

Job Vacancy

Engineer (M/F) in Cryogenic Infrastructure and Superconducting Cable Characterisation — SupraMarine / AERC Project

Unit: GeePs UMR8507

Work location: 11 rue Joliot Curie, 91190 Gif-sur-Yvette

Contract type: Fixed-term contract

Working language: French or English

Contract duration: 25 months

Salary: €3,665 gross per month, depending on experience

Start date: 01/09/2026

Closing date: 16/08/2026

To apply: send your CV and cover letter to Jessica.klar@centralesupelec.fr

Job Description

Main Duties

The recruited Research Engineer will be responsible primarily for contributing to the implementation, technical coordination and operation of the experimental resources required for the activities of the SupraMarine project and the AERC platform — Advanced Electrical Research Centre.

The position comprises two main areas: day-to-day technical support for AERC, and the implementation and follow-up of AERC's cryogenic and power infrastructure.

AERC Technical Support

1. Test management: Support the set-up and performance of tests at AERC.
2. Procurement management: Specify orders for projects hosted at AERC and for AERC infrastructure.
3. Infrastructure support and certification: Coordinate the installation within the 2,000 m² of the Breguet building from late 2026 onwards, and monitor the certification/labelling of platforms as well as compliance with safety standards.
4. Communication and prospecting: Help manage visits to AERC, contribute to communication around its activities and support actions related to the prospecting of future projects.
5. Support for the "Open Data" policy: Help implement the sharing of research data and code related to AERC projects.

AERC Cryogenic Infrastructure (Associated with SupraMarine T2.3.3)

1. LN2 cooling system: Specify and coordinate the installation of the liquid nitrogen cooling system.
2. GHe cooling system: Specify and coordinate the installation of the gaseous helium cooling system.
3. LN2 liquefier: Specify and coordinate the installation of the liquid nitrogen liquefier.
4. 1 MW substation: Specify and coordinate the installation of the 1 MVA electrical substation.

Candidate Profile

Education and Experience

The position is intended for a candidate holding an engineering degree, a Master's degree or a PhD in one of the following fields:

- electrical engineering;
- electrotechnics;
- cryogenics;
- applied superconductivity;
- experimental physics;
- scientific instrumentation;
- process engineering or energy engineering.

Previous experience on an experimental platform, in a research laboratory or in an industrial environment with a strong technical component would be highly valued.

Expected Technical Skills

The candidate should have skills in several of the following areas:

- applied cryogenics, particularly liquid nitrogen, gaseous helium or low-temperature cooling systems;
- high-current electrical testing, in alternating current or direct current;
- instrumentation, data acquisition and experimental metrology;
- integration of multiphysics experimental test benches;
- drafting technical specifications;
- supplier follow-up and coordination of equipment installation;
- knowledge of safety rules associated with cryogenic, electrical and pressure installations;
- ability to document experimental procedures and produce technical reports.

Knowledge related to cryogenic, electrical and pressure installations would be an asset.

Transferable Skills

- autonomy, rigour and strong organisational skills;
- interest in experimental work and complex technical environments;
- ability to work at the interface between researchers, engineers, technicians, doctoral students, support services and industrial partners;
- ability to manage several tasks in parallel;
- good written communication skills in French and English;
- ability to communicate in technical and scientific English;
- awareness of issues relating to safety, quality, traceability and the valorisation of experimental data.

Working Environment

The recruited person will be employed by CentraleSupélec and integrated into the GeePs laboratory — Génie électrique et électronique de Paris — a research unit specialising in electrical systems, electrotechnics, materials for energy, superconducting systems and technologies associated with the electrical grids of the future.

The laboratory is a joint research unit of CNRS, CentraleSupélec, Université Paris-Saclay and Sorbonne Université. Created in 2015, it resulted from the merger of LGEP — Laboratoire de Génie Electrique de Paris, the original joint research unit — with part of the former Supélec host team and the L2E host team — Laboratoire d'Electronique et d'Electromagnétisme — from Sorbonne Université.

It is located on the CentraleSupélec campus of Université Paris-Saclay in Gif-sur-Yvette and on the Pierre and Marie Curie campus of Sorbonne Université in Paris.

With 250 staff members, including 136 permanent staff — researchers, academic researchers, engineers and technicians — and around 80 doctoral students, it is one of the largest laboratories in Île-de-France in the field of Electrical Engineering. It falls exclusively under CNRS section 10 and CNU section 63.