



Reference number 96/2024

## **Doctoral Researcher in developing biofilm reactors for chemical production (m/f/d)**

Founded in 1409, Leipzig University is one of Germany's largest universities and a leader in research and medical training. With around 30,000 students and more than 5000 members of staff across 14 faculties, it is at the heart of the vibrant and outward-looking city of Leipzig. Leipzig University offers an innovative and international working environment as well as an exciting range of career opportunities in research, teaching, knowledge and technology transfer, infrastructure and administration.

The Research and Transfer Center for Bioactive Matter (b-ACTmatter) at Leipzig University is currently offering a doctoral researcher position. The position is part of the M-ERA.NET Call 2023 funded project "LivMat - Productive catalytic living materials: combining 3D biobased fibrillar membranes with synthetic microbial consortia to produce chemicals." We seek to fill the above position from 1 August 2024. The position will be filled subject to the approval of the third-party funder.

Leipzig University coordinates the LivMat project, and the consortium consists of Helmholtz-Centre for Environmental Research (Leipzig, Germany), University of Latvia (Riga, Latvia), Istanbul Technical University (Istanbul, Turkey), Kaunas University of Technology (Kaunas, Lithuania), and Solaga UG (Germany). In this project, we aim to capture and utilise natural resources (e.g., natural fibers) and waste resources (e.g., CO<sub>2</sub>) for developing catalytic living materials (cat-LMs) that are robust, energy-efficient, and scalable for chemical production. The overarching goal of this PhD project is to build synthetic microbial consortia and evaluate their biofilm growth within porous materials to develop scalable biofilm-based bioreactor prototypes for the continuous production of chemicals.

### **About the position**

- Fixed term of 3 years (depending on the formal approval of funding)
- 65 % of a full-time position
- Planned remuneration: salary group E13 TV-L

### **Duties**

- Selecting productive synthetic microbial consortia for chemical production
- Growing microbial biofilm consortia within porous materials and analysing their catalytic performance
- Development of biofilm-based reactor concepts to perform continuous biotransformation
- Based on these findings, a laboratory-scale prototype for the continuous production of chemicals will be established
- Providing high-quality scientific outputs in the form of journal publications and especially technology transfer
- Presenting your research at conferences and workshops

### **Requirements**

- You hold a master's degree in bioprocess engineering, biotechnology, microbiology, or equivalent in a relevant subject area
- Previous experience in whole-cell biocatalysis is a substantial surplus
- Experience in biofilm cultivation systems is desirable but not a must
- Excellent team play, excellent oral and written communication skills in English
- High motivation and excellent organisational skills, desire for technology transfer

### **What we offer**

- A modern and international working environment in one of Germany's most vibrant and fastest-growing cities
- Flexible working times with a focus on creating a sustainable work-life balance
- Broad research infrastructure with the possibility of cooperation with our many national and international partners from academia and industry
- The opportunity to visit conferences and workshops

- A big interdisciplinary team with colleagues from various thematic backgrounds in a familiar working atmosphere
- Pension plan
- A discounted local public transport ticket (e.g. the Deutschlandticket as a job ticket)

Please send your application with the usual documents (including a one-page letter of motivation stating your reasons for joining this PhD project, your master's (or equivalent) certificate with grades in German or English and contact details of two referees), quoting **reference number 96/2023**, to: **Leipzig University, Research and Transfer Center for bioactive matter, Head of junior group BIOMAT, Rohan Karande, Johannisallee 21, 04103 Leipzig** by **7 June 2024**. Interviews will be held between 17 and 21 June 2024. You are also welcome to email your application as a single PDF file to [rohan.karande@uni-leipzig.de](mailto:rohan.karande@uni-leipzig.de).

Please contact Rohan Karande ([rohan.karande@uni-leipzig.de](mailto:rohan.karande@uni-leipzig.de)) or Alexander Franz ([alexander.franz@uni-leipzig.de](mailto:alexander.franz@uni-leipzig.de)) for questions about the position or the application.

Please note that it is not possible to guarantee confidentiality and rule out unauthorised access by third parties when communicating by unencrypted email.

We kindly request that you submit copies only, as we are unable to return application documents. Interview expenses will not be reimbursed.

Leipzig University aims to increase the proportion of women in positions of responsibility and therefore expressly invites qualified women to apply. Severely disabled persons – or persons deemed legally equal to them under Book IX of the German Social Code – are encouraged to apply and will be given preference in the case of equal suitability.

### ***Privacy information***

*If you choose to apply and send us your documents, you do so voluntarily. Any personal data contained within your application documents, or obtained during an interview, will be processed by Leipzig University – as the advertiser of the position – exclusively for the purposes of the selection process for the position advertised. It will not be passed on to third parties without your consent in the individual case. The legal basis for such data processing is Sect. 11(1) of the Saxon Data Protection Implementation Act (SächsDSDG) in conjunction with the EU General Data Protection Regulation (GDPR). The controller for the application process within the meaning of the GDPR is the addressee of the application, specified in the advertisement. Your personal data will be stored for six months after the end of the recruitment process and then erased or destroyed in accordance with data protection regulations. You may refuse or withdraw your consent with effect for the future without giving reasons. In these cases, Leipzig University will not or no longer be able to process and consider your application. Under the GDPR, subject to the relevant statutory requirements you have the following rights vis-à-vis the addressee of the application with regard to your personal data: right of access (Art. 15 GDPR); right to rectification of inaccurate personal data (Art. 16 GDPR); right to erasure (Art. 17 GDPR); right to restriction of processing (Art. 18 GDPR); and right to object to processing (Art. 21 GDPR). If you have any questions, please contact the Data Protection Officer at Leipzig University (office: Augustusplatz 10, 04109 Leipzig). You also have the right to lodge a complaint with the Saxon Commissioner for Data Protection.*