

ELI Beamlines research centre in Dolní Břežany is part of pan-European infrastructure ELI (Extreme Light Infrastructure) representing a unique tool of support of scientific excellence in Europe by making available its capacities to the best scientific teams across the world. The aim of ELI Beamlines is to establish the most intensive laser system in the world and to operate it on a long-term basis. Due to ultra-high performances of 10 PW (1 petawatt = 1,000,000,000,000,000 watts) and concentrated intensities of up to 10^{24} W/cm², we can offer our users a unique source of radiation and beams of accelerated particles. The so-called beamlines will enable ground-breaking research in the area of physics and science dealing with materials, but also in biomedicine and laboratory astrophysics and many other fields. ELI Beamlines is part of the Institute of Physics of the Czech Academy of Sciences, and it was open in 2015.

The Institute of Physics of the Czech Academy of Sciences is a holder of the HR Excellence in Research Award. It is awarded by the European Commission to institutions which put significant effort into improving their human resources strategy and ensuring professional and ethical working conditions.

The ELIMAIA (ELI Multidisciplinary Application of laser-Ion Acceleration) user beamline has been recently installed by the Research Programme 3 (Particle Acceleration) team, along with its key system ELIMED (ELI MEDical Applications) for ion beam transport and dosimetry. The mission of ELIMAIA is to provide stable and well-characterized beams of ions for users interested in exploring a wide range of applications.

For this purpose we are seeking a suitable candidate able to work in a R&D project as:

Applied Physicist

Main responsibilities include:

- operation of the ion beam transport and dosimetry line (ELIMED) in preparation of commissioning experiments and later on user experiments
- operation of dosimetry detectors (passive and active), including data acquisition and analysis, as well as comparison with numerical simulations results (ion beam transport, FEA and MC GEANT4 codes)
- cooperation with RP3 researchers for design and development of ion beam transport line devices (upgrades)
- installations and maintenance of various technologies in the experimental hall dedicated to ion acceleration, including technical

support and coordination activities with ELI technicians and ELI safety team, as well as cooperation with the Monte Carlo group.

- preparation of user samples for their irradiation in a dedicated end-station (part of ELIMED)
- general user support during experiments with ELIMED

Required skills:

- PhD in physics or physical-engineering or equivalent research experience (at least 3 years after master degree), candidates with MSc in physics or physical-engineering with extensive experience are also encouraged to apply
- Basic knowledge of FEA, FEM, Monte Carlo codes is a plus
- fluency in English (both oral and written)
- good communication skills
- working experience obtained in research, scientific, or academic institution is an advantage

We offer:

- the opportunity to participate in this unique scientific project
- competitive and motivating salary
- flexible working hours
- nice working environment
- career growth
- lunch vouchers, pension contribution and 5 sick days
- support of leisure time activities

Applications, containing CV, cover letter, contacts of references, and any other material the candidate considers relevant, should be sent to Mrs. Jana Ženíšková, HR specialist (jana.zeniskova@eli-beams.eu, +420 - 601560322).

Information regarding the personal data processing and access to the personal data at the Institute of Physics of the Czech Academy of Sciences can be found on: <https://www.fzu.cz/en/processing-of-personal-data>