

FORM FOR EMPLOYERS

INSTITUTION . Jerzy Haber Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences

CITY . Krakow

POSITION Research Assistant

DISCIPLINE .

- Chemistry > physical chemistry;
- Physics > biophysics.

POSTED February 17th 2024

EXPIRES March 17th 2025, 3:00 pm GMT+1

WEBSITE www.ikifp.edu.pl

KEY WORDS protein systems, nanoparticle functionalization, model biological membranes, optical biosensors

DESCRIPTION (field, expectations, comments):

Jerzy Haber Institute of Catalysis and Surface Chemistry PAS invites applications for an assistant in the Adsorption 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 take part in research conducted by the Adsorption group.

In particular, the research assistant will be responsible for:

- Conducting experimental studies on the characteristics of the model membrane using a wide range of physicochemical methods;
- Designing receptor layers of optical biosensors.
- Researching molecular aspects of protein conformational stability in the context of creating amyloid superstructures
- Archiving and processing of experimental data, as well as preparation of publications in high-impact factor journals;
- Handling bibliographic databases (eg. Mendeley) and data repository ;
- Supervision over M.Sc. and students.

Required education:

PhD's degree (or equivalent) in one of the following disciplines: chemistry, chemical engineering, biochemistry, biophysics, materials engineering, or related.

Skills/qualifications:

- Experience conducting scientific research in physicochemistry, especially related to the stability of colloidal systems (proteins, peptides, polyelectrolytes), confirmed publication record the journals from the Journal Citation Reports lists (0-10 points). The minimum required: 3.
- Experience in advanced physicochemical methods for characterization of nanoparticle systems (among others DLS, FTIR, NMR, CD, SAXS)(0-10 points). The minimum required: 3.
- Experience in experimental studies on the characteristics of the structure of functional layers (among others SPR, QCM-D, EIS, CV, TEM) (0-10 points). The minimum required: 3.
- Knowledge of programming basics (Python, Matlab, Linux) will be an asset (0-5 points)
- Fundamental knowledge of the theoretical description of the protein systems. Knowledge of computational techniques (Molecular Dynamic Simulations) will be an asset (0-5 points).
- Experience as a leader (manager) of a research project (0-5 points).

The minimum number of points of the successful Candidate: 30.

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.) [[FORM](#)] and fill in the form „Consent to the processing of personal data” confirming acquainting with its content [[FORM](#)]. The form is available on the institute [website](#).
3. A copy of 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, patent, patent applications, grants, etc.).
7. The Candidate's report on his/her scientific interests and research aims (an A4 page).

Languages:

Fluent in written and spoken English.

Research experience:

- at least 4-10 years of experience in the field of physical chemistry of colloidal systems.
- working knowledge of nanomaterials physicochemical characterization methods.

Additional information:

Renumeration:

The gross salary will be at least **5400 PLN/month** depending on the Candidate's experience.

Eligibility criteria:

- PhD's degree (or equivalent) in one of the following disciplines: material science, chemical engineering, chemistry, or similar;
- Scientific achievements supported by JRC publications or patents.

Selection process:

Applications should be sent in electronic form to: sekretariat@ikifp.edu.pl with the subject title „Adsorption KSN 1/2025”

Deadline for applications: **17.03.2025 at 3:00 pm GTM+1**. The competition will be settled by **24.03.2025**. The candidates will be notified of the results.

The employment will be proceeded with accordance to the rules of Labour Code for 12 months.

In the case of candidates with equivalent qualifications or a need for further clarification of information provided selected candidates will be asked to participate in an on-line interview.

Additional information:

The Institute has been adapted to the needs of the disabled. The Institute does not provide accommodation.

Jerzy Haber Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences, awarded the HR Excellence in Research Award by the European Commission in recognition of ongoing commitment to adopt the principles of The European Charter for Researchers (ECR) and a Code of Conduct for the Recruitment of Researchers (CCRR) fully supports and applies open, transparent and merit-based recruitment (OTM-R) procedures. The Institute is dedicated to implementing and strengthening the [OTM-R policy](#) as one of the pillars of the ECR and CCER and one of the crucial components of the Human Resources Strategy for Researchers ([HRS4R](#)).

