



ELI-Beamlines will be the high-energy, repetition-rate laser pillar of the pan-European ELI (Extreme Light Infrastructure) project. It will be an international facility for both academic and applied research, slated to provide user capability. The main objective of the ELI-Beamlines Project is delivery of ultra-short high-energy laser pulses for the generation and applications of high-brightness short pulse X-ray sources and accelerated particles. The laser systems will be delivering pulses with pulse durations ranging from 10 to 150 fs and will provide high-energy Petawatt and 10-PW peak powers.

Leader of Research Programme 1

Lasers generating rep-rate ultrashort pulses & multi-petawatt peak powers

The suitable candidate will be responsible for the delivery of all primary laser systems and their integration into the ELI Beamlines facility. This will include responsibility for the following key activities:

1. Supervision of design, development, procurement, testing and implementation of the laser systems of the ELI-Beamlines facility.
2. Coordination of laser research and development teams, design engineering and technology teams.
3. Coordination of interfacing between the laser research and development team and the building designers.
4. Cooperation and coordination of the development of the laser systems and the support technologies with the teams responsible for the research programmes 2-6 and potential facility users.
5. Preparation and coordination of technical specifications for procurement of laser technology.
6. Responsibility for close cooperation, in the field of laser development, with other European research centres and commercial subjects.
7. Working closely with a team of laser scientists, optical and mechanical engineers, and control system engineers.
8. Independent scientific research and publishing, participating in conferences.
9. Implementation of the laser related projects with respect to deadlines, staff, and technologies used.
10. Management of the laser research team.

The candidates are expected to comply with the following requirements:

1. PhD in the field of laser physics. PhD in the field of high repetition-rate and/or ultrashort pulses and/or multi-petawatt peak powers would be of particular asset (the fields being in line with the ELI Whitebook).
2. Minimum of 5 years independent scientific research in the field of lasers generating repetition-rate ultrashort pulses and multi-petawatt peak powers with an excellent record of publications in this field and an outstanding reputation among the scientific community.
3. Substantial experience of at least 5 years with development, installation and operation of kilojoule laser systems.

4. Substantial experience of at least 5 years with development, installation and operation of CPA femtosecond-class laser systems.
5. Strong technical writing and communication skills.
6. Excellent interpersonal skills and communication abilities and at least 5 years' experience of managing an experimental research group.
7. Substantial working experience at large-scale laser facilities and experience with their operation.
8. Proven strategic planning ability.
9. Team player, flexible with "can do" attitude.
10. Excellent knowledge of English.

Applicants should provide their CV and cover letter (in English) along with a complete list of publications. They should single out 5 most important publications with the description of their contribution.

Applicant's professional profile and experience should demonstrate their ability to scientifically lead Research Programme 1 in accordance with the ELI Whitebook.

Knowledge of at least one additional European language is a bonus.

We Offer:

1. Unique opportunity of professional development within a large pan-European research project.
2. Motivating salary package.
3. Pleasant working environment.

Location

ELI Beamlines, Institute of Physics AS CR, Prague, Czech Republic.

Duration

2-3 years renewable, possibility of extension

Application process

Applications should be sent to Mrs Mirka Svobodova (Mirka.Svobodova@eli-beams.eu +420733690901). Please provide two letters of recommendation specifying in detail the candidate's contribution to the relevant area. Please include the following text in your cover letter, to allow us to process your personal details:

I agree that, according to the decree 101/2000 coll. (Czech Republic), my personal details sent to FZU AV CR, v.v.i. , Na Slovance 2, 18221 Praha 8, Czech Republic can be used for the purpose of obtaining employment and management of database of employment candidates. This permission is given for the period of one year and can be at any time withdrawn by giving a notice in writing.

The deadline for applications is open. Candidates will be reviewed and given initial feedback within about a month and for those that pass initial review reference letters will be sought. Relevant candidates will be invited to interview by phone or videoconference, and final interviews will be held in person.