



Director of Centre for Experimental Physics "eLBRUS" of the University of Szczecin, with the approval from the Rector of the University of Szczecin, announces opening of the position of Postdoc in the Research Group of Nuclear, Plasma and Medical Physics and in the Nuclear Physics Laboratory at the Centre for Experimental Physics "eLBRUS" of the University of Szczecin.

JOB OFFER

Position in the project:	Postdoc (Adjunct)
Laboratory:	Nuclear Physics Laboratory
Scientific discipline:	Physical sciences
Keywords:	Nuclear reactions at very low energies, ultra-high vacuum, accelerator techniques, surface physics
Job type (employment contract/stipend):	Employment contract
Part-time/full-time:	Full-time
Number of jobs offers:	1
Remuneration/stipend amount/month	~10 000 PLN gross
Position starts on:	01.02.2021
Maximum period of contract/stipend agreement:	40 months, permanent position possible
Institution:	Centre for Experimental Physics "eLBRUS", University of Szczecin
Project leader:	Prof. Konrad Czerski
Project title:	Clean Energy from Hydrogen-Metal Systems, CleanHME
Competition type;	Horizon 2020, FET Proactive, FETPROACT-EIC-05-2019
Financing institution:	European Commission

Project description:

The person chosen in this recruitment will be responsible for accelerator studies of nuclear reactions at extremely low energies and theoretical modelling of undergoing processes such as the enhanced electron screening effect. He will be closely cooperating with international participants of the CleanHME project, aiming to construct a new energy source based on nuclear fusion. The main goal of this research project is a combination of results achieved in accelerator experiments and with those observed in gas loading experiments in different hydrogen-metal systems.

Key responsibilities include:

- design and carrying out of accelerator experiments under ultra-high vacuum conditions at the lowest possible projectile energies, diagnostics of target samples using different surface physics methods, modelling of reaction mechanisms, extrapolating of reaction rates down to room temperature, detection of nuclear products in gas loading experiments
- active participation in lab meetings, scientific seminars and international conferences
- participation in the data preparation and writing of manuscripts

Profile of candidates/requirements:

The competition is open to persons who meet the conditions specified in: - Act of 20 July 2018 Law on higher education and science (Journal of Laws of 2020, item 85, as amended) and the Statutes of the University of Szczecin;

PhD degree in physics or related field.

The candidate should hold a PhD degree for no longer than 8 years before the date of signing an employment agreement in the project. The PhD degree should be obtained in a country of the EU, EFTA, OECD or nostrified on the date of employment at the latest.

- good knowledge of accelerator and ultra-high techniques, experience in one of the surface physics diagnostic techniques (e.g. Auger Electron Spectroscopy, NMR, Positron Annihilation Spectroscopy), computational methods of nuclear physics
 - very good knowledge of mechanism of nuclear reactions and atomic effects playing a role at low projectile energies
 - very good command of English
 - scientific achievements documented by publications in recognized journals
 - strong analytical and problem-solving skills as well as excellent communication skills
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Enquiries related to the position may be sent to: konrad.czerski@usz.edu.pl

Required documents:

1. Cover letter describing Candidate's motivation
2. Current curriculum vitae (CV) listing scientific publications, scholarships, prizes and awards, or other relevant documents demonstrating the excellence of Candidate
3. Copy of PhD certificate or a document confirming that the Candidate will obtain the PhD degree prior to the date of employment in the project
4. Information on the processing of personal data - the form is available at the University of Szczecin webpage: www.usz.edu.pl
5. Declaration confirming that the candidate has read and accepted the rules of conducting competitions, covered in the following documents:

We offer:

- an opportunity to participate in a multidisciplinary project dealing with a breakthrough technology
- stimulating, young and friendly work environment
- access to state-of-art equipment
- opportunity for interdisciplinary and international collaborations

Please submit the following documents to: konrad.czerski@usz.edu.pl, with "eLBRUS-3-2020" in the email title

Application deadline: 6.01.2021

Date of announcing the results: 15.01.2021

Method of notification about the results: e-mail
