

ELI-HU Research and Development Non-Profit Limited Liability Company is announcing

12 job openings in Young Scientist and Research Fellow positions

The Hungarian ELI: the Attosecond Light Pulse Source (ALPS)

The first civilian large-scale research facility based on high-power lasers, the Extreme Light Infrastructure (ELI), is to be constructed with international cooperation at three locations with a coordinated management and research strategy. The Attosecond Light Pulse Source (ALPS) research centre to be built in Szeged, Hungary will be devoted to study of electron dynamics on the femto-, attosecond scale in atoms, molecules, plasmas and biological samples. Experimental projects demanding ultrahigh intensity light, like laser particle acceleration or laser generated X-ray radiation will be mainly carried out at the Beamline Facility in Prague, while the photoinduced nuclear experiments will be performed at the research institute to be built in Magurele, next to Bucharest.

The primary mission of the ELI-ALPS research facility to be built in Szeged is to make a wide range of ultrafast light sources accessible to the user groups of the international scientific community, with special consideration to coherent extreme-ultraviolet (XUV) and X-ray radiations, and to attosecond pulses. The secondary mission of the facility is to contribute to the scientific and technological development necessary for the generation of 200 PW peak intensity pulses.

ELI-HU Non-Profit Research and Development Ltd. coordinates the preparation, construction and operation of ELI-ALPS, an international laser research center.

The selected candidates will have to carry out scientific research in one of the listed projects during the first 6-12 months, followed by participation in the preparation of the ELI-ALPS project:

- **6 positions: To design, develop, implement, and operate amplified ultrashort pulse laser systems as well as to develop the corresponding diagnostics. Please visit the ELI-ALPS website for detailed information on the laser systems. For further information in scientific and research matters please contact the Research Technology Director, Karoly Osvay (karoly.osvay@eli-alps.hu).**
- **6 positions: To design, develop, and implement attosecond pulse sources based on the generation of high-order harmonics in different media as well as other coherent radiation sources. For further information in scientific and research matters, please contact the Scientific Director, Dimitris Charalambidis (Dimitris.Charalambidis@eli-alps.hu).**

Requirements for all applicants:

The candidate must have good written and verbal English communication skills. Previous experience in research related to lasers, ultrashort light pulses, light-matter interactions, THz science, particle physics and spectroscopic investigations are especially advantageous.

1. For young scientists:

- University students in their last year of an MSc Programme in relevant specialization field (physicist, engineering physicist, electrical engineer or chemist), assuming that they complete their studies by 31st January, 2014.
- PhD students working in relevant research fields;
- Young (less than 35 years old) scientists or engineers without PhD degree.

2. For research fellows:

- Scientists or engineers with PhD degree or submitted PhD thesis in relevant research field, or at least 10 years of research experience in a related research institute.

We offer:

- Competitive salary
- Challenging job with carrier opportunities
- Pleasant working environment in a brand new infrastructure

The employment contract may last for a definite period up to 36 months, or by the end of 2017. Prolongation of the contracts may be possible. Later promotion for a tenure track position may become also possible.

During the employment the young scientists or research fellow may have the opportunity to enroll to a PhD program and work for a PhD degree. The successful candidates may have a duty to do part of their research and development work outside Hungary at contracted collaborators and partners of ELI-HU Non-Profit Ltd., as part of their training and education to their specific task.

The application must contain:

- A Europass curriculum vitae or detailed scientific curriculum vitae
- Full list of publications – highlighted the list of articles published in refereed journals and containing the following data:
 - h-index
 - cumulative impact factor (calculated by summing of impact factors of journals characteristic for the year of publication each articles
 - number of citation without self-citation
- A motivation letter
- The name of two scientific supervisors or professors, who could give expert opinion about candidate's skills
- The candidate's postal address and other contact data (phone, fax, e-mail)

Schedule:

- Application deadline: continuous, but not later than 31 January, 2014.
- Foreseeable date of the interview for selected candidates: within 4-8 weeks of application submitted
- Earliest start of the employment: 1st December, 2013.

If you are interested in any position and meet the required criteria, please submit your application documents detailed above to **monika.barany@eli-alps.hu**.