

COURSE OVERVIEW

The general objective is to provide participants with an up-to-date basic knowledge on the six concepts selected for the 4th generation of nuclear systems (SFR, LFR, GFR, VHTR, SCWR, MSR).

WHO IS THE COURSE FOR?

- Professionals, engineers, researchers and students with an interest in a global view of the 4th generation of nuclear reactors.
- Scientists already involved in Gen IV systems activities or planning to work in such areas.

TARGETED SKILLS

- Acquire a general view of GIF (Generation IV International Forum) objectives and organisation.
- Explain the rationale for the development of a 4th generation of nuclear reactors.
- Describe the main characteristics of each system, and formulate their design, performance and safety characteristics.
- Discuss the technical challenges they are faced with for practical development.

ENTRY REQUIREMENTS

Basic knowledge on nuclear reactor physics is desirable.

- Duration: 5 days (30 hours)
- Location: INSTN/CEA-Saclay, France
- Dates: November 16-20th, 2020
- Programme manager: Nadia NOWACKI/nadia.nowacki@cea.fr
- Technical advisor: Claude RENAULT/clauder.renault13@orange.fr
- Course organiser: Marie-Pia SEYS/marie-pia-formations-INSTN@cea.fr
- Registration fees:
 - Full rate: €2,350
 - Student: €1,640
 - ENEN/CEA member: €1,880
- Course code: 558



©P. Stroppa, CEA

CONTENT

- The course covers the 6 systems selected by GIF (SFR, LFR, GFR, VHTR, SCWR, MSR) and addresses cross-cutting aspects (safety, materials and fuels, energy conversion, nuclear fuel cycle).
- Focus on Gen IV demos and prototypes (ASTRID, ALFRED, ALLEGRO, HTR-PM).



WHY TAKE THIS COURSE?

- Lectures by renowned experts from France and other countries (China, Czech Republic, Italy, Germany).
- Tutorials (How to “design” a fast neutron reactor using simple calculations).
- The course is supported and advertised by GIF
www.gen-4.org/gif/jcms/c_82830/conferences-schools