



KSN 11/2022

Krakow, 19.12.2022

## **Call for Research Assistant position in the Theoretical and Experimental Biocatalysis research group**

- Employer: Jerzy Haber Institute of Catalysis and Surface Chemistry Polish Academy of Sciences, Krakow, Poland
- Research field:
  - Chemistry > inorganic chemistry, organic chemistry
  - Engineering > materials engineering
- Researcher profile: R1, R2
- Deadline for the applications: 19.01.2023, at 15:00 GMT+1
- Place: Poland, Krakow
- Type of Contract: 18 months
- Job Status: full time
- Working hours/week: 40
- Start of employment: 01.03.2023
- Keywords: biomaterials, tissue engineering, interaction between materials and cells, physicochemical characterisation of biomaterials, *in vitro* testing

Jerzy Haber Institute of Catalysis and Surface Chemistry Polish Academy of Sciences, Krakow, Poland invites applications for a position of a Research Assistant in the Theoretical and Experimental Biocatalysis research group.

The candidates who meet the conditions stated in the act “Ustawa o Polskiej Akademii Nauk” dated 30 April 2010 (Dz.U. 2018 poz. 1475 z póź. zm.), art 89. Ust. 4 for the position of Research Assistant are encouraged to apply for the position.

The candidate will be involved in research in the Theoretical and Experimental Biocatalysis group where intensive studies on synthesis and applications of bacterial polymers - polyhydroxyalkanoates (PHAs) are carried out as part of the development of new ideas related to modern biorefining. Also, bacterial fermentation strategies to valorise biomass-derived substrates are under development. In addition, new applications for the resulting polymers in medicine and the wider industry, including medical applications are explored.



The group develops, produces and researches, among others, biomaterials for medical and near-medical applications.

The Research Assistant will be responsible for:

- development of new biomaterials
- manufacturing of biomaterials
- testing the properties (mainly biological) of materials for medical and near-medical applications
- participating in research planning, archiving, processing experimental data, preparing publications for high-impact journals
- presentation of research results at thematic national and international conferences
- reviewing and working with bibliographical databases (e.g. Mendeley);
- supervising students and doctoral students in the research group.

#### **Required education level:**

The candidate should hold a PhD in Materials Science or a related discipline.

#### **Skills/Qualifications**

- a high mark for the PhD dissertation, confirmed by reviews. Distinction of the dissertation is welcomed (0-10 pts);
- minimum 4 years of research experience in the area of biomaterials engineering for regenerative medicine and tissue engineering applications supported by scientific output in the form of scientific publications in JCR-listed journals with significant contributions from the candidate (first author and/or corresponding author in at least three papers), as well as conference presentations of national and international scope (0-10 pts). Minimum number of points required. 3;
- experience in research projects as a contractor and/or principal investigator (0-10 points). Minimum number of points required. 3;
- experience as a leader (principal investigator) of a research project (0-5 points).
- 3 months of research experience in a foreign research unit as part of an internship (0-5 points);
- practical knowledge of the following research techniques regarding preparation of the material for testing along with analysis and interpretation of the obtained results: SEM/EDX, XRD, FTIR, mercury intrusion porosimetry, testing of mechanical properties; testing of materials using SBF test (0-10 pts); Minimum number of points. 5.
- experience in preparation of materials for testing *in vitro* and in biomaterials *in vitro* assays, both in direct and indirect methods (0-5 points);
- experience in performing bacterial fermentations would be an asset (0-5 points);
- experience in material functionalisation, enzyme immobilisation on solid media and experimental biocatalysis would be an asset (0-5 points);



- very good written and oral English language skills, confirmed by a certificate (0-5 points);
- high motivation in scientific and research work, and ability to work in a team (0-5 points);

The minimum number of points of the successful Candidate: 50.

### Specific requirements:

An application should contain:

- a letter of application;
- “Consent to the processing of personal data for the needs necessary to carry out the recruitment process” in accordance with the Act of 29 August 1997 on the protection of personal data (t.j. Dz. U. z 2016 r. poz. 922, z 2018 r. poz. 138, 723.) [FORM] and “Information obligations – recruitment of a perspective employee/collaborators” confirming acquainting with its content [FORM] (both documents filled and signed by the Candidate);
- a copy of Ph.D. degree certificate or a confirmation of its completion;
- full CV (including information on maternal leaves, voluntary work, and periods of work in the industry);
- at least one current opinions on the Candidate given by previous supervisors, preferentially an independent researcher;
- list of scientific achievements (scientific papers, research and implementation projects, grants, conferences etc.);
- report on the Candidate’s scientific interests and research aims taking into consideration reference to the subject of the project (an A4 page).

### Languages:

Fluent in written and spoken Polish and English;

### Research experience:

- 4-10 years of experience in the field of biomaterials.
- working knowledge of biomaterials physicochemical and biological characterization methods.

### Remuneration:

The gross salary **4000 PLN/month** (roughly **850 Euro/month**) depending on the Candidate’s experience.



Instytut Katalizy i Fizykochemii Powierzchni  
im. Jerzego Habera  
Polskiej Akademii Nauk



HR EXCELLENCE IN RESEARCH

### **Eligibility criteria:**

- PhD in Materials Engineering or related discipline.
- proven publication record from the JRC list confirming the required experience.
- experience of working in research grants.
- completion of a research internship in a centre other than the one in which the doctoral degree was obtained.

### **Selection process:**

Applications should be sent in electronic form to: [sekretariat@ikifp.edu.pl](mailto:sekretariat@ikifp.edu.pl) with the subject title „Assistant - Biocatalysis KSN 11/2022”

Deadline for applications: **19.01.2023 at 15:00 GMT+1**. The competition will be settled by 02.02.2023. The candidates will be notified of the results.

**The employment will proceed in accordance with the rules of the Labour Code for 18 months.**

### **Additional information**

The Institute has adapted to the needs of the disabled. The Institute does not provide accommodation. The recruitment process is conducted according to [OTM-R policy](#).