

Tenure track position in the experimental development of novel quantum devices in quantum nanoelectronics at PHELIQS (UGA-CEA, Grenoble, France)

Job description

The Quantum Photonics, Electronics and Engineering Laboratory ([PHELIQS](#)), a joint research unit of the CEA Fundamental Research Division in Grenoble ([CEA-IRIG](#)) and Université Grenoble Alpes ([UGA](#)), invites applications for **a tenure track position in the experimental development of novel quantum devices in quantum nanoelectronics (UGA Chaire Professeur Junior - CPJ)**.

The UGA plays a leading role in the development of Grenoble's very rich quantum community. With the experimental research activity of this CPJ, UGA will strengthen its position in quantum technologies by developing innovative quantum platforms based on emerging materials and concepts.

At the UGA and CEA, PHELIQS addresses major open challenges in nanoelectronics and photonics, with a focus on fundamental properties of engineered systems operating in the quantum regime. Within PHELIQS, the [LaTEQS](#) team is widely recognized for the study of **semiconducting quantum dots and hybrid superconducting nanostructures**, and is one of the actors of the French strategy on Quantum Technologies ("Plan quantique"). The candidates are expected to propose an ambitious project that complements current activities at LATEQS and opens new lines of research involving quantum electronic properties at the nanoscale. **The tenure track is for a period of 3 to 6 years and should result in a permanent position as a UGA professor.**

Research profile :

The successful candidate will develop her/his own project in close synergy with the LaTEQS team and its partners. She/he will work in an exceptional scientific and technological environment with access to very low temperature well-equipped dilution fridges and to the medium-scale academic cleanroom facility (PTA). She/he will also benefit from existing collaborations with the technological research at CEA-DRT and the NEEL Institute (CNRS) close by. She/he will train and supervise the research activity of students and post-docs. A initial financial of 200 k€ from the French research national agency (ANR) completed by the UGA will be provided to the recruited researcher.

Teaching profile :

Teaching assignments consist of 96 hours per year.

The strengthening of human resources is also a strong and necessary axis of the national strategy for quantum technology to ensure innovation, attractiveness and competitiveness of the industrial and research ecosystem. In order to meet the growing need for skills in quantum technologies, the national project QuanTEdu-France, led by the UGA, brings together a consortium of 21 academic institutions. The central objective of QuanTEdu-France is to implement concrete actions, from pre-university training to doctoral training, in initial and continuing education, in partnership with professional training and industrial players, while actively participating in the digital transition of training in higher education institutions. The CPJ will thus be able to invest in awareness-raising activities as well as in the creation of a « quantum technologies » practical work platform.

Qualification

Applicants must hold a PhD in physics and have postdoctoral research experience. The position requires proven experimental skills in experimental quantum nanoelectronics at very low temperature and some experience in teaching. Applicants are expected to have an outstanding record of research achievement in internationally recognized scientific environments.

How to apply

For additional information, candidates are encouraged to contact francois.lefloch@cea.fr or to visit www.lateqs.fr