
GSI Helmholtzzentrum für Schwerionenforschung in Darmstadt operates one of the leading particle accelerators for science. In the next few years, the new FAIR (Facility for Antiproton and Ion Research) 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 or Physicist (all genders)
in the domain of beam instrumentation
Reference No. 21.66 - 6520**

The Super Fragment Separator (Super-FRS) is a forefront machine of FAIR, with unique components having challenging technological functionalities. A large variety of beam instrumentation is applied to produce and separate exotic nuclei beams in-flight at relativistic energies. This includes (a) standard detector systems like profile and intensity monitors, (b) detector systems to provide particle identification like tracking detectors, time-of-flight systems and energy-loss monitors, as well as (c) special beam instrumentation like collimators/slit systems, energy degrader systems, beam stopper, and several other more. Few of these systems are developed in-house but the majority is developed and produced together with industrial partners or in collaboration with various FAIR Member States.

Your tasks:

- Supporting the follow-up of procurement processes in industry, at in-kind partners and of in-house groups
- Preparation and execution of the acceptance tests at the provider site (FAT) as well as on-site at FAIR (SAT). This includes in particular:
 - service and operation of all technical components and supplies of the beam instrumentation/detector systems during FAT/SAT
 - verification of the accomplishment of the component specification
 - monitoring the quality assurance and management of Non-Conformity Reports
 - preparation and participation of beam tests to verify the fulfilment of component specification (at GSI as well as at other laboratories world-wide)
- Participation in the Pre-assembly and Installation activities. This includes in particular
 - compiling assembly units during the pre-assembly phase
 - installation of the assembly units into the Super-FRS beam tunnel
 - coordinating logistic activities and intermediate storage of components and assembly units
- Commissioning of beam instrumentation systems after the installation into Super-FRS tunnel
- It is expected that the candidate supports the Work-Package-Leader (WPL) in organisational issues as well as in the project reporting regarding the concerned work packages

Skills and Abilities:

The successful candidate should:

- hold a degree (University Diploma or Master) in engineering (mechanical engineering, electronics or electro-technique engineering, physical technique or comparable field of study) or in physics
- have excellent skills and experiences in the domain of beam instrumentation and/or detector technologies
- have very good knowledge of beam instrumentation associated interfaces thus like front-end electronics and detector slow-control (EPICS or equivalent software environment)
- have experience with CAD programs like CATIA V5, Inventor or AutoCAD
- have experiences in follow-up of procurement process/project management with emphasize on the execution of acceptance tests
- be fluent in English; basic knowledge of German would be an advantage
- have a structured way of working, good team skills as well as ability of working independently

The candidate should possibly have experience on/with:

- computation skills (e.g. JAVA or equivalent object-oriented programming knowledge)
- working in Unix and Windows environments
- MS-Office tools
- operation of (in-flight) separators / magnetic spectrometers / particle accelerators

We offer:

The position starts on 01.01.2022 (possibly earlier) and is limited for 4 years. Salary is equivalent to that for public employees as specified in the collective agreement for public employees (TVöD Bund), effective at GSI.

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 (21.66 – 6520)** by **08.07.2021 at the latest**

by email to: bewerbung@gsi.de

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