

For the new Future lab we are looking to fill the position of a

*Opportunities
for Talents*

Research Assistant/Doctoral Candidate (m/f/d)

In the subject area of

H₂ biocatalytic cascades design in whole cells

The research project and environment

In this project, metabolic routes for the utilization of H₂ in producing green fuels and chemicals in whole cells and in cell free cascades are to be established. The work will involve engineering the metabolic pathways in suitable microorganisms and optimize the conversion of H₂ and C1 molecules into biofuels. The Department of Chemistry of Biogenic Resources at the Technical University of Munich's Straubing Campus for Biotechnology and Sustainability has been active in this field enzyme engineering for more than a decade. The Straubing Campus of TUM develops processes for sustainable and environmentally friendly chemical production. For this, natural scientists, engineers, social scientists and economists work closely together on site in teaching and research. The new established Future lab REDEFINE H₂ and TUM Network for Hydrogen and Power-to-X aim to bring together national and international expertise in the field of utilization and generation of green hydrogen <https://www.mse.tum.de/en/hydrogen-power-to-x/>. This project will be in close collaboration with international partners from Australia and UK.

Requirements

- Excellent degree in biotechnology, biochemistry, biology, chemistry or related sciences.
- In-depth knowledge and hand-on experience in molecular biology and fermentations
- Knowledge in metabolic engineering and instrumental analytics is desirable
- 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 will become a member of the TUM Graduate School and benefit from an extensive qualification and continuing education program, funding for international travel, and target group-specific services and consulting.
- Remuneration is in accordance with TV-L, level 13 (65%), and the appointment is limited to three years.
- Severely disabled applicants will be given preference in the event of otherwise essentially equal suitability.
- The Technical University of Munich aims to increase the proportion of women; applications from women are therefore expressly welcomed.

Application

Please send your detailed application including (CV (max. 2-pages), motivation letter (max. single page), academic record and proof of practical experiences) as a single PDF file by e-mail with the keyword (REH2M) until 15th of December to

Technical University of Munich

Chair of Chemistry of Biogenic Resources
Dr. Ammar Al-Shameri
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