



PhD position: Ecophysiology of Marine N₂-fixers

The Centre Algatech is currently looking for PhD students and Postdocs to join the group for the Ecophysiology of Algae in two recently funded projects on the physiology and ecology of marine N₂ fixing cyanobacteria.

Specifically, we are looking for a **PhD candidate** to join our project

Single-cell characterization of photosynthesis and N₂ fixation in the filamentous cyanobacterium *Trichodesmium*

All N₂-fixing cyanobacteria face the challenge of combining photosynthesis, which produces O₂, with N₂ fixation, which is inhibited by O₂. This project aims at understanding how these two processes are separated on a single-cell level in the globally important filamentous cyanobacterium *Trichodesmium*. We are looking for a motivated PhD student who will develop and apply techniques to investigate C- and N₂-fixation at a single-cell resolution, including stable isotope incubations combined with Nanoscale Secondary Ion Mass Spectrometry (nanoSIMS) as well as Fluorescence Kinetics Microscopy (FKM) and immunocytochemistry.

A BSc/MSc in Biological or Chemical Sciences with a focus on Marine Biology, Plant Physiology, Microbiology, Biophysics or related fields, as well as a profound interest in algal physiology are required. Experience in chlorophyll fluorescence techniques, protein biochemistry, stable isotope incubations and/or working with phytoplankton cultures is preferred, but additional training will be provided. The position may include traveling for nanoSIMS analyses at collaborating institutes. Maximum age 35 years due to funder's requirements. Funding is available for at least 3 years, subject to satisfactory progress after initial period. Start date at the earliest convenience.

For questions on this position, please contact Dr. Meri Eichner (eichner@alga.cz, project leader) or Prof. Ondřej Prášil (prasil@alga.cz, group leader). To apply, please send a motivation letter, CV and two reference letters or contact details for references to eichner@alga.cz, cc to prasil@alga.cz. Review of applications will start on Feb 20th. Skype interviews will be conducted end of February/early March.

Algatech Centre of the Institute of Microbiology of the Czech Academy of Sciences, is an internationally recognized centre for basic and applied research on microalgae, cyanobacteria and photosynthetic bacteria in Třeboň, Czech Republic (www.alga.cz). Algatech currently employs > 80 researchers and students in all areas of algal research. The Research in the Laboratory of Photosynthesis is focused on molecular biology, ecophysiology and biophysics of photosynthesis. We provide a friendly working environment, as well as assistance with administrative aspects of moving to the Czech Republic and accommodation for the first months. Třeboň is a small town located in the south of the Czech Republic close to the Austrian border, in a rural setting about 2 h from Prague and 30 min from Ceske Budejovice, surrounded by UNESCO-protected lake-land area and forests offering plenty of hiking opportunities, as well as by historical towns renowned for their local breweries.