JOB OFFER

Position in the project:	PhD student
Scientific discipline:	Physics
Job type (employment contract/stipend):	Stipend
Number of job offers:	2
Remuneration/stipend amount/month:	4 500 PLN/month
Position starts on:	01.04.2017
Maximum period of contract/stipend agreement:	3 years
Institution:	Jagiellonian University, Faculty of Physics, Astronomy and Applied Computer Science
Project leader:	Grzegorz Zuzel
Project title:	Radio-pure materials and technologies for science and society
Project description:	For physics frontier experiments, designed to investigate fundamental problems of the Standard Model like non-conservation of lepton number (through neutrino-less double beta decay) or existence of dark matter particles, the expected signals are very week. The detectors need to have large active masses and simultaneously the background rates, caused by natural radioactivity, must be pushed down to extremely low levels. Comprehensive research program on the background reduction techniques is therefore proposed. It will allow for better understanding of the origin of the most relevant isotopes, and for easier, faster and more confident selection of materials and procedures for applications with the highest radio-purity demands (single-atom level). Finally, the presented project will have crucial impact on future large-scale (ton-scale) experiments in the field of nuclear and astro-particle physics.
Key responsibilities include:	Development of low-background experimental techniques: purification of argon gas form residual radioactive contaminants, ultra-low background large-surface alpha spectroscopy, pulse shape analysis for radiation detectors
Profile of candidates/requirements:	1. M.Sc. in Physics (preferred nuclear physics/particle physics) 2. Documented experience in experimental work with radiation detectors, data analysis and MC simulations, analytical techniques (ICP-MS, noble gas mass spectrometry) 3. Very good English 4. Motivation for experimental work
Required documents:	1. Cover letter with CV 2. Copy of the M.Sc. thesis 3. Contact details of the scientific supervisor and, if available, of other personal referees
Please submit the following documents to:	grzegorz.zuzel@uj.edu.pl
Application deadline:	15.03.2017
For more details about the position visit:	www.zdfk.if.uj.edu.pl/?p=51

Please include in your offer: "I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended."

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