

OPEN ACCESS TO CENAKVA INFRASTRUCTURE

within school of doctoral studies



Are you a Ph.D. student?

SIGN FREE WITH YOUR RESEARCH!

We will support you and your project!



Come and use the top instruments for your research!

LC-QqQ- MS (TSQ Altis)

Faculty of Fisheries and Protection of Waters

High-resolution 3D X-ray microscope

Faculty of Science

Photoacoustic Gas Monitor – Innova 1512

Faculty of Agriculture



 **Apply for Open Access – its easy! With additional benefits!**

Research bonus 3,000 CZK for the Ph.D. student who use access to the infrastructure

Operating costs related to the implementation of infrastructure sharing 50,000 CZK/ grant (material, service, etc.)

Reward 4,000 CZK for guarantors of the projects (infrastructure expert) providing support to doctoral students

Project: Improving the quality of doctoral studies through mutual sharing of capacities of natural and agricultural sciences

Fund: JU Strategic Priorities Fund for the period 2021 - 2023

Aims: Efficient use and expansion of the existing cooperation of FFPW USB, FS USB and FA USB towards the support of the newly emerging concept of the School of Doctoral Studies and established practice of sharing infrastructures / capacities of CENAKVA, through implementing the model of operation of open sharing of infrastructures operating within CENAKVA on other involved components of USB and institutes of the CAS CR across sections of natural and agricultural sciences.

3 TOP INSTRUMENTS FOR YOUR RESEARCH

LC-QqQ- MS (TSQ Altis)

Laboratory of Environmental Chemistry and Biochemistry,
Faculty of Fisheries and Protection of Waters
Zátiší 728/II, 389 25 Vodňany

available
from 01/2022

TSQ Altis is a triple quadrupole mass spectrometer suitable for quantitative analysis on residual concentration levels of compounds; Ion source allows the use of heated electrospray or chemical ionization; A two-dimensional liquid chromatography system allows online solid-phase extraction suitable for residual analysis of pollutants in the water sample matrix; The Autosampler unit has a capacity of up to 324 samples; Analysis of 109 pharmaceuticals, 110 pesticides, and their metabolites; Sample types- soil, sludge and passive sampler extracts, water matrix; Limits of quantification- ng/mL (extracts), ng/L water.

High-resolution 3D X-ray microscope

Laboratory of Molecular Integrative Physiology in Drosophila,
Faculty of Science
Branšovská 1760, 370 05 České Budějovice

available
from 02/2022

Visualization of complex internal structures of biological objects without the need for their disintegration by fixation and tissue section is one of the challenges of modern biology. To overcome this limitation, we will soon operate the High-resolution 3D X-ray microscope. A series of hundreds of X-rays of a rotating object enables the subsequent 3D reconstruction of objects and their internal structures with a resolution of fewer than five μm . The device can be used to scan various objects from plants, stones, composite materials, building materials, and even live animals. The combination of natural contrast properties of biological structures with specific contrast agents and antibodies provides an infinite potential for implementing this tool in research carried out not only at the Faculty of Science. Furthermore, compact layout, absolute safety, and simple operation allow independent work of doctoral students.

Photoacoustic Gas Monitor – Innova 1512

Laboratory of Best Available Technique
Faculty of Agriculture
Studentská 1668, 370 05 České Budějovice

Photoacoustic Gas Monitor – Innova 1512 can simultaneously monitor the concentration of CO₂, NH₃, and water vapour in any air sample based on the principle of photoacoustic infrared spectroscopy. The device is well suited and very efficient in both short and long-term monitoring applications. In short-term monitoring, the benefit is portability, minimal warm-up time, and built-in data storage capability. In long-term monitoring, the system is especially stable, includes a multi-point sampling option and data handling. The device is equipped with a converter capable of taking samples from up to 12 different locations and can operate in difficult microclimatic conditions such as those in livestock farms. The detection limit for CO₂ is 13 ppm, and for NH₃ is 0.20 ppm.

available
from 01/2022

For more information contact us!



Faculty of Agriculture

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APPLY FOR OPEN ACCESS

the call for access is opened continuously!

Project proposal preparation

The applicant fills in the form for external / internal access. Internal access is intended for applicants - employees of the University of South Bohemia in České Budějovice, external access is intended for other applicants. The applicant communicates with the laboratory head about the proposed project.

Proposal sent to call manager

The electronic version of the form is sent by the applicant together with a structured CV to the call manager, who checks the formal part of the project and sends it for further evaluation. Call manager: Jaroslava Dubová, dubova@frov.jcu.cz, subject of email: OPEN ACCESS.

Proposal evaluated by head of the lab

The head of the laboratory evaluates the quality of the project and send it back to the manager (1 week). The time schedule of the project is checked to avoid the conflicts.

Proposal evaluated by the board

The manager sends the proposal for evaluation by the dean board. The manager announces the result of evaluation to the applicant.

Project implementation

If the project is accepted for implementation, the call manager will send an access contract to the applicant. The applicant sign the contract and send it to the manager. The applicant agrees on the project implementation with the head of the laboratory.

CENAKVA

South Bohemian Research Center
of Aquaculture and Biodiversity
of Hydrocenoses



Fakulta rybnářství
a ochrany vod
Faculty of Fisheries
and Protection of
Waters

Jihočeská univerzita
v Českých Budějovicích
University of South Bohemia
in České Budějovice



Zemědělská
fakulta
Faculty
of Agriculture

Jihočeská univerzita
v Českých Budějovicích
University of South Bohemia
in České Budějovice



Přírodovědecká
fakulta
Faculty
of Science

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