

CENTRE ALGATECH

Institute of Microbiology, The Czech Academy of Sciences

Postdoc position: Ecophysiology of Marine N₂-fixers

The Algatech Centre, 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, funded in 1960 in Třeboň, Czech Republic (<u>www.alga.cz</u>). Research in the Laboratory of Photosynthesis is focused on the molecular biology, ecophysiology and biophysics of photosynthesis. We are 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 postdoctoral researcher 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 O_2 , with N₂ fixation, which is inhibited by O_2 . This project aims at understanding how these two processes are separated on a single-cell level in the globally important cyanobacterium *Trichodesmium*. We are looking for a motivated Postdoc who will develop and apply techniques to investigate C- and N₂-fixation at a single-cell resolution, using stable isotope incubations combined with Nanoscale Secondary Ion Mass Spectrometry (nanoSIMS) as well as Fluorescence Kinetics Microscopy (FKM) and immunocytochemistry.

A PhD in Biological or Chemical Sciences with a focus on Marine Biology, Microbiology, Molecular Biology, Plant Physiology, or related fields, as well as experience and a profound interest in the physiology of microalgae/cyanobacteria are required. Benefits are expertise in chlorophyll fluorescence techniques, stable isotope incubations, nanoSIMS and/or immunocytochemistry. Maximum age is 35 years due to funder's requirements (with exceptions granted e.g. for parental leave, periods of illness). Funding is available until end of 2021, subject to satisfactory progress after initial period, with possible extension until end of 2022. Start date at the earliest convenience.

For questions on this position, please contact Dr. Meri Eichner (<u>eichner@alga.cz</u>, project leader) or Prof. Ondřej Prášil (<u>prasil@alga.cz</u>, 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 August 20. Skype interviews will be conducted in late August/early September.

Algatech Centre currently employs > 80 researchers and students in all areas of algal research. The Laboratory of Photosynthesis is an international working group with active collaborations across Europe, the USA, Israel and Japan. We provide a friendly working environment, as well as assistance with the 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. The town is







Institute of Microbiology, The Czech Academy of Sciences

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.