



# BIOLOGY CENTRE CAS

## Institute of Hydrobiology

address: Na Sádkách 702/7, 370 05 České Budějovice, Czech Republic

IBAN – CZ24 0800 0000 0000 0606 3942 | SWIFT CODE – GIBACZPX | VAT No.: CZ60077344

phone: +420 387 775 881 | fax: +420 385 310 248 | www.hbu.cas.cz | e-mail: hbu@hbu.cas.cz

## Post-doctoral researcher for evaluation and modelling of aquatic ecosystem of water reservoirs

The Institute of Hydrobiology (IHB; [www.hbu.cas.cz](http://www.hbu.cas.cz)) at the Biology Centre of the Czech Academy of Sciences in Ceske Budejovice, Czech Republic, is looking for a postdoc/scientist for a 3-year stay aiming at assessment of ecosystem processes and development of modelling systems for simulating hydrodynamics, biotic interactions and water quality in water reservoirs.

The IHB is the main institution in the Czech Republic engaged in comprehensive research of freshwater man-made reservoirs and natural lakes. Limnological interactions are studied both in water bodies and their catchments. The Institute performs research on different levels of interactions from the ecosystem, community, population, organismal, through cellular to molecular levels. The investigations combine regular long-term ecological research at several reservoir and lake systems, comparative and methodical studies and different scale experiments that allow examining the phenomena at different time and space scales. The Institute applies a holistic approach from elementary chemistry to high trophic levels and social effects on water systems. Special investigations going beyond the investigations of lakes and reservoirs involve ponds, running waters and other aquatic environment.

**Project description:** The successful candidate will be responsible for evaluation of ecosystem data and development of mathematical models of deep stratified reservoirs with the purpose to analyse one or more of the following areas:

- (i) Effects of hydrodynamics, such as mixing of the water column and stratified flows, on nutrient loading into the production layer and consequences for phytoplankton growth
- (ii) Biotic interactions in the planktonic and fish communities, i.e. the trophic cascade phytoplankton - zooplankton – fish
- (iii) Responses of the reservoir ecosystem within the existing long-term historical data sets of hydrology, reservoir operation, water quality and biota and in scenarios of future climate and socio-economic conditions in the catchment

The candidate will be involved in the ongoing projects of the IHB, such as *ClimeFish* (H2020-EU3.2, No. 677039; <http://climefish.eu/>) and *Bio-manipulation as a tool for the improvement of reservoir water quality* (EU Operational Programme Research, Development and Education No. CZ.02.1.01/0.0/0.0/16\_025/0007417).

**Qualifications required:** For this position the candidate must hold a PhD degree in Limnology, Oceanography, Geochemistry, Civil Engineering, Environmental Science or a related subject. We are looking for a person with proficiency in using statistical methods and mathematical models to analyse environmental data; programming skills are desirable. Candidates must be fluent in spoken as well as written English. We put great emphasis on personal suitability as cooperation, independence and a constructive approach.

**Position:** This is a temporary, full-time temporary position for 3 years with an annual gross salary of 15-25,000 € depending on qualifications and merit, and expected starting in February 2019 (optional). If successful, the employment can be continued after this period depending on the financial resources.

*Additional information/benefits:*

**Working conditions:** The employment is in compliance with Czech legislation and regulations. Employees receive the benefits of the Czech social security system covering sickness, maternity/paternity leaves and injuries at work. Support for leisure and holiday activities, coverage of required travels, SW/HW, and help with moving family members can be obtained from the Institute.

**International environment:** The opportunity to join a prestigious research institution and become a member of a young and growing research group.

**Local background information:** Ceske Budejovice is a medium-sized town ca. 150 km south of Prague with 100,000 inhabitants, a relaxed atmosphere, and a growing expat community at the Biology Centre and the University of South Bohemia. Both the town and the surrounding countryside provide numerous opportunities for research and leisure activities. Living costs are low by international standards. Foreign applicants will receive support in transferring to the Czech Republic. Czech courses are available for foreign staff and students to acquire basic skills in everyday situations. The Institute can also help to secure non-commercial accommodation at the campus shared by the Biology Centre and the University.

*How to apply and selection process:*

**Documentation submitted:** Applicants should send full application consisting of (1) cover letter outlining your skills and interest in the position, (2) CV including full publication list, (3) copies of relevant diplomas, , and (4) contact details for at least two academic referees.

**Applications and deadline for applications:** The application will be send to Biology Centre CAS, Personnel Department, Branišovská 31, 370 05 České Budějovice, Czech Republic to an e-mail address [vendela.aubrechtova@bc.cas.cz](mailto:vendela.aubrechtova@bc.cas.cz) indicating ref. ' PostDoc\_Biomanip\_BC-CAS\_IHB' in the subject of the email, with a copy to the mentor at: [hejzlar@hbu.cas.cz](mailto:hejzlar@hbu.cas.cz).

The deadline to submit the application is December 31, 2018.

**Selection process:** Pre-selection will be based on CV, experience, skills and motivation letter. Interviews will be done with the pre-selected candidates. Position offer will be sent to the successful candidate after the interviews.

**For further information please contact:**

Prof. Josef Hejzlar, +420 387 775 876, [hejzlar@hbu.cas.cz](mailto:hejzlar@hbu.cas.cz)