We are looking for a

Doctoral Candidate (m/f/d)

"Biocatalysis with oxygen (Boxy)"

The research project and environment

This project deals with the investigation and engineering of NADH oxidases involved in enzymatic cascades for the production of fuels and other valuable chemicals from renewable raw materials. The project is realized together with our partners from the Technical University of Denmark (DTU). During your PhD you will have the opportunity to do a three-month research stay at the DTU. Your position is funded by the International Graduate School of Science and Engineering (IGSSE). During your PhD you will be part of IGSSE and you will have the opportunity to be part of an international and interdisciplinary qualification program designed by IGSSE. Furthermore, you will experience many benefits as a member of IGSSE (https://www.igsse.gs.tum.de/en/igsse/home/).

You will be part of the Chair of Chemistry of Biogenic Resources at the Technical University of Munich at the TUM Campus Straubing for Biotechnology and Sustainability. The Campus has been active in the field of biocatalysis for more than a decade. The site as a whole develops processes for sustainable and environmentally friendly chemical production. For this purpose, natural scientists, engineers, ecosystem scientists and economists work closely together in teaching and research.

Requirement

- Master's degree in biochemistry, biotechnology, chemistry or related sciences with above-average grades
- Confident use of biological databases
- Profound knowledge with molecular modeling and simulations (YASARA,...), experience with "docking" studies and enzyme engineering (mutagenesis,...)
- Profound knowledge of biocatalysis and molecular biology, Basic knowledge in bioinformatics
- Curiosity and interest in scientific issues
- High level of commitment as well as teamwork and communication skills

We offer

- As a TUM doctoral student, you are will be a member of IGSSE and benefit from an extensive qualification and continuing education program, funding for travel abroad, and target group-specific services and consulting.
- The scholarship is 2000 € per month, the employment is limited to four years.
- Severely disabled applicants will be given preference in the case of otherwise essentially equal suitability.
- The Technical University of Munich aims to increase the proportion of women in its workforce, and therefore expressly welcomes applications from women.

Application

• We look forward to receiving your application documents by 30.04.2023. Please send them exclusively by email to bew_cbr@cs.tum.de under the keyword **NOX**.

Technische Universität München

TUM Campus Straubing Dr. Luca Schmermund Lehrstuhl für Chemie Biogener Rohstoffe Schulgasse 16, 94315 Straubing E mail: bew_cbr@cs.tum.de www.cs.tum.de www.tum.de