

The ELI (Extreme Light Infrastructure) Project is an integral part of the European Union plan to build the next generation of large research facilities. ELI-Beamlines as a cutting edge laser facility is currently being constructed in Prague, Czech Republic; its commissioning is scheduled for end of 2015. ELI-beamlines will be delivering ultrashort, ultraintense laser pulses lasting typically a few femtoseconds (10-20 fs) with some laser systems reaching peak power up

to 10 PW. It will make available time synchronized laser beams over wide range intensities for wide range of interdisciplinary applications in physics, medicine, biology, material science etc. The high laser electric field intensities of the laser pulse will be also used for generating secondary sources of e- and p+.

More details about this exciting project can be found on **www.eli-beams.eu** 

For development of the control system for this facility based on EPICS (Experimental Physics Control System) we invite applications for a new group member

# Control systems Software engineer (REF:ELI-T-CS02 EPICS)

The suitable candidate will take a key role in the control systems group responsible for design, development and implementation of the facility's central control system based around EPICS controlling and collecting data from a wide range of hardware.

The work will also involve analysis and design of SW components for the facility's central control system. Particular SW components will be based on Linux or UNIX-based operating systems accompanied by control system SW package -- EPICS.

The EPICS software is community developed and it is widely used at the leading research facilities around the world. The EPICS offers resources for both SW components integration and central SW system design, but the best fitting solution needs in-house SW extensions. Further in house SW solutions are necessary to develop high-level components of the central control system. The candidate will have many opportunities to work on interesting and innovative state-of-the-art control systems to support development of word-class ultraintense laser systems.

The work will also involve close cooperation with other research facilities in developing the EPICS platform. The specific training for the EPICS will be provided at other research facilities in Europe and therefore candidate should be able to travel abroad.

Work will also consist of writing technical specifications. The candidate will take active part in an effort towards a standardization of the facility's control philosophy, software and hardware.

### **Qualification required:**

University degree with a focus on one or more of the following disciplines: computer science, embedded software engineering, electrical engineering applied physics or mathematics.

#### **Requirements:**

- Very good C/C++ programming skills with proven at least 3 years' experience on software development projects
- ▲ Solid, methodical software engineering skills
- Knowledge of Linux/UNIX based platforms for SW development
- ▲ Experience with control software development
- ▲ Good working knowledge of the English (both written and verbal)
- A Strong team player and good interpersonal skills

- ▲ The following knowledge and experience would be also desirable:
  - Previous experience with EPICS
  - Experience with controls or embedded systems
  - Experience with Java programming platform
  - Knowledge of networking technologies and protocols
  - Experience working in an large scale research or industrial facility setting

#### Location

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

#### Duration

2-3 years, possibility of extension

## **Application process**

Applications should be sent to Mrs Mirka Svobodova (<u>Mirka.Svobodova@eli-beams.eu</u>, tel:+420733690901). Please provide your curriculum vitae and cover letter (in English), as well as the names and contact details (e-mail address and phone number) of two references. Please include the following text in your cover letter, to allow us to process your personal details:

A 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.