Job Title:	**R&D Thermal-Hydraulics Analyst**
Department:	Engineering – R&D Thermal-Hydraulics (RTH) Unit
Location:	Torino
Reports to (Job Title):	RTH, Head of Unit

Job Purpose

In the framework of our LFR projects in France and UK, we are looking for a thermal-hydraulics analysts to perform studies required by ***new*cleo's R&D experimental programme**, which is being implemented to support reactor design and safety assessment.
You will be part of the Engineering Department, particularly of the **R&D Thermal Hydraulics Unit**. You will closely collaborate with the other Engineering units as well as with the other scientific departments.

As a thermal-hydraulics analyst, you will be responsible for execution (and possibly the coordination) of technical studies, the follow-up of externalized activities, the drafting of project deliverables, the reporting of costs and schedules.

Main Activities

You will support *new*cleo projects by:

- carrying out engineering studies and numerical simulations to support the design and exploitation of experimental test facilities (assessment/verification of thermal-hydraulic performance, both at system and component level; thermal-hydraulic analyses in support of structural integrity assessment; support to definition of test matrices; support to design and optimization of instrumentation system; pre-test and post-test analyses; etc.);
- analysing and processing measured data resulting from experiments for correlation development and model validation purposes;
- performing code validation and benchmarking activities, and helping identifying validation gaps and R&D needs;
- drafting and reviewing project deliverables, such as calculation notes, validation notes, design specifications, technical reports, etc.

To perform such tasks, you will be working in close collaboration with the other engineering units (such as Plant Thermal-Hydraulics, Mechanical Design, Power Generation, Safety and Licensing, etc.) as well as with the Codes & Methods team and with *new*cleo's partners in R&D activities (such as ENEA).

Ideal Background

Education:	MSc degree, or an equivalent level of experience in relevant domains (nuclear engineering, mechanical engineering, aerospace engineering, etc.)
Languages:	Fluent written and spoken English (Adequate to work comfortably in a professional environment, draft good quality documentation and actively participate in technical meetings in an international context)
Experience / Professional requirements:	• Strong interest in nuclear engineering, in particular in the development of the fourth generation of reactor technologies • Strong background in thermal-fluid mechanics and heat transfer • Strong skills in the use of computational fluid dynamics (CFD) methods Well appreciated plusses: • Background in nuclear reactor thermal hydraulics • Background in technology of liquid metals • Knowledge of other TH simulation tools such as nuclear system TH codes (e.g. RELAP and similar) • Knowledge of nuclear reactor safety principles • Background in structural mechanics