

## JOB OFFER

Position in the project:	<i>Post-doc (adjunct)</i>
Scientific discipline:	<i>analytical and organic chemistry</i>
Job type (employment contract/stipend):	<i>employment contract</i>
Number of job offers:	<i>1</i>
Remuneration/stipend amount/month	<i>2852PLN (50% of full-time employment)</i>
Position starts on:	<i>15.05.2021</i>
Maximum period of contract/stipend agreement:	<i>28.5 months</i>
Institution:	<i>Faculty of Biology, University of Warsaw</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>
	<b>Project is carried out within the TEAM-NET programme of the Foundation for Polish Science</b>
Project description:	<p><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></p> <p><i>With this announcement, we are looking for a Postdoc for the work-package #5 "Biopreparations for pollutant removal from water, soil and air". The aim of WP #5 is to develop a series of biopreparations (bacteria immobilized on carriers derived from functionalized materials) to enhance the process of bioremediation of contaminated waters, soils and gases. Selected bacterial strains (proposed by the group leader) need to be analysed for the following abilities (i) degradation of pesticides and petroleum hydrocarbons, (ii) metabolism of nitric and sulphur oxides, (iii) degradation of volatile organic compounds, and (iv) denitrification of nitrates. Selected strains will then be thoroughly analysed for their metabolic potential, ability to survive under extreme environmental conditions (e.g. the presence of heavy metals in high concentrations), ability to form biofilms and biological safety. In the next stage, conditions for effective immobilization of the selected strains on the functionalized materials and on natural carriers (e.g. zeolites) will be worked out. The planned R&amp;D work should also include experimental verification of the</i></p>

	<i>biopreparations, both ex situ and in pilot bioreactors or directly in industrial tanks.</i>
Key responsibilities include:	<ol style="list-style-type: none"> <li>1. Supporting of project leader in analytical chemistry (quantitative and qualitative determination of metals, metalloids anions) and organic chemistry (identification of bacterial metabolites compounds using GC-MS and HPLC chromatography) analysis.</li> <li>2. Supporting the project leader in taking care of master students and PhD students involved in realization of work-package #5 concerning the development biotechnologies for the remediation of polluted environments heavy metals and petroleum substances.</li> </ol>
Profile of candidates/requirements:	<ol style="list-style-type: none"> <li>1. The candidate must be a researcher with PhD diploma obtained.</li> <li>2. The candidate must have a strong interest and knowledge of analytical and instrumental chemistry techniques.</li> <li>3. The candidate must be experienced in research concerning developing of new methods of qualitative and quantitative analysis.</li> <li>4. The candidate must have experience in handling ICP-MS, ASA and GC-MS analysis.</li> </ol>
Required documents:	<ol style="list-style-type: none"> <li>1. Written application for the competition.</li> <li>2. Curriculum vitae including: <ol style="list-style-type: none"> <li>a) A detailed description of the academic degrees and titles, titles of theses (master and doctoral, along with short description of main achievements in each thesis – up to 300 characters including spaces), years of receiving the degree/academic title, names and affiliation of supervisors and reviewers of each thesis.</li> <li>b) The academic career – chronological indication of places of employment with the indication of posts and contact details of the direct supervisor.</li> <li>c) 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>d) 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 trainings.</li> <li>e) List of awards and distinctions, including their range (international/national).</li> <li>f) Other activities (scientific clubs/circles, student conferences) and information (e.g. patents, patent application, commercial)</li> </ol> </li> <li>3. Recommendation letter from the last employer (direct supervisor) and address details of two other scientists who may recommend the given candidate. Alternatively, recommendation letter can be emailed by former supervisor directly to <a href="mailto:ldrewniak@biol.uw.edu.pl">ldrewniak@biol.uw.edu.pl</a></li> <li>4. Copies of obtained diplomas.</li> </ol>
Please submit the following documents to:	<ol style="list-style-type: none"> <li>5. All documents must be prepared in the English language.</li> </ol> <p>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 <a href="mailto:ldrewniak@biol.uw.edu.pl">ldrewniak@biol.uw.edu.pl</a>, indicating the reference mentioned in the</p>

	<i>beginning of this call, in the subject line.</i>
Application deadline:	30.04.2021
For more details about the position please visit (website/webpage address):	<a href="https://www.fnp.org.pl/oferta_pracy">https://www.fnp.org.pl/oferta_pracy</a> <a href="http://wbia.pollub.pl/pl/praca">http://wbia.pollub.pl/pl/praca</a> <a href="http://www.wggios.agh.edu.pl/pracownicy">http://www.wggios.agh.edu.pl/pracownicy</a> <a href="https://www.biol.uw.edu.pl/pl/index.php?option=com_content&amp;view=category&amp;layout=blog&amp;id=148&amp;Itemid=317">https://www.biol.uw.edu.pl/pl/index.php?option=com_content&amp;view=category&amp;layout=blog&amp;id=148&amp;Itemid=317</a>
Euraxess job/stipend offer (in case of PhD and postdoc positions):	
Appeal	<i>Possible appeals against the decision should be sent to prof. Wojciech Franus (project coordinator, <a href="mailto:w.franus@pollub.pl">w.franus@pollub.pl</a>) 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>