Technische Universität Berlin

Technische Universität Berlin offers an open position:

4 Positions - Research Assistant - 0.67 working time - salary grade E13 TV-L Berliner Hochschulen

The positions are available from 01.04.2025 for three years each and part of the joint DFG Research Training Group (RTG 2473/2) from Technische Universität Berlin, Freie Universität Berlin, Humboldt Universität zu Berlin, Universität Potsdam und FMP Berlin. At the same time, 2 further vacancies are available within the Research Training Group. Further details at www.synpepbio.de/apply.
There is the possibility of a doctorate.

Faculty II – Institute for Chemistry, Organic and Biological Chemistry and Faculty III – Institute for Biotechnology, Applied and Molecular Microbiology
Reference number: II-607/24 (starting at 01/04/25 / limited until 31.03.2028 / closing date for applications 02/01/25)

Working field:

The RTG provides a modern educational program on peptide research for doctoral students. It comprises 12 different collaborating peptides research groups from the Berlin/Potsdam area (www.synpepbio.de). As part of this highly innovative research training program, we are looking for candidates to undertake in the identification, production and characterisation of novel natural products, and the investigation of biosynthetic pathways and their mode of action, with different focuses:

Focus I - Biological Peptide Synthesis: The molecular biological and biochemical aspects of peptide biosynthesis and the downstream functions of these peptides are investigated. Methods used include gene inactivation, heterologous expression, in vitro reconstruction of enzymes and pathway engineering.

Focus II - Chemical Peptide Synthesis: Bioactive peptides are to be produced by chemical synthesis, modulated and examined and optimised with regard to their structure-activity relationship. Rare and non-natural structural modifications of peptides will also be synthesised.

The Süssmuth Lab offers an exciting, interdisciplinary research environment with excellent facilities for cell cultivation, natural product and protein purification (FPLC/HPLC), biophysical characterization (e.g. Fluorescence/CD spectroscopy), chemical synthesis as well as several NMR and Mass-Spec devices (LC-MS, MALDI-ToF) in-house. The group is involved in extensive co-operations within the Research Training Group and industry. Further details can be found on our group homepage (https://www.tu.berlin/biochemie). The working group is offering three of the vacancies with focus I or II.

The Meyer Lab (https://www.tu.berlin/mikrobiologie) deals with hyphal fungi, which are used as industrial cell factories (e.g. Aspergillus niger) on the one hand and pose a considerable threat (e.g. Aspergillus fumigatus) to humans and the environment on the other. More and more resistant hyphae fungi are being registered and require new antifungal agents. Using a broad spectrum of methods from the fields of micro- and molecular biology, protein biochemistry, biophysics and bioinformatics, genetics, etc., molecular target molecules for antifungal strategies are to be identified and modelled in order to find new, environmentally compatible and specifically antifungal active substances. The research group offers one of the open positions with focus I.

Requirements:

The research assistant has successfully completed an academic university degree (Master's, Diplom or equivalent) in (bio-)chemistry, molecular biology, biophysics, biotechnology or will complete it by the time of recruitment at the latest. In addition, specialised knowledge should also be available:

Focus I: basic knowledge of micro- and/or molecular biology in theory and practice (cultivation of E. coli and fungi, cloning techniques, PCR, etc.) and/or protein biochemistry (protein purification by chromatography, protein characterisation by MS and spectroscopic methods).

Focus II: theoretical and practical experience in the fundamentals of peptide synthesis chemistry, very good knowledge of bioanalytical techniques for the identification of synthesis products (MS, NMR).

Good knowledge of German and/or English required; willingness to acquire the respective missing language skills.

Desirable:
Successful applicants will have a strong interest in interdisciplinary collaboration in research, including molecular biology, (protein) biochemistry, bioanalytics, bioinformatics and structural biology.

If you are interested, please send your application **quoting the reference number, the Focus (I or II) and the group** with a cover letter (background and motivation), CV, certificates (including university degree) and the contact details of at least one person who would be willing to provide a letter of reference by e-mail as one single PDF file (max. 5 MB) to: **contact@synpepbio.tu-berlin.de**.

For further information concerning these positions please contact Dr. Erik Werner, email: erik.werner@tu-

berlin.de.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guaranty for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The participating institutions value the diversity of their members and are committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

The vacancy is also available on the internet at
https://www.personalabteilung.tu-berlin.de/menue/jobs/