



Assistant Professor in the group of research and teaching staff at the Institute of Molecular and Industrial Biotechnology

Lodz University of Technology is one of the finest universities of technology in Poland. Its tradition and experience in training professionals and conducting research date back more than 75 years. It is an attractive partner for business. It cooperates with the largest national and international corporations. It conducts research of a European standard, develops new technologies and creates innovation in collaboration with the leading research centres all over the world. One of the pillars of Lodz University of Technology management is equal treatment of staff regardless of their gender, age, race or other demographic and social characteristics. In 2016, TUL was the first technical university in Poland to receive the HR EXCELLENCE IN RESEARCH award certifying that the University adheres to the principles of *the European Charter for Researchers* and *the Code of Conduct for the Recruitment of Researchers*.

1. The requirements to be met by the candidate (detailed description of the knowledge, qualifications, skills, and professional experience).

- Doctor of PhD in food technology and nutrition, or biotechnology;
- documented academic achievements in the form of at least five publications in international scientific journals (from the Web of Science database) or books with worldwide coverage, including at least three first-authored articles;
- documented research internship of at least three months duration at a renowned research center in a foreign country;
- experience in animal and human cell culture confirmed by at least three publications in a JCR-listed journal;
- participation in research projects as a principal investigator or co-investigator;
- practical knowledge of analyses determining intracellular signalling (e.g. calcium ion mobilization), confirmed by at least one publication in a JCR-listed journal;
- practical knowledge of molecular biology and genetic engineering techniques (e.g., DNA/RNA isolation, proteins isolation, PCR, RT-PCR); electrophoretic techniques for proteins and nucleic acids, western blotting, ELISA;
- practical knowledge of standard statistical analyzes used in interpreting biological results;
- confirmed knowledge of the English language at a level of at least B2;
- knowledge of the Polish language, fluency in speech and writing is a prerequisite for all research activities, teaching duties, and organizational tasks;
- experience in teaching undergraduates at both first and second-degree level;
- supervise at least one Engineering or Master's thesis.

2. Specification of the terms and conditions of employment and authority associated with the position.

Employment contract (full-time) since 01.10.2025

3. Description of the expected responsibilities and duties.

- conducting scientific research in the disciplines of nutrition and food technology, chemical engineering, or related disciplines and participating in disseminating the results of these activities;
- didactic teaching for the Bachelor's and Master's degree courses related to the disciplines of nutrition and food technology as well as chemical engineering, both in Polish and English;
- participation in scientific projects implemented at the Institute and applying for grants financed by external institutions;
- traveling abroad as part of a European programme, such as Erasmus+, or attending an international conference;
- improvement of skills through participation in training courses;
- participation in organizational work for the benefit of the University and the Institute.



In order to carry out the above responsibilities, it is necessary to:

- be self-motivated and very good at organizing your work;
- be able to work independently and as part of a team;
- transfer knowledge and build relationships with students in the teaching process;
- present results and keep up-to-date reporting on work in progress;
- adapt to new challenges and changes;
- have high personal culture and excellent interpersonal skills;
- accurately carry out assigned tasks and adapt to procedures.

4. List of the required documents:

- application for employment to the Rector of Lodz University of Technology;
- personal questionnaire for a person applying for employment at Lodz University of Technology, as provided in Annex no. 1.1 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;
- Data Privacy Statement as provided in Annex no. 1.2 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;
- Consent to the processing of personal data, as provided in Annex no. 1.3 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;
- true copies/copies of diplomas;
- description of scientific achievements and research experience;
- other documents proving the qualifications.

5. The place, manner, and deadline for submitting the documents (as well as information concerning their return):

- Competition entries will be accepted until 02.07.2025 (15:00 Europe/Brussels).
- Competition entries can be sent to the e-mail address: ewa.gromek@p.lodz.pl with "job application - I51 assistant professor competition" in the subject line. All required documents/attachments must be sent as PDF files.
- Competition entries can also be sent by post to the correspondence address: Lodz University of Technology, Institute of Molecular and Industrial Biotechnology, 116 Żeromskiego Street, 90-924 Łódź, Poland in an envelope with the note "job application - I51 assistant professor competition".
- Documents delivered after the deadline (the date of delivery to the Institute of Molecular and Industrial Biotechnology TUL) will not be considered.
- Candidates will be able to collect their documents related to the competition for 30 days after the end of the competition.
- Candidates meeting the requirements of competition will be invited for an interview. Information regarding the interview will be sent to Candidates by e-mail.

6. Contact person and postal and e-mail addresses to which documents or scans thereof may be forwarded:

In matters related to the competition, please contact Mrs. Ewa Gromek, e-mail: ewa.gromek@p.lodz.pl

7. The expected date of the announcement of the decision:

July 2025

8. Description of the Institute's profile and the leading research conducted in the Institute:

The Institute of Molecular and Industrial Biotechnology was established in 1963. Based on the laboratories of Molecular Biotechnology and Cell Culture as well as X-ray Structural Analysis, it conducts research in the field of molecular biotechnology, industrial biotechnology, proteomics/structural biology, food biochemistry and nutrigenomics, biomaterials engineering. Current research topics include:

- characterization of pro-health effects of phytochemicals and synthetic compounds using *in vitro* methods, including cell cultures;



