

RELEVANT INFORMATION

Location

The course will be held at the **Campus North** of the **Karlsruhe Institute of Technology**, which is located ~10 km north of Karlsruhe next to Eggenstein-Leopoldshafen, Germany

(<http://www.kit.edu/downloads/Campus-Nord.pdf>)



Dates and course duration

Dates: 23rd – 24th of February 2016

Course duration: 2 full days

Fees

The participation fee of the workshop is covered by the FP7 CAST project. Please be aware that travel and accommodation expenses are not included.

If you are interested in participation, please provide following information to:

Dr. Vanessa Montoya and Dr. Volker Metz

Karlsruhe Institute of Technology (KIT)

Institute for Nuclear Waste Disposal (INE)

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Please complete all sections

Name:

Institution:

Address:

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e-mail:

Phone:

undergraduate student

graduate / Ph.D. student

other



**EURATOM FP7 project
Carbon-14 Source Term**

Training Course

**“C-14 behaviour
under repository
conditions”**



**Karlsruhe, Germany
23rd – 24th of February 2016**

Introduction and Scope

A **two days training course** is organized within the framework of the EURATOM FP7 CAST project <http://www.projectcast.eu/>.

The course will comprise:

- Lectures by experts
- Laboratory visits with practical training.

The course will provide advanced level understanding of different C-14 waste streams, their origins, radiological and chemical properties, and the hazards they represent. Moreover it covers topics related with waste management of decommissioning wastes, irradiated materials, spent nuclear fuel.



Audience: It is organized for (post-) graduate students as the main target group and is limited to **15 participants**. (When there will be vacancies in the course, the course will be open to other interested persons).

Course contents

Lectures by experts

- Overview on C-14 in waste streams from commercial light water reactors and its relevance to the long-term safety of C-14 bearing waste disposal.
- Production of C-14 in fuel elements of light water reactors (LWR) – introduction to calculation methods and related NEA databases.
- Instant Release Fraction of C-14 of spent nuclear fuel.
- Waste management of (C-14 bearing) low / intermediate level waste.
- Separation and analysis of gaseous / dissolved C-14 compounds in structural parts of irradiated LWR fuel elements.
- C-14 behaviour under repository conditions – application to geochemical based long-term safety analysis for a underground disposal system.

Laboratory visits and practical training

- Training for working with glove boxes, handling of radioactive laboratory waste and analytical techniques for determination and speciation of radionuclides under disposal relevant conditions.
- Visit to facilities for low / intermediate level waste treatment, decontamination, conditioning and interim storage.
- Visit to laboratories with open radioactivity, shielded box line with high level waste and C-14 separation and analysis facility.

General information

The training course is organized by the *Karlsruhe Institute of Technology, Institute for Nuclear Waste Disposal, KIT-INE*, in collaboration with the *Hauptabteilung Dekontaminationsbetriebe, WAK-HDB*.

The course is funded by the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no. 604479, the CAST project.



Registration

The requested information of the registration form (see front page) must be provided and sent to the following e-mail addresses:

- vanessa.montoya@kit.edu
- volker.metz@kit.edu

Deadline for registration is 15th of January 2016