

JOB OFFER

Position in the project:	<i>Student</i>
Scientific discipline:	<i>environmental engineering, geology</i>
Job type (employment contract/stipend):	<i>scholarship</i>
Number of job offers:	<i>1</i>
Remuneration/stipend amount/month ("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):	<i>1 500 PLN of full remuneration cost (scholarship)</i>
Position starts on:	<i>01.09.2020</i>
Maximum period of contract/stipend agreement:	<i>12 months</i>
Institution:	<i>AGH University of Science and Technology; Faculty of Geology, Geophysics and Environmental Protection / Cracow</i>
Project leader:	<i>Prof. Wojciech Franus</i>
Project title:	<i>Fly ashes as the precursors of functionalized materials for applications in environmental engineering, civil engineering and agriculture</i> Project is carried out within the TEAM-NET programme of the Foundation for Polish Science
Project description:	<i>This TEAM-NET joint project assumes using fly ashes as a precursors for the synthesis of novel functionalized materials with the structure of not only zeolites, but also mesoporous silica materials and metal-organic frameworks (MOFs). Then produced materials will be tested for possible applications in agriculture, civil and environmental engineering. With the implementation of new technologies of coal combustion and flue gas treatment, new types of fly ashes with increased content of unburned carbon (up to 30%) have been produced. Such byproducts will be used in this project for the synthesis of novel zeolite-carbon composites. Previous work related to the use of this type of fly ashes was focused on the separate production of zeolites or activated carbons, which did not fully exploit the potential of the above-mentioned byproducts. Their use as a precursor to the synthesis of a zeolite-carbon-vermiculite composite in this project will also pave the way for developing a novel material to replace vermiculite raw materials in agricultural applications.</i>
Key responsibilities include:	<i>1. Sorption experiments of organic and inorganic compounds on the porous materials from fly ash (zeolites, mesoporous materials and MOFs).</i> <i>2. Assistance in laboratory works including physicochemical and mineralogical characteristics of materials before and after sorption.</i> <i>3. Preparing of data sheets for analysis of the results.</i>
Profile of candidates/requirements:	<i>1. The candidate must be a student of 1st (Bachelor) or 2nd (Master) degree in the field of: environmental engineering, geology.</i> <i>2. The candidate must be fluent in English (both speaking and writing) enabling communication and understanding of publication texts.</i> <i>3. Preferentially, the candidate should have predispositions for</i>

	<i>scientific and organizational work.</i>
Required documents:	1. <i>Written application for the competition.</i> 2. <i>Curriculum vitae including (with the note "I consent to the processing of my personal data contained in the offer for the purposes of the recruitment process in accordance with the Personal Data Protection Act of 29.08.1997, Journal of Laws No. 101, item 926, as amended.").</i> 3. <i>Subject of current research (engineering (bachelor) or master's).</i> 4. <i>Copies of obtained diplomas.</i> 5. <i>Documented information about completed courses and trainings.</i> 6. <i>Other activities (scientific clubs/circles, student conferences).</i> <i>All documents must be prepared in the English language</i>
Please submit the following documents to:	bajda@agh.edu.pl
Application deadline:	22.05.2020
For more details about the position please visit (website/webpage address):	https://www.fnp.org.pl/oferta_pracy http://wbia.pollub.pl/pl/praca http://www.wggios.agh.edu.pl/studenci https://www.biol.uw.edu.pl/pl/index.php?option=com_content&view=category&layout=blog&id=148&Itemid=317
Appeal	<i>Possible appeals against the decision should be sent to prof. Wojciech Franus (project coordinator, w.franus@pollub.pl) no later than 7 days after receiving the decision, i.e. the date of results announcement. In the protest an explicit justification have to be included.</i>