

Post-doc Position (M/F) at Poznan University of Technology, Poland

Project financed by National Science Centre, Poland: call SONATA 21

Project name: Deep insight into biofilm-controlled carbon flow in the chain elongation process – DeepChain
(PI: Filip Brodowski, PhD)

Country: Poland

Organisation/Company: Poznan University of Technology,

Department: Institute of Environmental Engineering and Building Installations

Position: Post-doc

Qualifications:

1. PhD degree in Biotechnology / Biology / Chemistry / Microbiology / Chemical engineering / Environmental engineering or a closely related field conferred in the years 2014-2026. This period may be extended by a time of long-term (in excess of 90 days) documented sick leaves or rehabilitation leaves granted on account of being unfit to work. In addition, the period may be extended by the number of months of a childcare leave granted pursuant to the Labour Code and in the case of women, by 18 months for every child born or adopted, whichever manner of accounting for career breaks is preferable. For researchers with multiple PhDs, the date of the first PhD award is deemed the reference date.
2. Experience in biotechnological, analytical, or fermentation laboratories (or similar), including fermentation processes and analytical techniques, as well as in working in research projects.
3. Experience in omics and bioinformatic data analysis, including the processing and interpretation of metagenomic and metatranscriptomic datasets.
4. At least basic knowledge of microscopy techniques.
5. Strong spoken and written communication skills, good organisational skills, and analytical thinking.
6. Ability to learn new techniques and work effectively in a research team.
7. English language proficiency at least at the B2 level.

What do we offer:

A chance to join in a driven and young team Bioref Research Group (<https://bioref.put.poznan.pl/>) focused on development in the field of environmental biotechnology and recovery of valuable compounds from organic waste in accordance with the assumptions of the circular economy; mutual consultations and support; participation in national and international conferences.

Project description:

The project will investigate how biofilm structure influences the biological production of medium-chain carboxylic acids (MCCAs) via chain elongation during open culture fermentation of organic waste. Biofilms are expected to improve process stability by enhancing microbial spatial organisation, syntrophic interactions, and resistance to stress. Biofilm-based and planktonic systems will be compared to evaluate differences in performance and stability under varying conditions. In parallel, multi-omics and imaging techniques (e.g. CLSM-FISH, Raman microspectroscopy) will be used to identify key microorganisms and their spatial organisation within biofilms. The aim is to elucidate mechanisms governing stability and efficiency in CE systems and develop more robust waste-to-product bioconversion processes.

Main tasks: research conceptualisation, design and conduct of fermentation experiments, performing analytical and biofilm characterisation analyses, preparation of biomass and biofilm samples for omics, bioinformatic analysis of sequencing data, integrated data analysis (including multivariate and network analyses), supervision of FISH probe design, preparation of scientific publications, and dissemination of results at international conferences.

Duration: 12 months, with the possibility to be extended up to 36 months

Type of Contract: Temporary

Job Status: Full-time

Hours Per Week: 40

Offer Starting Date: 1 Oct 2026

Remuneration: ~ 12900 PLN gross /month (plus 13th salary)

Application Instructions:

All applications must be submitted by email to: filip.brodowski@put.poznan.pl

1. Curriculum vitae (CV)
 - Detailing relevant professional experience, academic background, and specific skills or knowledge related to the position.
 - Including a list of publications, patent applications, participation in scientific conferences, scholarships, prizes and other achievements.
2. Motivation letter
 - A brief explanation of your motivation to join the project.
 - Your research interests and how they relate to your previous studies and future goals.
3. Recommendation letter (optional, not required)

Declaration of consent to the processing of personal data for recruitment purposes with the following content: "I consent to the processing of my personal data contained in the application documents by the Poznań University of Technology based in Poznań for the purpose of conducting the current recruitment procedure."

Email title: Sonata21_Post-doc_Surname, Name

Selection Procedure:

1. Documents evaluation - formal assessment of the submitted documents according to the procedure complying the rules for employment in research projects funded by the NCN. Candidates who meet the formal requirements and predefined criteria will be selected for the interview.
2. Interviews - selected candidates will be invited via email to an online interview conducted by the recruiting organization via video conference.
3. Feedback and Admission Support - Candidates who are not selected will receive a reply. The successful candidate will receive support throughout the administrative procedures.

Application Deadline: 12 July 2026 - 23:59 (Europe/Berlin)

Call decision date: by 24 July 2026

We reserve the right not to select any candidate if none meets the required criteria. In such a case, the recruitment process may be extended accordingly.

Important:

It is the applicant's responsibility to ensure that the application is complete and complies with all the instructions provided in this advertisement.

Information clause

In accordance with Art. 13 of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46 /EC (hereinafter referred to as GDPR) we inform that:

1. The administrator of your personal data is **Poznan University of Technology** located at **Jacka Rychlewskiego 1, 61-131 Poznań** e-mail: biuro.rektora@put.poznan.pl, phone: 61 665 3639.
2. Contact details of the Data Protection Inspector - Piotr Otomański, e-mail: iod@put.poznan.pl,
3. Your personal data will be processed in order to carry out the recruitment process; the legal basis for the processing of your personal data is voluntarily and knowingly expressed by your consent according to art. 6 section 1 (b) GDPR.
4. Personal data will not be passed on to processing entities (**art. 28 section 1 GDPR**). They can be only transferred only to bodies authorized by law.
5. Personal data will be kept for the period of the recruitment process or until you withdraw your prior consent, but its withdrawal does not affect the legality of the processing which was carried out on the basis of consent before its withdrawal.
6. You have the right to access your personal data, the right to rectify them, the right to transfer them, and if applicable, also to remove them, to limit processing and the right to object to processing.
7. You have the right to lodge a complaint with the President of the Office for Personal Data Protection when you feel that the processing of your personal data violates the provisions of the General Data Protection Regulation of 27 April 2016 (GDPR).
8. Providing by you your personal data is voluntary, however, the consequence of not providing personal data may lead to inability to consider your candidacy for a vacancy.
9. Your data will not be processed in an automated way, including profiling.