



KSN 04/2021

Kraków, 31-03-2021

## Call for Assistant Professor (adjunct) position in the group of Theoretical and Experimental Biocatalysis

- Employer: Jerzy Haber Institute of Catalysis and Surface Chemistry Polish Academy of Sciences, Krakow, Poland
- Research field:  
Chemistry> physical chemistry  
Chemistry> instrumental analysis  
Engineering> materials engineering
- Researcher profile: R2, R3
- Deadline for applications: 30.04.2021, 3:00 pm GTM+1
- Place: Poland, Kraków
- Type of Contract: 33 months
- Job Status: Full-time
- Working hours/week: 40
- Start of employment: 17<sup>th</sup> of May 2021
- Key Words: fermentation, polyhydroxyalkanoates, bioprocesses, biorefining

Jerzy Haber Institute of Catalysis and Surface Chemistry PAS invites applications for an assistant professor (adjunct) in the Theoretical and Experimental Biocatalysis 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. 3 for the position of assistant professor (adjunct) are encouraged to apply for the position.

The Candidate will take part in research conducted by the group of Theoretical and Experimental Biocatalysis. In the "Theoretical and Experimental Biocatalysis" group, intensive research is conducted on the synthesis and applications of bacterial polymers - polyhydroxyalkanoates (PHAs) as part of the development of new ideas related to modern biorefining. Bacterial fermentation strategies are being developed to valorize biomass-derived substrates. In addition, new applications for the obtained polymers in medicine and the wider industry are sought.

The Candidate's work will be carried out in the following topics:

ul. Niezapominajek 8, 30-239 Kraków, Polska  
tel. +48 12 639 51 01, +48 12 425 19 23  
fax +48 12 425 19 23

Nr konta: Bank Gospodarstwa Krajowego  
PL 36 1130 1150 0012 1186 5820 0004  
NIP: 6750001805, REGON: P-000326351



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



HR EXCELLENCE IN RESEARCH

- synthesis of bacterial polymers from the PHA group under controlled conditions; including optimization of bioprocess yields.
- development of a scale-up process for the synthesis of bacterial PHAs
- description of the physical properties of polymers at the micro- and macro-scale.
- *in vitro* characterization of new polymeric materials for their biocompatibility with eukaryotic cells.
- the search for pathways to commercialize the produced PHA polymers.

In particular, the Candidate will be responsible for:

- Conducting research work in accordance with the Institute's profile, in particular on issues of bacterial fermentations.
- Planning and analysis of experimental results and preparation of publications.
- Submitting proposals for research projects.
- Searching for partners for commercialization of developed technologies.

### Required education:

The candidate should hold a PhD degree in chemistry, biochemistry, biophysics or related sciences.

### Skills/Qualifications:

1. ability to work with bioreactors for biopolymer production
2. at least 6 months of postdoctoral training in a unit other than the one where the Candidate did his/her PhD

### Documented by publications from the JCR list:

3. experience in the physical characterization of biopolymers by instrumental techniques,
4. experience in the day-to-day analysis of fermentation parameters
5. experience in the *in vitro* characterization of biopolymers, in particular in terms of their effect on mammalian cells with a view to their potential use in medicine

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6. experience in the analysis of the use and implementation of biopolymers in a socio-economic environment, including applications in medicine and in the circular economy (documented through publications, cooperation through the implementation of application projects and expert reports).

### Specific requirements:

1. An application.
2. 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.) and fill in the form „Consent to the processing of personal data” confirming acquainting with its content. The form is available on the institute website [\[FORM\]](#).
3. A copy of the scientific degree certificate.
4. Full CV (including information on maternal leaves, voluntary work and periods of work in the industry).
5. At least one opinion on the Candidate given by an independent researcher.
6. List of scientific achievements (scientific papers, patents, patent applications, grants, etc.).
7. Copies of 3 best publications connected to the topic of the call.
8. The Candidate's report on his/her scientific interests and research aims (an A4 page).

### Languages:

Polish (fluent in speech and writing), English (fluent in speech and writing)

### Research experience:

1-4 years

### Additional information:

#### Remuneration:

The gross salary will be at least **4700 PLN/month** (approx.**1000 euro/month**) depending on the Candidate's experience.

#### Eligibility criteria:

- A doctoral degree in natural science
- Proven track record of publications from the JRC list or patents.



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HR EXCELLENCE IN RESEARCH

- Research internship(s) in centers other than those in which the doctoral degree was obtained

### **Selection process:**

Applications should be sent in the electronic form to [sekretariat@ikifp.edu.pl](mailto:sekretariat@ikifp.edu.pl) with the subject title „Adjunct – Biokataliza - KSN 04/2021”

Deadline for applications: **30.04.2021** at **3:00 pm GTM+1**. The competition will be settled by **14.05.2021**. The candidates will be notified of the results.

The employment will be proceeded with accordance with the rules of the Labour Code for **33 months**.

### **Additional information:**

The Institute has been adapted to the needs of the disabled. The Institute does not provide accommodation. The recruitment process is conducted according to OTM-R policy.