Public job advertisement

43,000 students and 8,000 employees in teaching, research and administration, all working together to shape perspectives for the future – that is the University of Münster. Embedded in the vibrant atmosphere of Münster with its high standard of living, the University's diverse research profile and attractive study programmes draw students and researchers from throughout Germany and around the world.

The Institute of Molecular Microbiology and Biotechnology in the Department of Biology at the University of Münster is seeking to fill the position of a

Doctoral Research Associate Wissenschaftliche*r Mitarbeiter*in (salary level E 13 TV-L, 65%)

at the earliest possible date. We are offering a part-time position (65% FTE) for 3 years. Full-time employees are required to teach 4 hours per week during the semester.

Your tasks:

The position involves working towards a PhD project and is integrated into the new priority program SPP2451 "Engineered Living Materials with Adaptive Functions" funded by the DFG.

In the SPP 2451, new materials with programmable and adaptive capabilities will be created by combining living organisms with materials in a synergistic way. Materials with advanced property combinations like responsiveness to multiple factors, resilience or evolvability are envisioned. The SPP 2451 involves research teams in all of which scientists from chemistry/material sciences are working closely together with biologists.

In this specific project at the University of Münster, we are aiming to create polymer-based structures that include different bacteria of biotechnological relevance. More specifically, we want to create **hybrid structures of materials and bacteria that gain novel functionalities for biotechnological applications.** For this, we will closely cooperate with our SPP-partner at the Institute for Physiological Chemistry und Pathobiochemistry at the University of Münster.

The central tasks in the project include:

- Cultivation and genetic engineering of different bacteria of biotechnological importance (e.g. *Pseudomonas putida, Escherichia coli, Corynebactrium glutamicum* and cyanobacteria)
- Studying the interaction of these bacteria with new materials using physicochemical methods
- Developing new methods to characterize these engineered living materials
- Establishing the use of these materials for biotechnological application
- Establishing cooperation with other groups in SPP 2451

Our expectations:

- A graduate degree (i.e. German Diplom and/or master's degree) in (micro)biology, biotechnology, chemistry or biochemistry is required.
- Very good knowledge in biochemistry and molecular biology is essential.

- Strong interest in studying interactions of materials with microbial cells and the development of respective methods for this purpose is desirable.
- The ability to work in a team, communication skills, organisational skills and independent working methods are expected.

Your benefits:

- The opportunity to contribute to pioneering work in the area engineered living materials and the establishment of a scientific community in this area in Germany.
- The opportunity to collaborate in an interdisciplinary and international team.
- Our broad range of diverse work-time models offers great flexibility also when working from home.
- If you have family members or young children in your care, our <u>Family Service Office</u> offers concrete support to help you balance your private and professional responsibilities.
- As an educational institution, we are deeply committed to offering <u>occupational training and</u> <u>continuing education</u> opportunities tailored to your individual needs.

The University of Münster strongly supports equal opportunity and diversity. We welcome all applicants regardless of sex, nationality, ethnic or social background, religion or worldview, disability, age, sexual orientation or gender identity. We are committed to creating family-friendly working conditions.

We actively encourage applications by women. Women with equivalent qualifications and academic achievements will be preferentially considered unless these are outweighed by reasons which necessitate the selection of another candidate.

Are you interested? Then we look forward to receiving your application electronically (all documents combined into one PDF file) by **8 July 2024** to: <u>bodo.philipp@uni-muenster.de</u>

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