



Ph.D. study

Specialist in biological and biologically-related fields

Activities

- Daily Ph.D. study in discipline of Fishery or Protection of Aquatic Ecosystems;
- Work on own Ph.D. thesis topic (List of available Ph.D. thesis topics and contact to supervisors you can find below);
- Publication of manuscripts in Q1-Q3 journals;
- Presentation of results at international conferences, faculty seminars, realization of research internships abroad;
- Tuition in field of study, consulting or supervising of bachelor or master students,
- Supervising of summer school projects;
- Other activities within given research unit.

Requirements on applicants:

- Successfully completed master study field of environmental chemistry, toxicology, ecology, biology, protection of environment, fishery, biology, agriculture, veterinary or related fields;
- Admission into Ph.D. study program Fishery or Protection of Aquatic Ecosystems at USB FFPW, full-time form of study;
- General knowledge of biology, aquatic ecology and chemistry;
- English language knowledge minimally at B1 level;
- User knowledge of PC work – MS Office (Word, Excel, PowerPoint, Outlook); Communicativeness, responsibility, thoroughness, organizational ability, willingness to learn new things, stress resistance.

We offer

- Nice working environment in new faculty infrastructures;
- Study and work in international collective;
- Possibility for personal and professional development;
- Other benefits (5 weeks holiday, 4 days of indisposition vacation, MS Office for private usage);

Position start: October 2024

Working hours: reflecting full work load (40 hours a week)

Duration of position: 4 years (based on the duration of Ph.D. study)

Net month income: from 18 900 CZK (based on the study results)

Place of work: based on the supervisor (Vodňany, České Budějovice, Nové Hrady)

Get in contact with supervisor written by the selected theme. **In case of a mutual deal, complete the e-application to study.** Applicants for position should submit e-application to Ph.D. study at USB FFPW into e-mail lkacerova@frov.jcu.cz within **May 6, 2024**.

More information at:

<https://www.frov.jcu.cz/en/admissions/admission-procedures>



Topics for dissertation thesis for DSP Fishery for ac. year 2024/2025

Research Institute of fish Culture and Hydrobiology - Vodňany

Ing. Roman Franěk, Ph.D. – franek@frov.jcu.cz, +420 389 034 784

- Overcoming barriers in studying gametogenesis using surrogate reproduction /
Překonávání bariér ve studiu gametogeneze prostřednictvím náhradních rodičů

MSc. Oleksandr Malinovskyi, Ph.D. – omalinovskyi@frov.jcu.cz, +420 389 034 770

- The effect of pikeperch (*Sander lucioperca*) origin on their ability to express natural behaviour / Vliv původu candáta obecného (*Sander lucioperca*) na jeho schopnost projevovat přirozené chování

prof. Ing. Tomáš Polícar, Ph.D. – policar@frov.jcu.cz, +420 389 034 788, +420 602 263 594

- Increasing operation efficiency of RAS culture of selected high-valuable fish species with the aim to achieve better fish welfare and use system capacity / Zvýšení provozní efektivity chovu RAS u vybraného vysoce hodnotného rybího druhu s cílem dosáhnout lepšího welfare ryb a využití kapacity systému

Ing. Marek Rodina, Ph.D. – rodina@frov.jcu.cz, +420 389 034 614

- Spermatology of endangered, rare ("non-commercial") and invasive fish species of Central Europe and cryopreservation of their sperm / Spermatologie ohrožených, řídce se vyskytujících („nekomerčních“) a invazních druhů ryb střední Evropy a kryokonzervace jejich spermatu

Institute of Aquaculture and Protection of Waters – České Budějovice

doc. Ing. Jan Mráz, Ph.D. – mraz@frov.jcu.cz, +420 389 034 643, +420 737 221 913

- Circularity and sustainable aquaculture / Cirkularita a udržitelná akvakultura
- Feed optimization for sustainable aquaculture / Optimalizace krmiv pro udržitelnou akvakulturu

Institute of Complex Systems – Nové Hrady

Ing. Jan Urban, Ph.D. – urbanj@frov.jcu.cz, +420 389 033 842, +420 777 729 854

- Fish fins as a welfare indicator / Rybí ploutve jako indikátor welfare

Biology Centre of Czech Academy of Science – České Budějovice

doc. Mgr. Radka Symonová, Ph.D. – radka.simonova@hbu.cas.cz, +420 387 775 893

- Molecular background of the developmental switch from planktivory to piscivory in pikeperch brain / Molekulární mechanismy přechodu k dravému způsobu života v mozku mladých candátů



Topics for dissertation thesis for DSP Protection of Aquatic Ecosystems for ac. year 2024/2025

Research Institute of fish Culture and Hydrobiology - Vodňany

doc. Paride Balzani, Ph.D. – balzani@frov.jcu.cz

- Who eats who: using biomarkers to reveal food links in aquatic ecosystems / Kdo žere koho: použití stabilních izotopů k odhalení potravních vazeb ve vodních ekosystémech

doc. Ing. Martin Bláha, Ph.D. – blaha@frov.jcu.cz, +420 389 034 611

- Urban waters: a source of hidden biodiversity of non-native species / Vodní plochy měst a obcí: skrytý zdroj biodiverzity nepůvodních druhů

Ing. Bc. Kateřina Grabicová, Ph.D. – grabicova@frov.jcu.cz, +420 389 034 752

- Polar micropollutants and aquatic organisms – a study of fate and effects with application of targeted and non-targeted LC/HRMS analysis / Polar micropollutants and aquatic organisms – a study of fate and effects with application of targeted and non-targeted LC/HRMS analysis

Dr. Phillip Haubrock, Ph.D. – phillip.haubrock@senckenberg.de

- Spatial patterns of biological invasions and their impacts on biodiversity / Prostorové modely v otázách biologických invazí a jejich důsledky pro biodiverzitu

doc. Ing. Vladimír Žlábek, Ph.D. – vzlabek@frov.jcu.cz, +420 389 034 730

- Bioaccumulation dynamics of emerging contaminants in aquatic invertebrates / Bioakumulační dynamika emergentních kontaminantů ve vodních bezobratlých organismech

Institute of Aquaculture and Protection of Waters – České Budějovice

Mgr. Otakar Strunecký, Ph.D. – ostrunecky@frov.jcu.cz, +420 389 034 683

- Plasmid-encoded nitrogen fixation in cyanobacteria / Plazmidem kódovaná fixace dusíku u sinic

Institute of Complex Systems – Nové Hrady

prof. RNDr. Dalibor Štys, Ph.D. – stys@frov.jcu.cz, +420 389 033 843, +420 777 729 581

- Detection of particles in liquids using flow light microscopy / Detekce částic v kapalinách pomocí průtokové světelné mikroskopie
- The use of human tissue cultures as rapid, sensitive and semi-specific biosensors for the detection of pollutants and bioactive compounds / Využití lidských tkáňových kultur jako rychlých, citlivých a polospecifických biosenzorů pro detekci znečišťujících látek a bioaktivních sloučenin

Ing. Jan Urban, Ph.D. – urbanj@frov.jcu.cz, +420 389 033 842, +420 777 729 854

- Fish behavior as environmental markers / Chování ryb jako environmentální markery