



KRekInż-1/25

Lublin, 21.11.2025

THE INSTITUTE OF AGROPHYSICS
OF THE POLISH ACADEMY OF SCIENCES IN LUBLIN
IS SEARCHING FOR:

Engineering Staff Member (f/m)
in the Department of Physical Chemistry of Porous Materials
on research project „Impact of Novel Synthesized Eco-friendly Hydrogel Composites from Insect Breeding Waste on Soil Hydraulics, Stability and Fertility” (2024/06/Y/NZ9/00183), funded by National Science Centre within programme Weave-Unisono (hereinafter as “the Project”)

1. Research tasks in the Project:

- a) active participation in scientific research, including in particular:
 - breeding insects (*Hermetia illucens*),
 - obtaining/synthesizing research materials: preparing biochar using pyrolysis, hydrochar using a hydrothermal reaction, extracting chitin and obtaining chitosan from it,
 - obtaining hydrogel composites from waste materials,
 - characterizing hydrogel composites: morphology, swelling degree, stability, functional groups, charge density, sorption properties for metal ions, etc.,
 - collecting and preparing soil for laboratory testing,
 - analyzing soils before and after modification with hydrogel materials: pH, organic carbon content, variable surface charge, ash content, porosity, etc.,
 - conducting experiments on plants: establishing cultures, monitoring and measuring plant growth, determining proline content in plant material,
- b) creating required reports and research documentation,
- c) conducting statistical analyses,
- d) active participation in the promotion of the project (including national and international conferences, as well as by preparing co-authored scientific articles in English).

2. Requirements:

- a) Master's degree in biology, chemistry, agronomy, or related sciences,
- b) practical knowledge of classical and modern instrumental methods, e.g., potentiometric titration, extraction methods, AAS spectrometry, FTIR spectroscopy, and UV-Vis spectrophotometry,
- c) knowledge of plant experimental methodology,
- d) knowledge of English language sufficient to study freely professional literature as well as to prepare co-authored scientific papers and to take active part in scientific events conducted in English,
- e) practical experience in preparing research reports,
- f) experience in statistical processing data,
- g) conscientiousness, accuracy and ability to complete tasks in a timely manner,
- h) communication skills, as well as willingness and openness to work as part of a team.

3. It would be nice if YOU additionally have:

- a) knowledge of insect breeding, including *Hermetia illucens*,
- b) knowledge of methods for obtaining hydrogels.



4. We offer:

- a) working with the Institute with the highest rank for research units according to evaluation of the Ministry of Science and Higher Education (A+ rank), in the implementation of interesting scientific project funded by National Science Centre;
- b) access to modern infrastructure for R&D;
- c) supervision of experienced researchers;
- d) opportunities for development and upgrading professional skills.

5. Required documents:

- a) Curriculum Vitae with information regarding research skills and prior experience in science with the following clause:
*„I allow my personal data stated in the abovementioned applications to be processed for the purpose of the recruitment by **the Institute of Agrophysics of the Polish Academy of Sciences** (20-290 Lublin, ul. Doświadczalna 4), in accordance with the General Data Protection Regulation (EU) 2016/679.”**
- b) cover letter (max. 1 page of A4 typewritten text)
- c) declaration of availability to work in the Project from 01.01.2026;

please send **in electronic form via our Recruitment System by 05.12.2025:**

<https://career.ipan.lublin.pl/en/announcements/>

- 6. Additional information:** this competition is conducted in accordance with the Regulations on awarding funding for research tasks funded by the National Science Centre as regards research projects.

We kindly inform that we contact only chosen candidates. Applications that are incomplete, submitted after the deadline or in the different form than required will not be processed.
We also reserve the right to close the recruitment process before the deadline indicated above.

*) Information clause on personal data is available on the following website:

<http://www.ipan.lublin.pl/wp-content/uploads/2019/02/information-clause-IA-PAS.pdf>