

The Laboratoire Léon Brillouin (LLB), France, invites for applications for an Instrument Project.

Description of the project

In the framework of the european project of a new neutron scattering source, the Technische Universität München (TUM) and the Laboratoire Léon Brillouin (LLB) are jointly involved in the design and construction of a neutron scattering spectrometer, C-SPEC, to be located at the European Spallation Source (ESS), under construction in Sweden.

Working as a team with the instrument scientist, the Instrument Project Engineer takes an instrument concept and turns it into an actual instrument, performing planning, detailed design, procurement and installation in a project environment.

Description of main responsibilities

The Instrument Project Engineer working in the development group at the LLB, is co-leader of an instrument project (work package) with an Instrument Project Leader (instrument scientist). The engineer provides technical project leadership, including management and integration of engineering effort. Working with the Instrument Scientist, you perform engineering design work based on the scientific specifications in accordance with the technical requirements of ESS. You will be responsible for developing and maintaining the 3D CAD model of the instrument, working with the technical groups at LLB, TUM and ESS for integration and coordinating all engineering efforts related to the instrument. You will also be responsible for fabrication and assembly of all manufactured components of the spectrometer onsite. Additionally, you will work with other staff to perform validation, verification and testing.

This will include:

- Design engineering using the 3D CAD-tool Catia V6.
- Engineering activities from requirements to installations.
- Analyzing engineering problems using traditional analytical methods and FEA packages.
- Writing calls for tenders and follow-up of supply contracts.
- Supervision of technical staff and designers for prototyping, series production and follow-up of supply contracts.

Qualifications

- Bachelor or master in mechanical engineering or an equivalent combination of education and design experience.
- Experience in mechanical engineering of complex engineering problems, working in a multi-disciplinary environment.

- Experience in a 3D CAD software (Catia V6 preferred, others acceptable).
- Knowledge of the technical concepts of drafting plus basic engineering principles, coded and standards required.
- Experience in the implementation of engineering activities such as functional descriptions, requirement definitions, design, and definitions of complex interface systems.
- Ability to analyze and solve basic mechanical engineering problems using strength of materials and materials selection principles.
- Experience in designing and building scientific components in a collaborative scientific atmosphere would be preferred.
- Willingness to work in an international environment is essential.
- Excellent oral and written English skills are a prerequisite; very good knowledge of German and French would be an advantage.
- Mobility, the instrument project Engineer will work in close collaboration with the different scientific and technical teams of the project. This will necessitate frequent journey in Sweden and Germany.

You as a person: To be successful and perform well in this position you are communicative and well adapted to work in a complex, multi-cultural, interdisciplinary team environment.

Duration & Location: The position is a renewable 2 years contract at CEA (Commissariat à l’Energie Atomique et aux Energies Alternatives). Your work place will be situated in Saclay close to Paris, France.

Start date

The position is to be filled for June 2015.

Application & Contact

Please provide your curriculum vitae and covering letter in English to Dr. C. Alba-Simionesco, director of the Laboratoire Léon Brillouin, CEA Saclay, F-91191 Gif-sur-Yvette, France (christiane.alba-simionesco@cea.fr).

The deadline for applications is 15th of January 2015.

For further information regarding the position, please contact Dr. S. Longeville, (slongeville@cea.fr), or S. Désert (sylvain.desert@cea.fr).

We look forward to receiving your application.