

The GSI Helmholtz Centre for Heavy Ion Research (Helmholtzzentrum für Schwerionenforschung), a member of the Helmholtz Association of German Research Centres, is one of the largest investigation centres in Germany. The laboratory consists of a system of heavy-ion accelerators, storage rings, separators, as well as high-energy lasers.

The upcoming **F**acility for **A**ntiproton and **I**on **R**esearch (FAIR), one of the world's largest research projects, will extend the existing accelerator complex and widen enormously the research area of the laboratory. FAIR is being built in the frame of international cooperation.

GSI and FAIR offer the opportunity to work together in an international environment with a team of employees committed to ensuring forefront science.

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

Engineer (m/f/d)

in the domain of physical technique, electro techniques, electronics, or comparable field of studies, to work on the development, installation, commissioning, and operation of the Super-FRS detector systems.

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The Super Fragment Separator (Super-FRS) is a forefront machine of FAIR, with unique components having challenging technological functionalities. A multiplicity of particle detector systems will be employed in order to fulfil the various operation requirements of Super-FRS. This include particle identification of fragment beams (tracking, time-of-flight, energy loss) as well as beam-profile and beam-intensity measurements for tuning and calibration purposes of the separator. Some of the detector systems will be developed in collaboration with FAIR Member States (in particular institutes from Finland, Russia, and Sweden).

Your responsibilities:

- Development and construction of various detector systems for Super-FRS
- Follow-up of procurement processes together with in-kind partners; this includes:
 - follow-up of project milestones
 - quality assurance during production
 - participation during acceptance tests
 - preparation and participation of test beam times to characterize detector systems (at GSI as well as at other laboratories world-wide)
- Pre-assembly and installation of detector systems at the Super-FRS
- Commissioning of detector systems
- operate and maintain the detector systems during the FAIR operation phase
- optimize the detector system / adapt them to experimental needs and perform further detector developments during FAIR operation phase

It is intended that the candidate act as a deputy of the Work Package Leader of the Work Package Super-FRS Beam Diagnostics (WBS 2.4.6). Hence, it is expected that the candidate support the WPL in all organisational issues as well as in the project reporting.



Your qualifications:

- Technical Diploma or Bachelor in physical technique, electro-technique, electronics or comparable
- Excellent skills and experiences in the domain of detector technologies
- Very good knowledge of associated front-end electronics as well as detector slow-control
- Very good computation skills (e.g. C, C++ or equivalent scientific programming knowledge and experience to work in Unix and Windows environments)
- Fluent English; basic knowledge of German would be an advantage
- Structured way of working. Good team skills as well as ability of independently working.
- Data Acquisition and Data Analysis (Root knowledge)
- Operation of accelerator machines (preferable in-flight separators)
- MS-Office tools (preferable also Microsoft Project).
- Follow-up of procurement process and execution of acceptance tests

The position is open-ended. 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 **Posting ID** above by **06.09.2019** to the following address:

GSI Helmholtzzentrum für Schwerionenforschung GmbH

ABTEILUNG PERSONAL

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or by email to: bewerbung@gsi.de