# GENERATION IV NUCLEAR REACTOR SYSTEMS FOR THE FUTURE NOVEMBER 18-22, 2019



#### **Course overview**

The general objective is to provide participants with an up-todate basic knowledge on the six concepts selected for the 4<sup>th</sup> 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 4<sup>th</sup> generation of nuclear reactors.
- Scientists already involved in Gen IV systems activities or planning to work in such areas.

## **Entry requirements**

Basic knowledge on nuclear reactor physics is desirable.

## Competences

- Acquire a general view of GIF (Generation IV International Forum) objectives and organization.
- Explain the rationale for the development of a 4<sup>th</sup> 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.

Duration	5 days (30 hours)
Location	INSTN/CEA-Saclay, France
Dates	November 18-22, 2019
<b>Programme Manager</b>	Nadia NOWACKI/nadia.nowacki@cea.fr
Technical Advisor	Claude RENAULT/claude.renault13@orange.fr
Course Organiser	Marie-Pia SEYS/marie-pia.seys@cea.fr
<b>Registration fees</b>	
Full rate	€2,270
Student	€1,590
ENEN/CEA M	lember €1,820

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Course code



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#### Course

- 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 advertized by GIF <u>www.gen-4.org/gif/jcms/c\_82830/</u> <u>conferences-schools</u>



