

CALL FOR APPLICATIONS: MASTER THESIS

The Chair of Werner Siemens for Synthetic Biotechnology at the School of NAT, Chemistry department at the Technical University of Munich in Garching has an opening for a Master's Thesis position

Experimental: Analytical Study of Red Algae Components

We are looking for a highly motivated Master's student to join our research group working on the biochemical and structural characterization of red algae components, focusing on pigments, sugars, and phycobilisomes. This project aims to develop and optimize extraction protocols to quantify and analyze these biomolecules, contributing to a deeper understanding of red algae physiology and potential biotechnological applications.

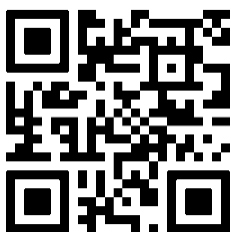
Responsibility and Tasks:

- Extraction of pigments (e.g., chlorophylls, carotenoids), sugars, and phycobilisomes from coralline red algae.
- Quantitative and qualitative analysis using HPLC and LC/MS MS methods.
- Sample preparation and interpretation of results obtained from advanced analytical techniques such as X-Ray Diffraction (XRD) and Scanning Electron Microscopy (SEM) for structural analysis.
- Tissue sectioning and confocal microscopy to study the spatial distribution of coralline red algae.
- Maintaining coralline red algae cultures.

Requirements:

The ideal candidate should have a background in biochemistry, biotechnology, construction technology or related fields. Familiarity with advanced imaging and analytical techniques such as XRD, SEM, and confocal microscopy is a plus. Prior experience in working in a biochemical lab is advantageous. A high level of motivation, strong problem-solving abilities, and the capacity to work both independently and as part of a team are essential. Please note that email applications should reference ABS1 in the Subject.

Contact Information:



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