## **JOB OFFER**

Position in the project:	Post-doc
Scientific discipline:	Microbiology, Environmental microbiology, Biotechnology.
Job type (employment contract/stipend):	Employment contract (full-time)
Number of job offers:	1
Remuneration/stipend amount/month ("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):	15 000 PLN of full remuneration cost, for a senior postdoctoral researcher (6-9 years after obtaining the PhD diploma)  10 000 PLN of full remuneration cost, for a junior postdoctoral researcher (up to 5 years after obtaining the PhD diploma)
Position starts on:	01.10.2022
Maximum period of contract/stipend agreement:	12 months
Institution:	University of Warsaw, Faculty of Biology/ Warsaw
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 description:	Project is carried out within the TEAM-NET programme of the Foundation for Polish Science  This TEAM-NET joint project assumes using fly ashes as a precursor 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 by-products 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 by-products. 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.  With this announcement, we are looking for a Postdoc for the work-package #6 "Production of biostimulants of crop plant growth and of composting process and production of bioinhibitors of phytopathogen growth based on functionalized materials derived from fly ash and bacterial inoculants". The aim of WP #6 is to develop microbial biostimulants of crop plant growth and of biocomposting as well as biological inhibitors of phytopathogen growth. Strains selected from the culture collection of the University of Warsaw will be analyzed for their ability to survive in soil environment (including extreme conditions, e.g. low temperature). The influence of the application of microbial strains on plant biomass, plant resistance to unfavorable environmental conditions and phytopathogen growth in soil will also be analyzed. In the next stage, a process manual for the









	immobilization of selected strains on functionalized materials and on natural
	carriers (e.g. zeolites) will be developed. The influence of carrier conditioning on the survival and activity of immobilized microorganisms will also be investigated. Experimental verification of biopreparations on the laboratory and pilot scales (pot experiments and micro-field/biocomposter experiments, respectively) will also be carried out. In addition, the effect of biopreparation application on the structure and biodiversity of the soil microbiome (both bacterial and fungal) will be determined.
Key responsibilities include:	<ol> <li>Developing a hyperlignocellulytic enzyme producing strain from already identified and characterized fungal isolates</li> <li>Carrier-based bio preparation of selected compost inoculants</li> <li>Preparing and writing scientific articles for international journals.</li> <li>Tracking current research trends in the scientific literature.</li> </ol>
Profile of candidates/requirements:	<ol> <li>The candidate must be a young scientist - max. 9 years after obtaining the Ph.D. diploma in experimental biology (biochemistry, molecular biology, microbiology, biotechnology).</li> <li>Research experience in applied microbiology, enzymology aerobic/anaerobic composting. More specifically, the candidate should be experienced in methods associated with some of the following research areas: composting, metagenomics, molecular biology, enzymology, assay development, protein purification, and characterization.</li> <li>Experience in bioinformatics and statistics is a plus.</li> <li>The candidate must be fluent in English (both speaking and writing).</li> <li>The candidate must have the experience to work in a team</li> </ol>
Required documents:	<ol> <li>A written application for the competition</li> <li>Prepare your Curriculum vitae ONLY according to the below-mentioned structure.</li> <li>Curriculum vitae should include:</li> <li>2.1 A detailed description of the academic degrees and titles, titles of theses (master and doctoral, along with a short description of main achievements in each thesis - up to 200 words), years of receiving the degree/academic title, names, and affiliation of supervisors and reviewers of each thesis.</li> <li>2.2 The academic career - a chronological indication of places of employment with the indication of posts and contact details of the direct supervisor.</li> <li>2.3 List of scientific publications/monographs/books/chapters - including the full list of authors, an indication whether the candidate was the corresponding author of the given publication, title, full title of the journal, and 5-year IF.</li> <li>2.4 Participation in conferences (list of conferences in which the candidate took an active part, stating whether it was a lecture or a poster), internships abroad (research stays), and most important courses and training.</li> <li>2.5 List of awards and distinctions, including their range (international/national)</li> <li>2.6 Other activities (scientific clubs/circles, student conferences) and information (e.g. patents, patent application, commercial)</li> <li>Recommendation letter from the last employer (direct supervisor) and address details of two other scientists who may recommend the given candidate. Alternatively, the recommendation letter can be emailed by former supervisor directly to k. pranaw@uw.edu.pl</li> <li>Copies of obtained diplomas.</li> </ol>









	5. All documents must be prepared in the English language
Please submit all the required documents (S. No. 1-4) to:	All documents must be sent as a single PDF file (if too big, the copies of diplomas may be sent as an independent file) by email to Dr. Kumar Pranaw <u>k.pranaw@uw.edu.pl</u> and Prof. Lukasz Drewniak <u>l.drewniak2@uw.edu.pl</u> , indicating the reference mentioned in the beginning of this call, in the subject line. Please include the number of the Euraxess offer (799795) in the title of your application email.
Application deadline:	31.07.2022
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.wagios.agh.edu.pl/pracownicy  https://www.biol.uw.edu.pl/pl/index.php?option=com_content&view =category&layout=blog&id=148&Itemid=317
Euraxess job/stipend offer (in case of PhD and postdoc positions):	https://euraxess.ec.europa.eu/jobs/799795
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 has to be included.
Consent to personal data processing	To allow us to process your data, please include the following statement in your application:  "I hereby consent to have my personal data processed by the University of Warsaw with its registered office at Krakowskie Przedmieście 26/28, 00-927 Warszawa for the purpose of carrying out a recruitment process and selecting an employee and concluding a contract for employment at the University of Warsaw I have been informed of my rights and duties. I understand that provision of my personal data is voluntary."







