

Position title – Underwater  
sound  
physicist/acoustician/engineer



In this position, the appointee will be expected to work with sound signals obtained from various active sonars, in particular from broad-band and multi-frequency sonars for complementing basic understanding of functioning of freshwater ecosystems. The main task will be to analyze and process backscattering signal data of assorted objects, and to develop models and validate them with empirical field data in the aquatic environment. Also signal processing of acoustic fish telemetry data may be involved. The examples of relevant acoustic applications can be found at Fish Ecology Unit web page (<http://www.fishecu.cz/>). This is an exciting and diverse job with a lot of room for bringing in your own initiatives. We pay attention to personal development and offer good opportunities for that. You will be part of a highly motivated group of colleagues closely cooperating on exploring diverse freshwater ecosystems.

Target start date is June 2017 (negotiable). Initial appointment will be for 12 months, with an extension for up to 5 more years based on initial performance. Applicants wishing to further extend their contract beyond this period will be expected to secure at least part of their research through extramural funding. We offer a highly competitive salary in local standards (28000–56000 CZK monthly, before taxes) commensurate with the applicant's experience and skills. Successful applicant will be encouraged to develop his/her own research agenda compatible with the overall aims of the project.

#### Qualifications

- MSc/PhD (preferably) in a relevant field (hydro acoustics, Biological Sciences, Mathematics, Signal processing or Engineering. is desirable. Successful candidate without PhD can obtain this degree in partner University of South Bohemia.

#### Experiences

- Previous experiences in underwater acoustics are advantageous

#### Technical Knowledge and Skills

- Must have a strong understanding of acoustics and signal processing
- Must have good quantitative skills in statistics and mathematical modelling
- Must be familiar with at least one programming language, preferably Matlab, or R
- Excellent communication skills in written and spoken English, promising publication record commensurate with the career stage is desirable
- A valid driver's license for ordinary car is desirable
- Be a good team player, but be able to work independently and to take your own initiative

The employer, Institute of Hydrobiology (IHB, [www.hbu.cas.cz](http://www.hbu.cas.cz)) and SOWA (Soil & Water) Research Infrastructure at the Biology Centre of the Czech Academy of Sciences in Ceske Budejovice, carries out research in various freshwater ecosystems with main emphasis on man-made reservoirs and lakes. Labs and teams at IHB cover all aspects of freshwater ecosystems ranging from water chemistry to biochemistry, bacteria, protozoans, algae, zooplankton, fish and their predators. The fellows will participate in ongoing multidisciplinary research and will be encouraged to develop their own, cutting-edge research agenda building upon or extending current research activities.

#### HOW TO APPLY

Interested applicants should email the following documents to Prof. Jan Kubečka ([kubecka@hbu.cas.cz](mailto:kubecka@hbu.cas.cz)) 15 April 2017.

- 1) Cover letter outlining main research interests
- 2) CV including full publication list
- 3) Copy of PhD or MSc diploma
- 4) Copies of 1–2 relevant publications
- 5) Contact details for or at least 2 references.

Preliminary enquiries are welcome.

#### BACKGROUND

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. 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. The Institute can also help secure non-commercial accommodation, and PhD students have access to accommodation in dormitories at the campus shared by the Biology Centre and the University. Czech courses are available for foreign staff and students to reach a basic level of proficiency in everyday situations.