Facility for Antiproton and Ion Research

Helmholtzzentrum für Schwerionenforschung GmbH

GSI Helmholtzzentrum für Schwerionenforschung in Darmstadt operates one of the leading particle accelerators for science. In the next few years, the new FAIR (**F**acility for **A**ntiproton and **I**on **R**esearch) one of the world's largest research projects, will be built in international cooperation. GSI and FAIR offer the opportunity to work together in this international environment with a team of employees committed to ensuring each day to conduct world-class science.

In the department of **System Planning of Super-FRS (SFS)** we are looking for an

Engineer (all genders)
in the domain of nuclear technology or comparable
Reference No. 21.78-6520

The Super Fragment Separator (Super-FRS) is a forefront machine of FAIR. It will produce exotic nuclei beams by impinging high intensity primary ion beams including Uranium at relativistic energies on a high-power production target. Activation of various components in the target area will occur during operation. The maintenance and/or (temporary) storage of these activated components will take place in a Hot Cell complex integrated into the target building of Super-FRS.

Job tasks

- Conceptual Design of the Super-FRS hot cell complex. This includes
  - defining/detailing the remote handling (RH) workflow of affected components
  - simulating RH workflow by applying suitable computer programs
  - design and construction of hot cell equipment and tooling
  - component testing on a manipulator test stand
- Procurement of Hot Cell equipment. This includes
  - establishing tender specification for the hot cell parts
  - follow-up of the procurement processes, in particular monitoring the quality assurance
  - preparation and execution of the acceptance tests at the provider site (FAT) as well as on-site at FAIR (SAT)
- Installation and commissioning activities. This includes in particular
  - compiling assembly units during the pre-assembly phase
  - coordinating the installation in the Hot Cell complex
  - testing of remote handling sequences on components
  - coordinating logistic activities and intermediate storage of components
- Contact person to FAIR Site & Building (FSB) and coordination of hot cell civil construction activities (integration of built-in parts into the construction shell)
- Contact person to GSI Radiation Safety Department and supporting the establishment of hot cell approval documents

Skills and Abilities

The successful candidate should have:

- Technical Diploma or Bachelor in engineering (nuclear technology, mechatronics, physical technique/physical plant construction or comparable field)
- Experiences in the operation of hot cells or comparable facilities
- Excellent skills of RH workflows in hot cells or comparable facilities
- Experiences in applying/programming software tools to simulate RH workflows
- Experience in the handling of RH tool (e.g. manipulators)
- Structured way of working; good team skills as well as ability of independently working
- Fluent English; good knowledge of German would be an advantage

The candidate should possibly have experience on/with:

- Follow-up of procurement process and execution of acceptance tests
- Establishing of approval documents in the frame of nuclear facilities
- CAD programs
- MS-Office tools

The position starts preferably on 01.11.2021 and is limited to 4 years. Salary is equivalent to that for public employees as specified in the collective agreement for public employees (TVöD Bund).

GSI supports the vocational development of women. Therefore, women are especially encouraged to apply for the position.

Handicapped persons will be preferentially considered when equally qualified.

Further information about FAIR and GSI is available at www.gsi.de and www.fair-center.eu.

If you find this position interesting and challenging and would like to work in an exceptional, international, strongly technical environment, please send your full application documents with information of your earliest possible starting date and the **reference number (21.78 – 6520)** by **03.09.2021 at the latest**

by email to: bewerbung@gsi.de

GSI Helmholtzzentrum für Schwerionenforschung GmbH
Abteilung Personal
Planckstrasse 1
64291 Darmstadt
Germany