

Engineer
at the **Extreme Light Infrastructure – Nuclear Physics (ELI-NP)**
Research Activity 2 - High-Brilliance Gamma Beam
Control System

Job Description and Candidate's Profile

Scope of Work

The successful candidate will become a member of the operation, maintenance and development team of the High-Brilliance Gamma Beam System (GBS) and he will collaborate with the other technical teams of ELI-NP.

During the implementation phase of the GBS, the successful candidate will be involved in the commissioning and testing of the GBS control system.

During the operation phase the successful candidate will be in charge of the proper operation, maintenance and development of the GBS control system.

Main responsibilities:

In the implementation phase:

- The engineers will gather the knowledge and experience necessary to ensure the operation of the infrastructure and of the related equipment. In this context, they will benefit from training provided by the suppliers of the equipment regarding the assembling, testing and commissioning of the equipment. Therefore, the candidates will have to be available to travel and work abroad for a determined period of time;
- Ensuring the best and efficient collaboration and dialogue between the research staff and the suppliers of the respective equipment and various services;
- Ensuring the conformity of the activities with the standards in the field.

In the operational phase:

- Maintaining the performances of the ELI-NP equipment and systems to the desired level;
- Actively participating in the technological development activities performed at ELI-NP;
- Providing the technical support for the experiments.

Main tasks during implementation phase:

- Designing the interface between Building Management System (BMS) and the GBS control system totally compliant with Safety Rules for GBS.
- Providing technical support for scientific and engineering activities during the implementation of experimental setups that use *High-Brilliance Gamma Beams*;
- Participation to the installation of all equipment in the experimental areas according to the designed control system interface;
- Follow-up and documentation of activities during the installation, commissioning, maintenance, etc. is an important task of the candidate; producing technical specifications, drawings and costs estimates; writing and/or reviewing installation, maintenance, coordination procedures.
- Collaboration with other ELI-NP technical teams to meet the expected goals of the working team; this includes collection of information, reporting and coordination.

Main tasks during exploitation phase:

- Proper operation of the GBS control system and of the interface with BMS.
- Maintenance and operation of the designed interface between BMS and GBS control system.
- Contribute to the organization and scheduling of the preventive, predictive and corrective maintenance of the entire GBS control system, including the interface with BMS.
- Cooperate with other technical teams at ELI-NP to meet the expected goals of the working team; this includes collection of information, reporting and coordination.

Professional background:

- Bachelor or Master Degree in Engineering in Computer Science/Automation/Electronics or related field.
- Experience in control system technologies and applications; proven record of projects related to production of technical specifications for control systems in industrial plants and/or research institutions; proven experience in control systems for electron or heavy ion RF accelerators based on EPICS is desirable.
- Operation and maintenance experience, preferably in similar positions in industrial plants and/or research institutions.
- Experience in at least one Object Oriented language (C++, Java, Python);
- Relevant experience in at least two of the following:
 - User interface development;
 - SQL programming;
 - LabView Programming;
 - Linux Operating System;
 - Source Code Control;
 - MatLab Programming;
- Hands-on experience with hardware is essential;
- Self-motivation to develop the qualification and skills in the field of control systems;
- Fluency in English, communication and interpersonal skills are a prerequisite;
- Availability to travel and perform work stages abroad.

Working arrangements/Conditions of employment:

- Full-time position, based in Bucharest–Magurele, Romania.
- Included: private medical coverage, paid annual leave;
- Motivating salary, at European level, based on qualifications and experience
- Professional, multicultural and interdisciplinary work environment.

Applications:

Applications shall be accompanied by the documents requested in the Rules of Selection for this position;

Applications shall be sent to the Human Resources Department at human.resources@eli-np.ro