

25.06.2024, Poznań, Poland

## **Research scholarship for PhD candidate in environmental biotechnology (high-throughput characterization of methanotrophic bacteria)**

The project "**Biosynthesis of secondary metabolites from methane with genetically engineered methanotrophs (C1-BIOREF)**" (PI: Mateusz Łęzyk) is financed by the National Science Centre (NCN, Poland) under 2023/50/E/ST8/00556 grant agreement.

The general aim of the project is to establish bioconversion process of selected methane feedstocks (such as biogas from landfills or anaerobic digesters) into biochemicals by genetically modified methanotrophs, reveal the molecular mechanisms determining the yield of bioproducts and to investigate the possibility of improving the selected aspects of the fermentation process.

For further information please check:

<https://www.ncn.gov.pl/sites/default/files/listy-rankingowe/2023-06-15-lut7739ikitila/streszczenia/598019-pl.pdf>

We are looking for a PhD candidate, interested in applying high-throughput biological methods (genomics, transcriptomics, proteomics) for characterization of methanotrophic bacteria and modeling of their metabolism in order to establish/improve environmentally-friendly processes to produce bio-materials.

### **Your tasks will be to:**

1. Characterize selected methanotrophic bacteria via high-throughput biological methods (genomics, proteomics)
2. Selecting targets for genetic manipulation of methanotrophic strains via genome scale metabolic modelling
3. Develop ideas and hypotheses put forward in the research project
4. Take part in scientific, dissemination and collaboration activities related to the project and the research group

### **It is expected that the candidate will have:**

- M.Sc./M.Res. degree in biotechnology, microbiology, computational biology, environmental sciences or in a closely related subject,
- good collaboration and communication skills (good command of English is a necessity),
- experience in delivering seminars and writing reports/articles,
- at least a basic experience using Python/R,
- strong motivation for scientific work, an eye for details and be able to take on highly challenging tasks.

It is considered a huge asset that:

- the candidate has a background in microbial metabolism and comparative genomic computational analyses,
- the candidate possesses any experience in fermentation of gaseous substrates such as syngas or methane,
- track record of publications related to microbial fermentation and/or fermentation of gaseous substrates.

We look very much forward to receiving your application if you:

- appreciate working on a high impact cross-disciplinary collaborative project with potential to solve a global environmental challenge,
- enjoy good collaborations, and the relaxed atmosphere in our group.

### **We offer:**

- **a stipend in an amount consistent with national regulations** (Act - Law on Higher Education and Science and the Regulation on the amount of the minimum monthly basic salary for a professor at a public university).
- The project is carried out in Water Supply and Bioeconomy Division at the Institute of Environmental Engineering and Building Installations, Faculty of Environmental Engineering and Energy, Poznan University of Technology (address: Berdychowo 4, 60-965 Poznan, PL)
- **Funding for 4 years**
- Scientific training, support from peers, and academic mentoring

### **Additional info**

- Appointment to be started on the 1<sup>st</sup> of October 2024
- Apply now (or ask any questions you may have) to: [mateusz.lezyk@put.poznan.pl](mailto:mateusz.lezyk@put.poznan.pl)
- In the subject include "C1-BIOREF – PhD student" and your first and last name
- Your application must be in English. Please submit applications as one PDF file containing all materials. The file must include:
  - A letter motivating the application (cover letter)
  - Curriculum vitae
  - Grade transcripts and scan of BSc/MSc diploma
  - List of publications
  - At least one letter of recommendation and contact to a former or current scientific supervisor
- **We will collect applications until 12<sup>th</sup> of July 2024.** The PhD-student will be selected from candidates in the open competition, according to the procedure complying the rules for granting employment in research projects funded by the NCN. The competition will be decided on 15<sup>th</sup> of July 2024.
- The competition may be extended until a suitable candidate who fulfills all requirements is found.
- All interested candidates irrespective of age, gender, race, disability, religion or ethnic background are encouraged to apply.
- The application must contain the following statement to allow us to process your data: ‘I consent to the processing of my personal data contained in the application documents by the Poznan University of Technology based in Poznań in order to carry out the current recruitment procedure.’

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 Pl. Marii Skłodowskiej-Curie 5, 60-965 Poznań, Poland, e-mail: [biuro.rektora@put.poznan.pl](mailto: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](mailto: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 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.