## **JOB OFFER**

Position in the project:	Technician
Scientific discipline:	Agronomy, environmental protection, analytical chemistry
Job type (employment contract/stipend):	employment contract (half-time job)
Number of job offers:	1
Remuneration/stipend amount/month	1 950 PLN of full remuneration cost
Position starts on:	01.09.2021 r.
Maximum period of contract/stipend agreement:	20 months
Institution:	AGH University of Science and Technology; Faculty of Geology, Geophysics and Environmental Protection / Cracow
Project leader:	Prof. Wojciech Franus
Project title:	Fly ashes as the precursors of functionalized materials for applications in environmental engineering, civil engineering and agriculture
	Project is carried out within the TEAM-NET programme of the Foundation for Polish Science
Project description:	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.
Key responsibilities include:	<ol> <li>Characterizing of obtained materials (i.e. zeolites, mesoporous materials and MOFs, fertilizers, soil, plant) with advanced instrumental methods.</li> <li>Setting up and conducting the laboratory for testing innovative fertilizer formulations with extended release of macro- and micronutrients.</li> <li>Soil and plant sampling and sample preparation for analysis.</li> <li>Controlling and monitoring all laboratory equipment used during project.</li> <li>Helping with the innovative fertilizer testing process from the technical point of view</li> <li>The candidate must have Master, Engineer degree diploma.</li> </ol>
Profile of candidates/requirements:	<ol> <li>The candidate must have Master, Engineer degree diploma.</li> <li>The candidate must have the skill in using scientific instruments such as: Atomic Absorption Spectrometr, Kjeldahl Apparatus CN, UV-VIS Spectrometer, Microwave Sample Preparation System).</li> <li>Practical experience and knowledge about methods of laboratory analysis of soils and plants materials.</li> <li>The candidate must know English (both speaking and writing) enabling communication.</li> </ol>









	5. Preferentially, the candidate should have an experience in working at agriculture or environmental chemistry laboratories.
Required documents:	<ol> <li>Written application for the competition.</li> <li>Curriculum vitae including:</li> <li>Copies of obtained diplomas.</li> <li>Documented information about completed courses and trainings.</li> <li>Other activities.</li> </ol>
Please submit the following documents to:	mierzwa@agh.edu.pl and bajda@agh.edu.pl
Application deadline:	24.08.2021
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/pracownicy  https://www.biol.uw.edu.pl/pl/index.php?option=com_content&view =category&layout=blog&id=148&Itemid=317
Appeal	Possible appeals against the decision should be sent to prof. Wojciech Franus (project coordinator, w.franus@pollub.pl) no letter then 7 days after receiving the decision, i.e. the date of results announcement. In the protest an explicit justification have to be included.







