

Electronics Engineer
at Extreme Light Infrastructure –Nuclear Physics (ELI-NP) Research Facility,
Research Activity 1 – High-Power Laser Systems

Position Description and Candidate's Profile

Scope of Work

The Electronics Engineer will work in the “High-Power Laser Systems” team (Research Activity 1 team, <http://www.eli-np.ro/research-activities-ra1.php>) and will collaborate with the rest of the ELI-NP technical and experimental teams.

During the implementation phase, the Electronics engineer will participate in the activities of monitoring the installation and commissioning the HPLS* and LBTS**. The Electronics engineer will also gradually participate in the integration of the systems with their environment. This second activity will require his/her electronics skills on dedicated technical projects.

During the operation phase, the Electronics engineer will ensure the smooth operation of the HPLS and LBTS and will continuously work on upgrades of the systems.

* *HPLS: High-Power Laser System delivered by Thales*

** *LBTS: Laser Beam Transport System*

Main responsibilities

In the implementation phase, the Electronics Engineer will:

- Gather the knowledge and experience necessary to ensure the operation of the HPLS and LBTS and of the related equipment. In this context, he/she will benefit from training provided by the suppliers of the equipment regarding the assembling, testing and commissioning of the equipment.
- Ensure the best and efficient collaboration and dialogue between the RA1 team and the suppliers of the respective equipment and various services.
- Participate (leading position depending on experience) in the electronics projects conducted in RA1 that are related to the integration of the laser systems in the ELI-NP facility.

In the operational phase, the Electronics Engineer will:

- Provide technical support for the operation and maintenance of the HPLS and LBTS.
- Provide technical support for the ELI-NP experimental teams.
- Participate in electronics projects, parts of the upgrades of the systems

Main tasks

- Gather and write structured documentation concerning the HPLS and LBTS electronics and electrical systems, in particular the synchronization system of the HPLS.
- Participate in the activities ensuring technical support for the installation and commissioning of the HPLS and LBTS, on the main subject of electronics sub-systems.
- Actively participate in the different phases – definition of needs/requirements, design, writing of specifications, implementation, validation and installation– of electronics project conducted in RA1: e.g. implementation of electronic safety related systems, and synchronization between the HPLS and the Gamma Beam System (GBS).
- Promote a harmonious collaboration framework.

Competencies and experience

- Bachelor's or Master's degree in Electronics or related field
- Relevant experience in Electronics projects: projects including control engineering, and electronic circuit design.
- Technical competence in several of the following subjects: synchronization signals, clocks, analogue electronics, control loops, microcontrollers, PLC, high voltage pulsed power supplies, electronic signal processing.
- Being able to set priorities and plan tasks with results in mind
- Adapting quickly and resourcefully to shifting priorities and requirements.
- Fluency in English;
- Proven teamwork experience and efficient communication and collaboration skills

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.