Engineer/Physicist

at the **Extreme Light Infrastructure – Nuclear Physics (ELI-NP)**

Research Activity 2 - High-Brilliance Gamma Beam

Laser and Optical Systems

Job Description and Candidate's Profile

Scope of Work:

During the implementation phase the successful candidate will participate in all activities of factory testing, installation and commissioning of the High-Brilliance Gamma Beam System (GBS) components: photo-gun laser (PGL), interaction point lasers (IPL), laser beam transport lines (LBTL) and laser beam circulators (LBC). He will participate in all training activities provided by the GBS supplier related to the above-mentioned components.

During the operation phase the successful candidate will ensure the smooth operation of the GBS components and will play an active role in their further developments and upgrades.

Main responsibilities:

In the implementation phase:

- The engineers/physicists 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:

- Acquiring the knowledge and experience necessary to ensure the proper operation of the lasers systems, and their components and devices;
- Participating at all the stages of installation, tests, and start-up of the lasers systems, and their components and devices;
- Documenting and reporting the work done on the lasers systems during all stages of the installation, tests, and start-up of the systems;
- Using the test and measurement equipment to verify the laser systems components and devices performance and integrity;
- Measuring, tuning, testing and repairing the laser systems components;
- Setting-up, operating, calibrating and maintenancing the laser systems for GBS, their components and devices;
- Maintaining the documentation records for assembly, repair, testing of the laser systems components and devices;
- Contributing to planning the tests, upgrades, purchasing, assembly of the new equipment and devices;

- Ensuring the compliance of the operations with environmental, safety, health and quality program requirements;
- Participating to tests of the systems components and devices at supplier premises;
- The successful candidate will have the opportunity to benefit from training in system operation provided by the supplier of the laser systems or by laser specialists from the general contractor;
- During the operational phase the laser systems engineer/physicist will support the laser systems and circulators group in optimization and maintenance of the laser systems of GBS. He/she will interact with the staff and facility users to ensure optimal operation of the laser system according to requirements, and to minimize the downtimes;

Professional background:

- Bachelor or Master Degree in Physics/Engineering /Automation/Electronics or related fields;
- Proven experience in working with lasers, optical equipment and devices;
- Knowledge of test and measurement techniques in the field of the laser systems;
- Experience in assembly, troubleshooting, repair, calibration, testing the laser systems components and devices is desirable;
- Experience in developing and using control systems for lasers is desirable;
- Self-motivation to develop the qualification and skills in the field of the laser 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 .