

The ELI (Extreme Light Infrastructure) Project is an integral part of the European 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. The ELI Beamlines facility will house lasers with the highest intensity ever achieved. The laser beam will be focused on different gas or solid targets to accelerate particles such as protons or electrons to study lot of physical phenomena and to demonstrate their applicability in various fields.

One of the key points concerns the cryogenic targets in a double layer geometry consisting of a metal foil and a layer of solid hydrogen or Deuterium. In our team we are looking for a suitable candidate for a position:

EXPERT FOR CRYOGENIC SYSTEMS

Scope of work:

The junior researcher or post-doc will be in charge of the design of the cryostat, including mechanical and thermal aspects. This cryostat includes

- a cold source which has yet to be defined (liquid Helium source or cryogenic refrigerator based on Gifford-McMahon thermodynamic cycle),
- a cooling system for the metal foil which supports the hydrogen or Deuterium solid layer,
- a condensation system which allows directly the solidification from the gaseous state,
- a control system and a data acquisition system.

Requirements:

- PhD in physics,
- knowledge of hydraulics, thermal transfer and vacuum technology,
- CAD experience will be beneficial,
- interest in experimental aspects and engineering systems is a must,
- willingness to travel and to spend a part of the time working abroad,
- fluency in English required.

We offer:

- The opportunity to participate in this unique scientific project
- Career growth, professional education
- Competitive and motivating salary
- 5 weeks of holidays and other employee benefits
- Pleasant work environment

Applications should be sent to Mrs. Mirka Svobodová, HR Project Manager (mirka.svobodova@eli-beams.eu, +420 733 690 901 +420 266 052 547). 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.