

FORM FOR EMPLOYERS

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

CITY . Krakow

POSITION Assistant Professor (adjunct)

DISCIPLINE .

- Material science > polymer materials,
- Material science > composites,
- Chemistry > polymer chemistry.

POSTED December 9th 2024

EXPIRES January 31st 2025, 3:00 pm GMT+1

WEBSITE www.ikifp.edu.pl

KEY WORDS: Degradation mechanisms, cultural heritage, polymers, mechanical properties

DESCRIPTION (field, expectations, comments):

Jerzy Haber Institute of Catalysis and Surface Chemistry Polish Academy of Sciences, Krakow, Poland opens a position of an assistant professor in the Cultural Heritage Research Group of the Institute.

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 research assistant are encouraged to apply for the position.

The assistant professor reporting to the head of the Cultural Heritage Research Group will investigate the polymeric materials characteristic of cultural heritage objects and the dependence of their mechanical properties on microclimatic parameters (temperature, relative humidity). In particular, the assistant professor's task will be to determine the long-term mechanical responses of polymeric materials using dynamic mechanical analysis using the principle of time and temperature superposition. Currently, mechanical models of heritage objects are created based on the mechanical response of materials under the influence of rapid microclimate changes, therefore studies focused on the long-term mechanical response are

particularly important for assessing the risk of mechanical damage caused by slow changes in the environmental parameters.

The assistant professor will be responsible for:

- Performing experiments using dynamic mechanical analysis and static tensile experiments;
- Experimental determination of temperature and relative humidity of phase transitions of tested materials and characteristic activation energy of a given transitions;
- Defining dominant degradation processes of materials based on rates of physical (mechanical) processes and degradation reactions.

Required education:

Doctoral degree in one of the following disciplines: chemistry, chemical engineering, material science and related disciplines.

Skills/Qualifications:

1. Experience in static and dynamic mechanical testing of polymer materials, preferably supported by JRC publications – 0-20.
2. Experience in investigating degradation of polymer materials, preferably supported by JRC publications – 0-20.
3. Experience in the area of heritage science, preferably supported by JRC publications – 0-20.

The minimal number of points required for admission – 40. The minimal number of points required in each area - 5.

Specific requirements:

- an 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 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](#).
- a copy of PhD degree certificate,
- full CV (including information on maternal leaves, voluntary work and periods of work in the industry),

- list of scientific achievements (scientific papers, research and implementation projects, grants etc.).

Languages:

Fluent in written and spoken English

Research experience:

- Experience in static and dynamic mechanical testing of polymer materials,
- Experience in studying polymer degradation processes using spectroscopic, diffraction and chromatographic methods,
- Experience in studying heritage materials (particularly mechanical properties).

Additional information:**Remuneration:**

The gross salary 7000 PLN/month (roughly 1700 Euro/month) depending on the Candidate's experience.

Eligibility criteria:

- Research experience documented by scientific publications in journals enlisted in JCR or patents and carried projects,
- Doctoral degree in one of the following disciplines: chemistry, chemical engineering, material science and related disciplines.

Selection process:

Applications should be sent in the electronic form to: sekretariat@ikifp.edu.pl with the subject title „CHR – adjunct - KSN 7/2024”

Deadline for applications: 31.01.2025 at 3:00 pm GMT+1.

The two-phase evaluation will take place. The group of selected candidates will be asked to participate in an individual meeting using the Teams platform.

The competition will be settled by 28.02.2025. The candidates will be notified of the results.

The employment will proceed in accordance with the rules of the Labour Code for at least 24 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).