

CALL FOR APPLICATIONS

The Werner Siemens Chair of Synthetic Biotechnology at the TUM School of Natural Sciences of the Technical University of Munich in Garching, has an opening for:

Research internship / Thesis project

on the following topic:

Engineering and characterization of terpene synthases

The Werner Siemens Chair of Synthetic Biotechnology is dedicated to the isolation, characterization and process-related optimization of enzymes and microorganisms for the production of industrial platform chemicals. The research focuses on the engineering and characterization of terpene synthases to design novel terpenoid scaffolds. You will combine experimental and computational approaches to evaluate designed diterpene synthase variants, assessing their stability, enzymatic activity and product profiles.

Your tasks:

- Genetic engineering and molecular cloning of enzyme mutants
- Cultivation of modified *Escherichia coli* for terpene production
- Analysis of terpene extracts using GC-FID and GC-MS
- Protein overexpression and purification
- Biophysical and biochemical characterization of functional diterpene synthase variants

Your qualifications

We are looking for a student with a background in molecular biology, biochemistry, biotechnology or related fields. The ideal candidate should have experience in molecular biology techniques, microbial cultivation and preferably some experience in bioinformatics. Familiarity with SnapGene software or analytical techniques such as gas chromatography is an advantage. Additionally, strong motivation, problem-solving skills and the ability to work independently as well as collaboratively are essential.

We look forward to receiving your application! Please submit it to us via email.



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