



GSI Helmholtzzentrum für Schwerionenforschung GmbH

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Stellenangebote

FPGA and C/C++ Developer for Scientific Data Acquisition (DAQ) - (all genders)

GSI Helmholtzzentrum für Schwerionenforschung in Darmstadt operates one of the leading particle accelerators for science. Currently, 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 in this international environment with a team of employees committed to ensuring each day to conduct world-class science.

The Experiment Electronics department supports science experiments and projects at GSI/FAIR in all electronics-related tasks. Our strength is detector readout, data acquisition, data analysis, and the monitoring and control of single detectors, and complex large scale detector systems. We support scientists (all genders) in planning, implementation, and application of novel technologies, including those that go beyond state-of-the-art systems.

The department Experiment-Electronics (EEL) is looking to hire as soon as possible a motivated

FPGA and C/C++ Developer for Scientific Data Acquisition (DAQ) (all genders)

Posting ID: 26.121-6220

The successful applicant (all genders) will join the group Experiment Data Processing of the EEL department and will program different front-end electronics modules, e.g., TDCs or ADCs. Such modules are applied for the data acquisition of various existing and future experiments at GSI and FAIR.

Your tasks:

- adaption and support of the proprietary DAQ frameworks MBS and DABC
- development and continuous improvement, and documentation of FPGA firmware
- testing and quality assessment of data acquisition installations
- system debugging and fixing of errors
- user support for experiments during commissioning and operation of DAQ systems.

Your profile:

- university degree (PHD or master) in physics, electrical engineering, information technology or related subjects
- experience with data acquisition systems for nuclear and particle physics
- advanced knowledge of FPGA development (VHDL/Verilog) and hardware-oriented programming (C/C++)
- confident handling of FPGA simulation and in-system debugging tools
- experience with software IDEs and repositories (git)
- experience with electronics design and PCB-layout is advantageous
- experience with communication architecture (physical to TCP/UDP) is advantageous
- familiar with the Linux operating system
- fluent German and English (written and verbal)
- good communication skills, willingness to provide consulting and support
- ability to work effectively in a team.

We offer a unique opportunity to work in an exciting and highly-stimulating environment within the framework of world-leading scientific topics.

The duration of the contract is unlimited.

The salary is based on 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 are interested in working in an exceptional international, highly technical environment, please send your complete application documents and details of your earliest possible starting date, quoting the **Posting-ID 26.121-6220** by **04.09.2026 at the latest** via our online portal:

[☞ Online-Bewerbungsportal](#)

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Datenschutzerklärung

Sie finden die Datenschutzhinweise zu Bewerbungsverfahren hier:

[☞ www.gsi.de/datenschutzhinweise](http://www.gsi.de/datenschutzhinweise)