencing ingestion dose
- Modelling external dose in contaminated inhabited areas
- Decision support systems for accident management
- Important concepts in sampling and gamma spectrometry
- Radiochemical analysis for radionuclides that are difficult to measure
- Rapid radiochemistry techniques for multiple samples

The targeted audience is PhD students and young scientists / advisors.

The course will give students 2.5 ECTS points.