

Permanent scientific position (full time) as Logistician of the ABINIT-MULTIBINIT Software Platform

Start date: 01/06/2022

Vacancy Reference: FS-211512-04

Job description

A **research logistician** position (computational staff scientist) attached to the CESAM Research Unit, as technical manager of the ABINIT-MULTIBINIT software platform for *ab initio* modelling of material properties.

Activities

The activities of the Research Logistician will include, among others tasks and to varying degrees:

- technical management of the ABINIT-MULTIBINIT software platform in coordination with the ABI-Logix inter-university consortium The logistician will be the local technical manager and will ensure the coordination of the software platform (in particular the management of new second-principles simulation tools). Their responsibilities will be to ensure (i) software development, (ii) sustainable management and (iii) international dissemination, in concert with the activities of the inter-university ABI-Logix consortium. Tasks will include: planning and optimisation of the software development strategy, specific implementation and programming tasks, coordination and monitoring of the activities of other developers, correct merging of different contributions, production and distribution of code releases, benchmarking, IT maintenance, quality control (Test Farm)
- Support for users of the ABINIT platform The logistician will participate in training and technical support for ULiège users and developers (Masters' students, PhD students, postdocs, visitors, etc.) as well as more broadly to the entire Belgian and international community through the activities of the ABI-Logix consortium (e.g. Participation in the work of the ABINIT developers' community, contribution to user forums, development of online tutorials and documentation, training of researchers in international schools, etc.).
- Participation in the management of local hardware resources and access to decentralised resources - The logistician will participate in the management of local computer servers used for the ABINIT platform (access, backup, update, development) and will provide assistance for the submission of collective applications for supercomputing time, also on behalf of the ABI-Logix consortium.

The logistician will join the team of researchers of the ab initio simulation groups of the CESAM Research Unit. Through their activities, they will be involved and actively participate in research projects. As their career progresses, they will be required to take on responsibilities and will enjoy a certain degree of autonomy. A precise specification of their main tasks and priorities will be established with the local team and the ABI-Logix consortium at the time of taking up the post, and periodically reevaluated.

Qualifications required / profile

- Hold a doctorate in Science or Applied Science in the field of Materials Physics and have international experience (research stay abroad or equivalent experience);
- Have scientific knowledge in the field of materials modelling using first-principles (DFT, DFPT, PAW, etc.) and second-principles (atomic potentials, molecular dynamics, magnetisation dynamics, tight-binding, etc.) simulation methods;
- Have excellent computer skills (Fortran, C/C++, Python, etc.) and experience in software development. Knowledge of parallel and graphics card programming as well as the management and coordination of distributed software teams (github/gitlab, buildbot, modularisation, DevOps) are strong assets;
- Fluency in English and good interpersonal and teaching skills.

Selection procedure

The selection procedure will be carried out following the regulations applied within the University of Liège.

Our institutional policy is based on diversity and equal opportunities. We select candidates on the basis of their qualities regardless of age, sexual orientation, origin, beliefs, disability or nationality.

Applications

Applicants are requested to submit their applications electronically, to the following address: Postesscientifiques@uliege.be with a copy to Prof. Pascal Poncin, Dean of the Faculty of Science - doyen.sciences@uliege.be and Ms Françoise Motte - francoise.motte@uliege.be by 18 March 2022 at the latest. Please mention the vacancy Reference number FS-211512-04.

Documents required:

- A cover letter highlighting the applicant's skills in relation to the position to be filled;
- A complete curriculum vitae;
- A copy of publications (in electronic form) as well as links to any software developed and available online.

Recruitment conditions

The position shall be assigned either for a fixed term of four years, which may lead to the permanent appointment of the person concerned, or on a permanent basis from the outset.

Information

Further information on the post, status and remuneration can be obtained from **Prof. Philippe Ghosez**, **Director of the CESAM Research Unit** - tel. +32 (0)4 366 36 11 - philippe.Ghosez@uliege.be

Remuneration:

Salary scales and how they are applied are available from the human resources department of the University: **Ms Ludivine Depas** – tel.: +32 (0)4 366 52 04 – <u>Ludivine.Depas@uliege.be</u>