

SCALE Modeling and Simulation for Nuclide Inventory and Decay Heat in LWR Spent Nuclear Fuel

[Register for the event](#)

Date: 12-16 October 2026

Place: NEA Headquarters in (Boulogne-Billancourt) Paris, France. [Plan your trip to the OECD/NEA.](#)

Minimum enrollment: 12 participants

Maximum enrollment: 20 participants

Course fee: 300 EUR

Registration deadline: 11 September 2026

Contact: programs@oecd-nea.org

This 5-day training course will be taught in English by two members of the SCALE development team from Oak Ridge National Laboratory (ORNL).

The course is open to participants who already hold a **personal SCALE 6.3 licence** (any version: 6.3, 6.3.0, 6.3.1, 6.3.2 or 6.3.3).

Details regarding the proof of license you are required to provide will be sent to you upon receipt of the registration form.

Programme

This is a hands-on training course that will provide instruction on best practices for modeling and simulations with SCALE of nuclide inventories and decay heat in LWR spent nuclear fuel. The course will summarize the underlying modules and sequences in SCALE that enable these types of simulations, including ORIGEN, ORIGAMI, Polaris, and TRITON. SCALE's graphical user interface, Fulcrum, designed to create, edit, validate, and visualize SCALE input, output, and data files, will be used throughout the course.

Participants will learn how to apply different approaches for nuclide inventory and decay heat calculations for representative LWR fuel assemblies. That will include: how to generate ORIGEN reactor libraries

with TRITON or Polaris, how to perform rapid depletion and decay calculations with ORIGAMI for LWR fuel assemblies with assembly average or axially-varying burnup, how to perform ORIGEN decay simulations over a cooling time of interest. Participants will also learn how to use the Sampler uncertainty quantification tool in SCALE to estimate uncertainties in calculated nuclide inventories and decay heat that are due to uncertainties in input modeling data (geometry, materials, operating parameters).

No prior knowledge of SCALE is required.

Registration

The registration fee is **300 EUR**. This included lunch and coffee breaks, but do not cover accommodation.

As soon as your registration has been confirmed, you will receive the necessary information to make the payment—which must be made by bank transfer only—before the training begins.

Registrations are open until places ran out. We draw your attention to the fact this course could only host **20 participants**.

Note aux participants français : l'OCDE/NEA n'est pas un centre de formation. Pour cette raison, les frais d'inscriptions sont dus avant le début de la prestation et il ne sera pas établi de convention de stage.

Practical information

Participants must bring their own laptop (with charger and cable) capable of connecting to Wi-Fi and allowing connections to the internet. **They should have arrived with the SCALE code installed for use in the classroom.** It is strongly recommended that the installation DVDs also was brought (and a way to read them) in case the code needs to be reinstalled on the student's laptop during the class.

When?

12 - 16 October 2026

Paris, France

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