The Extreme Light Infrastructure ERIC (ELI ERIC) is the world's largest and most advanced high-power laser research infrastructure. As an international user facility dedicated to multi-disciplinary science, ELI provides access to world-class high-power, high-repetition-rate laser systems and enables cutting-edge research, as well as breakthrough technological innovations. The ELI ERIC operates as a single multi-site organization with two complementary facilities specialized in different fields of research with extreme light: ELI Beamlines in Dolní Břežany (Czech Republic) and ELI ALPS in Szeged (Hungary).

ELI Beamlines Facility operates four cutting-edge high-power femtosecond laser systems reaching unprecedented intensities. The operational laser systems make unique femtosecond sources of X-rays and accelerated particles available to scientific users for pioneering research in physical, chemical, materials, life and medical sciences as well as physics of dense plasmas, warm dense matter, and laboratory astrophysics. The ELI Beamlines Facility employs over 350 researchers, engineers and other professionals from more than 38 countries.

Applications are now being accepted for a new position in the Laser Systems Department:

Postdoctoral Fellow - Allegra laser system (4)

Job description:

The successful candidate will work closely with the scientific team on the upgrade and development of state-of-the-art laser systems, in particular the Allegra laser (read more here). This work position provides an excellent opportunity for the involvement in the new research areas, applying for research grants/projects based on the large laser facility infrastructure, and professional development opportunity and career growth within the organization.

The essential duties:

- conduct research in high-energy laser amplifiers development, beam combining and optical synchronization
- actively participate in the development of high-energy laser beam diagnostics, laser system performance optimization and automation
- perform calculations and modelling of system performance for newly developed ultra-short pulse amplification beamlines
- present research results in scientific journals and conferences
- actively participate in the development of laser components and specify their required parameters
- mentor students and other junior researchers if necessary

Requirements:

- recent PhD in Laser Physics or related field
- ability to conduct research independently and as a member of a team
- pro-active, team-oriented person with good communication skills
- working knowledge of English, verbal and written
- experience with custom laser applications or optical engineering
- basic understanding of data acquisition and control systems architectures
- knowledge of Matlab, ZEMAX, LabView or other programming skills

We offer:

- the opportunity to participate in this unique scientific project
- career growth, professional education
- competitive and motivating salary
- flexible working hours
- nice and friendly working environment
- meal allowance and canteen
- support of leisure time activities
- 5 weeks of holidays and 6 days of personal leave
- other employee benefits

Applications, containing CV, cover letter, contacts of references, and any other material the candidate considers relevant, should be sent to Mrs. Jana Ženíšková, HR Senior Specialist (jana.zeniskova@eli-beams.eu). Please include the following text in your cover letter, to allow us to process your personal details:

Information on the processing of personal data can be found on https://www.eli-beams.eu/informace-o-zpracovani-vasich-osobnich-udaju-gdpr/. We are an equal opportunity employer.