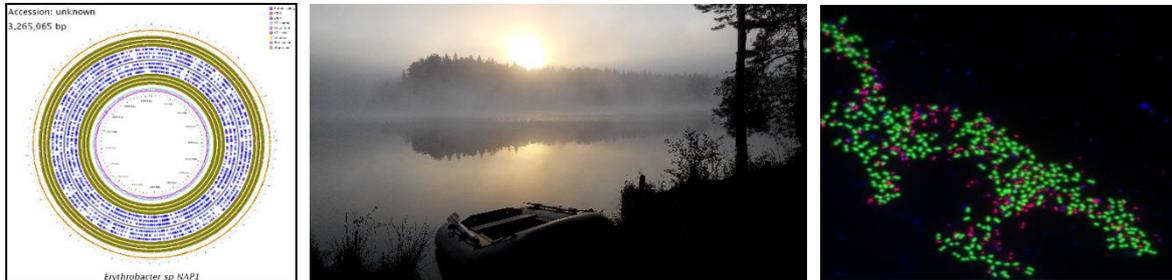


PhD position in Ecology of Photoheterotrophic Bacteria



Aerobic Anoxygenic Phototrophic (AAP) bacteria harvest light energy using bacteriochlorophyll-containing reaction centres. This additional energy allows them to grow more efficiently when compared to heterotrophic bacteria. AAP bacteria are common in aquatic habitats, but their role in the carbon cycle is still poorly understood.

Project:

We are looking for a motivated candidate who graduated in biology, ecology, microbiology, molecular biology, bioinformatics or similar fields to join our project **AAPs rule! Aerobic anoxygenic phototrophs: their role in carbon utilization in light in freshwater ecosystems.** The project focuses on the role of AAP bacteria in the freshwater carbon cycle. The main hypothesis is: due to the phototrophic activity of AAPs, carbon utilization efficiency by microbial communities is higher than presently assumed based on measurements conducted in the dark. Our results may alter the understanding of the carbon cycle.

The successful applicant will investigate diversity, dynamics and activity of AAP bacteria in a freshwater lake. She/He will learn field and experimental work, state-of-the-art molecular, microscopic and analytical techniques, scientific thinking and writing. She/He will have the opportunity to gain teaching experience and present results at international conferences.

Work place

The Laboratory of Anoxygenic Phototrophs at the Institute of Microbiology of the Czech Academy of Sciences in Třeboň is an international, competitive group working on physiology, genomics and ecology of anoxygenic phototrophic bacteria. The communication language is English. Our team collaborates with laboratories in Europe, USA and Japan. The Institute of Microbiology of the Czech Academy of Sciences is one of the top research institutes in the Czech Republic and Central Europe. We provide a friendly working environment, as well as assistance with the administrative aspects of moving to the Czech Republic, and affordable accommodation if required.

Třeboň is located in the south of the Czech Republic, close to Austrian and German border, and lies in the centre of a nature protected lake-land area. Třeboň and the neighbouring town České Budějovice are renowned for their local breweries, historical centres and cultural heritage sites.

Recruitment procedure - committed to equality and valuing diversity:

Motivational letter and CV should be sent to aap@alga.cz by **January 30th, 2019**. Interviews with selected candidates will be held in **February**. The expected start is at the earliest convenience, no later than **April 2019**.

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<http://www.alga.cz/en/c-371-laboratory-of-anoxygenic-phototrophs.html>