

Vacancy

Postdoctoral Researcher - Scientific Software Development

Yours Tasks

As a member of the Scientific Computing Group, you will work closely with other groups within the Science Division at ILL, particularly the Large Scale Structures group and the scientists responsible for the LADI and DALI diffractometers. The current software used for data reduction is LAUEGEN, which is outdated and no longer maintained. We plan to extend the capabilities of our in-house software, ESMERALDA (used for the reduction of single-crystal Laue diffraction patterns in condensed matter studies), to handle the large unit cells characteristic of biological samples. ESMERALDA is an application written in Fortran 2008 that utilizes many crystallographic routines being incorporated into the CrysFML08 library (<https://code.ill.fr>).

You will be responsible for:

- Establishing workflows for data reduction/data analysis, specific to the quasi-Laue methods, to meet the scientists' requirements
- Developing the code and, optionally, a specific Graphical User Interface (GUI)
- Validating the software solutions
- Writing the documentation
- Participating in scientific experiments on LADI/DALI.

You will work in a multidisciplinary, international environment, interacting with scientists, and you will be encouraged to pursue or initiate your own scientific activities. However, your main task will be to validate and deliver a robust and professional software solution for processing LADI/DALI data.

Qualifications / Experience:

- You have a PhD in Physics, Chemistry or Life Sciences with a particular interest in Diffraction experiments and Structure determination.
- Alternatively, you have a degree in Computer Science with demonstrated experience in working in a scientific environment or developing a scientific software.
- You have solid experience with Python, Fortran or C++, and good practices in software development (e.g. versioning with Git).
- Knowledge of Crystallography would be a bonus
- You must have a sound knowledge of English and be willing to learn French (a language course will be paid for by the ILL)

We offer:

- ✓ **Quality of life** A hub for research and technology, the city of Grenoble is ideally located in the heart of the French Alps (just 3 hours from Paris/Provence by train, 1 hour from Lyon international airport and 1 ½ hours from Geneva). It is important for us that our staff achieve a healthy work-life balance. We therefore offer home working (under certain conditions), generous annual paid leave entitlement and a host of other benefits that you will discover when you arrive!
- ✓ **Prospects** We guarantee you a secure 2-year post-doctoral contract renewable for a further 12-month period. Only candidates holding a PhD obtained within the last 3 years are eligible for post-doctoral positions at ILL. Then why not take your next career step with us by applying online -preferably in English- via our career portal quoting **reference number 25/15** and including a **list of publications and the names of three referees**, one of whom should be from your present workplace. **Applications are accepted until the selection of the candidates who meets the job requirements.** Please note that all applicants are subject to administrative screening (background checks). For this post, medical fitness for work under ionising radiation is required. **We are committed to equal opportunities and diversity and therefore welcome applications from all suitably qualified candidates.**
- ✓ **Benefits** - We offer generous social benefits (expatriation allowance, excellent health cover), moving and relocation assistance (under certain conditions) and an annual productivity bonus. We also offer language courses for you and your partner and subsidies for the use of public transport and the staff canteen, as well as for holidays and a variety of cultural and sports activities.

How to apply:

Further information can be obtained by contacting Stéphane ROLS, Head of the Scientific Computing Group: +33 (0)4.76.20.78.25 or rols@ill.eu ; Ralf SCHWEINS, Head of the Large Scale Structures group: +33 (0)4.76.20.70.91 or schweins@ill.eu. **Please do not send your application to these addresses.**

website :

www.ill.eu/careers

(vacancy reference : 25/15).

https://www.ill-recruits.eu/index_extern.php?sid=1715&intern=0

Con copia de la candidatura a: eures.franciasuizabeneLux@sepe.es

Indicando la referencia ILL 25/15



Ayudas a la movilidad EURES