



# Permanent researcher position in experimental solid-state physics at CEA-IRIG (Grenoble, France) with a focus on quantum nanoelectronics

## 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 **permanent researcher position in the field of experimental quantum nanoelectronics at very low temperature**. 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 successful candidate will develop her/his own project within the LaTEQS team and in close synergy with its partners. She/he is expected to participate to major projects of the Lateqs team, as well as establish and manage her/his own research collaborations with academic or industrial 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 strong team spirit is therefore required.

Located in the French Alps and surrounded by a stunning natural environment, the international city of Grenoble hosts a rich scientific ecosystem formed by public research organizations (CEA, CNRS), Université Grenoble Alpes (UGA), Large Scale European Infrastructures (ESRF, ILL), and high-tech companies. Université Grenoble Alpes attracts a large number of students in a broad range of disciplines, including quantum technologies and quantum matter.

CEA is a French public research organization that stands at the crossroad between fundamental and applied research. PHELIQS is one of the 10 laboratories of the CEA-IRIG, which gathers 1200 people in the fields of physics, chemistry, biology, health, and cryotechnologies.

## Qualification

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

## How to apply

Applicants shall submit a cover letter indicating their interest and fit for the position, a detailed curriculum vitae including a description of their main achievements, list of publications, and research statement (2 pages max explaining current and future research interests) to [francois.lefloch@cea.fr](mailto:francois.lefloch@cea.fr). In addition, they should arrange for three letters of recommendation to be sent to the same address.

To ensure consideration, applications must be received by March, 31<sup>st</sup> 2023. Short-listed candidates will be invited to visit the laboratory in April-May, and interviewed by a committee of experts in June.

For additional information, candidates are encouraged to contact Xavier Jehl ([xavier.jehl@cea.fr](mailto:xavier.jehl@cea.fr)) and/or François Lefloch ([francois.lefloch@cea.fr](mailto:francois.lefloch@cea.fr)) or to visit [www.lateqs.fr](http://www.lateqs.fr).