FULL TIME RESEACH LOGISTICIAN IN PHYSICS

FACULTY OF SCIENCE and ECOLE POLYTECHNIQUE DE BRUXELLES

Reference: 2025/S154
Application deadline : 15-08-2025
Start date : 01-10-2025

Job Description

The research logistician is responsible for implementing research projects, including advising on, supervising, and monitoring the progress of scientific activities and experiments, and for maintaining and using advanced scientific equipment. This mandate is granted for an initial term of 2 years; at the end of these 2 years, the commitment may be renewed for a further term of 2 years.

We are searching for an electronics engineer or experimental physicist to contribute to the research activities of three groups at Université libre de Bruxelles: the Laboratoire d'Information Quantique (LIQ, https://liq.ulb.ac.be), the Opera Photonics Laboratory (https://opera-photonics.polytech.ulb.be/), Ecolé Polytechinique de Bruxelles (https://polytech.ulb.be/en), and the Interuniversities Institute for High Energy Physics (IIHE, www.iihe.ac.be). There will be two work locations, at the Solbosch and La Plaine campuses, and the work will be carried out in collaboration with the researchers and engineers from these three institutes, in a diverse and stimulating environment.

The research logistician will be involved in complex and challenging research projects. These include developing technical solutions for experimental nonlinear photonics and quantum optics, as well as designing electronic systems to read out signals produced by the most energetic particles in our Universe. These efforts support various current and future astroparticle experiments with similar requirements: PEPS (gamma rays), the Pierre Auger Observatory, GCOS (cosmic rays), RNO-G, and IceCube (neutrinos).

The research logistician will carry out specialized technical tasks, including the design, testing, and calibration of programmable logic devices (PLDs) and field-programmable gate arrays (FPGAs), testing of photosensors (photomultipliers, siPM), and developing data acquisition systems. The responsibilities will also include the development and implementation of shared instrumentation infrastructure, involvement in the management and maintenance of laboratory equipment and fast electronics, and providing technical support to research staff. Travel to the Pierre Auger Observatory site in Argentina may be required for the deployment and commissioning of detector systems, as well as hardware testing and integration at our partner Universities in the USA and Europe.

Skills required

PhD in engineering or physics.

Required qualifications :

The successful candidate should have a broad portfolio of competencies:

Technical skills: standard benchtop electronics, fast electronics, FPGA programming, advanced PCB board design, programming in a standard language (C++, python), lasers and photonics. It is not expected that the successful candidate will master all these techniques.

Soft skills: Ability to work effectively in multidisciplinary and international research teams, time-management skills to handle multiple and different tasks, capacity and motivation to learn new technical skills.

Languages: Working language is English; knowledge of French is a plus

Interested ?

For more information, please contact Prof. Simon-Pierre Gorza (simon.pierre.gorza@ulb.be) and Prof. Ioana Mariş (Ioana.Maris@ulb.be).

Applications must be sent by e-mail to the rectorate of the Université Libre de Bruxelles (rectrice@ulb.be) and to the faculty deanship (aff.acad.sciences@ulb.be).

They must include the following :

- an application letter
- a Curriculum vitae including a list of publications :
  if you want you can complete a standard form via our website at https://www.ulb.be/fr/documents-officiels/completer-votre-cv-en-ligne . Once completed, it must be downloaded and attached to the application file.
- Report on previous or current activities relevant to this call
- The names and contact e-mail addresses of at least three referees, with due regard to gender balance, who may be contacted by the selection committee. These persons may not be in a conflict of interest due to family or emotional ties.

Equal opportunities policy

ULB's personnel management policy is geared towards diversity and equal opportunities.

We recruit candidates on the basis of their skills, irrespective of age, gender, sexual orientation, origin, nationality, beliefs, disability, etc.

Would you like to be provided with reasonable accommodation in the selection procedure because of a disability, disorder, or illness? Please contact Marie Botty, the person in charge of diversity aspects for the academic and scientific staff (marie.botty@ulb.be). Be assured of the confidentiality of this information.

More details on the ULB gender and diversity policy are available at https://www.ulb.be/en/about-ulb/gender-equality-at-ulb.

You will find all the regulations relating to research careers on our site at http://www.ulb.ac.be/emploi/academique.html.