



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 Applied Scientist - (REF:ELI-T-CS01 EPICS)

The suitable candidate will take a leading 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 implementation of local control systems that may be based on PLCs or PXIe cards, embedded PCs or other hardware and ensuring their interfacing into the EPICS system. The EPICS system is community developed and is widely used at the leading research facilities around the world. The work will therefore involve close cooperation with other research facilities in developing the EPICS platform. Work will also consist of writing technical specifications, performing market surveys and price enquiries to find appropriate suppliers. The candidate will take active part in an effort towards a standardization of the facility's control philosophy, software and hardware. The specific training for the EPICS will be provided at other research facilities in Europe and therefore candidate should be able to travel abroad.

Qualification required

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

Requirements:

- Proven experience in analysing, designing and commissioning instrumentation and control systems (e.g. motion control centres, fast data acquisition, cooling systems controls, vacuum system controls, fast trigger timing systems ...);
- Good understanding of both slow and fast controls role in an experimental physics facility
- Knowledge of control hardware and software programming
- Demonstrated ability to work with minimal supervision on projects requiring integration of multiple technical and scientific disciplines;
- Previous experience in configuration, programming and use of Supervisory Control And Data Acquisition (SCADA) type systems.
- Excellent organizational skills;
- Good working knowledge of the English, and knowledge of other languages would be beneficial.
- The following knowledge and experience would be also desirable:
 - Experience working in an large scale research or industrial facility setting
 - Previous experience with EPICS
 - Good knowledge of LINUX or UNIX as software development platform
 - Experience in C/C++, Java or LabView programming ;
 - Experience in PLC programming, control software development;
 - Experience of working in an international environment

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 (Mirka.Svobodova@eli-beams.eu, 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.