

IT 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 IT 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 teams.

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

During the operation phase, the IT 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 IT 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 IT projects conducted in RA1 that are related to the integration of the laser systems in the ELI-NP facility.

In the operational phase, the IT 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 IT projects, parts of the upgrades of the systems

Main tasks

- Gather and build a structured documentation concerning the HPLS and LBTS networks and associated components (rack-mounted computers, switches, UPS, etc.).
- Participate in the activities ensuring technical support for the installation and commissioning of the HPLS, with a special care on the HPLS and LBTS control system networks and interfaces to the facility.
- Continue or initiate the development of specific IT projects such as:
 - Design and implementation of a video network, based on PoE CCD cameras, for laser diagnostics.

- Integration of the HPLS and LBTS networks with the ELI-NP network in collaboration with the ELI-NP IT department
- Design of the Laser control room IT infrastructure
- Promote a harmonious collaboration framework.

Competencies and experience

- Bachelor's or Master's degree in Computer Sciences or related field
- Relevant experience in one of the two topics:
 - Network design: layer 2 network equipment setup (secured switches, passwords setup, parameters setup), VLAN, switching and structured cabling standards.
 - Operation and maintenance of server hardware systems (e.g. Data acquisition center)
- Knowledge of standard communication protocols for connecting various hardware components such as Ethernet, GPIB, RS232/485, GigE Vision, etc.
- 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
- Previous experience in plant operation and maintenance environment is a plus.

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
- The opportunity for a professional development in the IT field, with state-of-the-art IT infrastructure and on-going technical projects.

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.