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- search of antidiabetic compounds;
- determination of cytotoxicity, efficacy and molecular mechanisms of xenobiotics using cell lines;
- tests of biocompatibility and cytotoxicity of materials using *in vitro* methods;
- search in natural environments and selection of technologically useful microbial enzymes (including extremophiles) using efficient methods and omics techniques;
- molecular identification of microorganisms producing enzymes and valuable bioproducts;
- development of efficient bioprocesses (biosynthesis, biocatalysis, biotransformation): isolation and purification of enzymes and bioproducts; mathematical optimization and up-scaling of biotechnological processes under different culture conditions or reaction environments;
- production and characterization of different forms of biocatalysts (including immobilized): kinetics and mechanism of action, stability, stabilization;
- construction of recombinant enzymes using genetic engineering techniques: selection of vectors and expression systems; optimization of expression of target gene(s) in a heterologous host, purification of recombinant enzymes;
- engineering of native and recombinant enzymes by recombinant DNA technology: rational mutagenesis and targeted enzyme evolution (increasing enzyme efficiency, changing substrate specificity, increasing stability and finding new, unique enzymatic activity);
- the development of strategies for the utilization of enzymes to synthesize compounds that have previously been obtained only by chemical synthesis;
- the construction of enzyme preparations with diverse forms and functions for the purpose of facilitating the treatment of plant biomass waste in the biorefinery process, including cascade reactions;
- genomics (bacterial genome assembly, NGS and nanopore sequencing data), bioinformatics analysis and functional annotation of genomes, transcriptomics (RT-PCR, RNA-seq), bacterial proteomics;
- structural studies of biologically active compounds in the aspect of application in medicine and biotechnology;
- crystallographic studies of native proteins and their complexes with ligands;
- analysis of the properties of biopolymers (biomechanical, biological, and physicochemical tests).



**PERSONAL INFORMATION FORM
FOR APPLICANTS FOR EMPLOYMENT AT LODZ UNIVERSITY OF TECHNOLOGY**

1. First name(s) and family name.....
 2. Date of birth.....
 3. Contact details.....
(provided by the applicant)
 4. Education (where required for specific duties or jobs)
(name of school and graduation date)
.....
.....
(occupation, specialization, degree, professional title, academic title)
 5. Professional qualifications (where required for specific duties or jobs).....
.....
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(courses, postgraduate education, other forms of further development of knowledge and skills)
 6. Employment history (where required for specific duties or jobs)
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(employment periods and jobs held at previous employers')
 7. Additional personal information, where the right or the duty to disclose it exists under specific regulations.....
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.....
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(place and date)
-
(signature of the applicant)



Data Privacy Statement for job candidates

Pursuant to Article 13(1) and (2) of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation, Official Journal of the EU L 119/1), hereinafter referred to as "GDPR", we inform you as follows:

- 1) Lodz University of Technology with the registered office in Lodz is the Controller of your personal data;
- 2) We have appointed a Data Protection Officer to supervise the compliance of personal data processing, who can be contacted in matters concerning the protection of your personal data at the following e-mail address: iod@adm.p.lodz.pl; telephone number: 42 631 2039; or in writing to the address of our registered office: Lodz University of Technology, Żeromskiego 116, 90-924 Łódź;
- 3) As the controller, we will process your data for the purpose of the recruitment process for the position indicated, based on your consent (Article 6(1)(a) GDPR);
- 4) You have the right to withdraw your consent to the processing of your personal data at any time, but such withdrawal shall not affect the lawfulness of the processing effected on the basis of your consent prior to its withdrawal;
- 5) You have the right to lodge an objection against the processing of the data as set out above at any time. We will cease to process your data for these purposes unless we can demonstrate that there are compelling legitimate grounds for us to do so which override your interests, rights, and freedoms, or that your data will be required for the possible establishment, assertion, or defense of claims;
- 6) Your personal data provided in the CV, personal information form for the applicant for employment, and copies of documents supporting your professional experience, education, additional credentials and qualifications will be processed for the period in which claims related to the recruitment process may arise, i.e. for 6 months following the conclusion of the recruitment process. For individuals who have given their consent to the processing of personal data for the purposes of future recruitment, for a period of 12 months following the conclusion of the recruitment process during which the consent has been given;
- 7) Only individuals authorized by the Controller to process your data in the performance of their duties will have access to your data;
- 8) Your personal data will not undergo automated processing and will not be subject to profiling;
- 9) Under GDPR, you shall further have:
 - a) the right to access your data and to receive copies thereof,
 - b) the right to rectification (amendment) of your data,
 - c) the right to erasure/to be forgotten, restriction of data processing,
 - d) the right to data portability,
 - e) right to file a complaint to the supervisory authority - President of the Personal Data Protection Office, Stawki 2, 00-193 Warsaw.

.....
(date and signature of the candidate)



Candidate's consent to personal data processing under Article 7 GDPR

I consent to the processing of my personal data for the purpose and to the extent necessary to carry out the recruitment for the job in accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation), publ. Official Journal of the EU L No. 119, p. 1. Consent is voluntary. Failure to give consent entails the inability to participate in the recruitment process. Consent may be withdrawn at any time, but without affecting the legality of the processing of personal data carried out on the basis of consent before its withdrawal.

.....
(date and signature of applicant)

* delete as appropriate