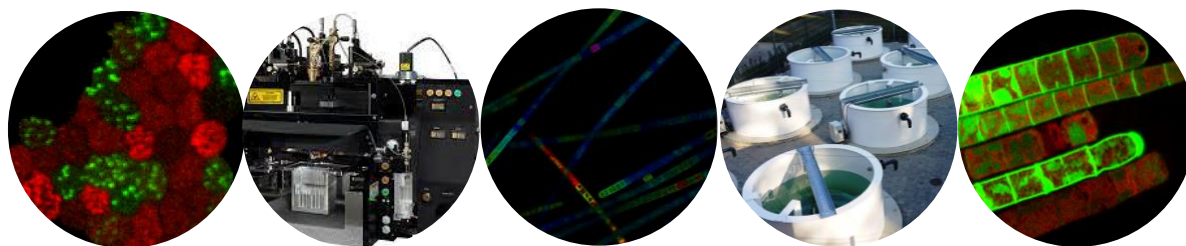


Join our team: PhD position on the Ecophysiology of Aquatic Cyanobacteria

Interested in climate change effects, phytoplankton ecophysiology and single-cell techniques? Join our new project launched January 1st, 2024: **How to cope with a fluctuating environment: Cell-to-cell heterogeneity versus acclimation in cyanobacteria**. We are looking for a motivated student to join the laboratory for Algal Ecophysiology at Centre Algatech of the Institute of Microbiology CAS in Trebon, Czechia.

THE PROJECT

Short-term fluctuations in environmental conditions such as temperature (e.g., heat waves) and carbonate chemistry (e.g., diurnal pH changes) are expected to increase with **climate change**. In this project, we will investigate how phytoplankton respond to fluctuations at different time scales. The project involves characterization of physiological acclimation mechanisms as well as development and application of innovative techniques to determine the role of cell-to-cell heterogeneity in this context.



The selected candidate will conduct **experiments with laboratory cultures and natural communities**, characterize their growth and (photo-)physiology and **develop and apply a range of single-cell techniques** including flow cytometry, fluorescence-activated cell sorting (FACS), Nanoscale Secondary Ion Mass Spectrometry (nanoSIMS), confocal microscopy and/or transcriptomics.

REQUIRED QUALIFICATIONS

- A BSc/MSc with a focus on **Aquatic Microbiology, Biological Oceanography, Plant Ecophysiology** or related fields
- A profound interest in **fundamental ecological questions** as well as in **physiological mechanisms**
- Experience in cultivation and experimental work with microalgae as well as flow cytometry, confocal microscopy or other imaging techniques are of advantage.
- Proficiency in data analysis and image processing are further benefits.
- We seek a candidate with good communication skills, who is self-motivated and able to work independently as well as in a team.

WHAT WE OFFER

- Work in a friendly international team focused on the molecular biology, ecophysiology and biophysics of photosynthesis, located at an internationally recognized center for basic and applied research on microalgae and bacteria (currently >80 employees)
- The position includes collaboration with institutes in Hungary (BLKI), the Netherlands (Utrecht University) and Germany (AWI)

- Plentiful learning opportunities concerning new methods, access to cutting-edge technology (microscopy, mass spectrometry etc.)
- Funding available for at least 3 years subject to satisfactory progress during initial trial period
- Enrollment at the University of South Bohemia, Ceske Budejovice (Physiology and Developmental Biology PhD program) provides opportunities for scientific and soft skill training, support for stays abroad and more. We also offer assistance with the administrative aspects of moving to the Czech Republic and accommodation for the first months.
- Třeboň is a small town set in a tranquil and invigorating environment 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 as well as historical towns.
- Start date at the earliest convenience, preferably April 2024

HOW TO APPLY

Submit a single pdf with a letter of motivation (max 2 pages) describing previous experience relevant to the project and research interests, as well as a CV including any publications and contact information for 2 references before February 20th, 2024 to eichner@alga.cz. Online or in-person interviews will be scheduled for the end of February.

For more detailed information or questions on the project feel free to contact the PhD project supervisor Dr. Meri Eichner (eichner@alga.cz).

The Lab: <https://www.alga.cz/en/c-285-ondrej-prasil-s-group.html>, <https://www.alga.cz/en/c-287-radek-kana-s-group.html>