

**Job Title:** Research Engineer  
**Department:** R&D Codes and Methods  
**Location:** Torino, Lyon or London  
**Reports to (Job Title):** Daniele Tomatis

## Job Purpose

The R&D Codes and Methods group at *newcleo* is seeking applicants for a Research Engineer position in the domain of reactor physics and computer simulation of lead-cooled fast reactors. The Research Engineer will support the engineering studies with new ideas and solutions, using a research-driven approach. In particular, this position will focus on the development of heat transfer and thermal-hydraulic models for new innovative steam generators featuring complex geometries. The role of this position contributes to the company's objectives in the field of advanced reactor physics and methods.

The R&D group in Codes and Methods supports the development of computer codes, physical correlations and nuclear data, methodologies, and engineering applications for criticality and shielding, reactor design and safety studies. The successful candidate will work jointly with other research staff to apply knowledge, practices and techniques to the existing methodologies used for reactor studies. The group operates in the areas of reactor physics, transport theory and neutronics, reactor thermal-hydraulics and heat transfer, two-phase flow, and instrumentation physics.

## Main Activities

- Participate in individual and collaborative research projects
- Support engineers and computer code users in routine design and safety studies
- Prepare technical reports and presentations
- Supervise internship work of undergraduate students
- Develop and support the community of new computer codes' users

## Ideal Background

**Education:** Master's Degree in Nuclear Engineering  
PhD is a plus

**Languages:** Fluent English, with Italian or French as optional languages

**Experience / Professional requirements:**

- show a scientific mindset when approaching new tasks
- knowledge of nuclear engineering principles, theories, and practices for the design and analysis of fast reactor systems
- demonstrated background in thermal-hydraulics and heat transfer
- experience with Python programming