

Interdisciplinary postdoc fellowship in biogeochemical ecology (2.5 years in Prague)

We offer a full-time postdoctoral position (2.5-year contract) in an interdisciplinary field encompassing biogeochemistry, ecotoxicology, ecology, and environmental science. The successful candidate will join the research team of Markéta Zárbybnická at the Dept. of Ecology in collaboration with Vladislav Chrastný at the Dept. of Environmental Geosciences, both at the Czech University of Life Sciences in Prague, Czech Republic.

Research topic:

This research is part of the project *Small mammals as key indicators of sublethal impacts of air pollution and metal(loid) deposition in terrestrial ecosystems* funded by the Czech Science Foundation (GAČR). This project investigates how pollution in terrestrial ecosystems impacts the dynamics, demography, and tissue health of small mammal populations. It also explores the bioaccumulation of potentially toxic elements (PTEs) throughout the food chain, aiming to provide robust evidence for establishing small mammals as reliable bioindicators. To achieve these objectives, we utilize long-term data and specimen collection from the European Black Triangle (the Ore Mountains study area in northern Czechia), supplemented with contemporary samples from diverse sources and contaminant levels.

Job responsibilities:

- Writing and publishing scientific papers as the lead author.
- Performing data management and statistical analyses, including multivariate and GLM statistical analyses (using R, Canoco, or similar tools).
- Preparing biological samples for chemical concentration and isotope analyses.
- Assisting with Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) to measure metal(loid) concentration and conduct isotope analyses.
- Assisting with collecting biological samples in the field.

The postdoc will examine biogeochemical patterns in various types of biological tissues, considering diverse pollution sources, species, and tissue types, as well as trace the origins of specific PTEs, particularly lead (Pb). The goal is to understand patterns and relationships among chemical elements and their interactions with environmental factors. The postdoc will be encouraged to present findings at conferences and actively contribute to the development of international collaborations. Opportunities for teaching are also available.

Requirements:

- PhD in environmental chemistry, biochemistry, applied chemistry, or fields related to chemistry, environmental toxicology, ecology, zoology, environmental sciences, or similar disciplines. Candidates with PhD in food science and biotechnology are also encouraged to apply.
- Demonstrated ability to conduct research from developing scientific questions to producing peer-reviewed publications.
- Proficiency in using R and other similar software, particularly multivariate analyses and generalized linear models.
- Experience in laboratory analyses and field collection of biological samples is desirable.

We offer:

- **Gross salary of 55,000 CZK/month (approx. 2,180 EUR as of Jan 2025)**, which is approximately 40,700 CZK/month net. The median gross salary in the Czech Republic in the first quarter of 2024 was 38,500 CZK/month. For accommodation costs, see <https://www.sreality.cz/en>.
- **The starting date for the position is July 2025**, or as soon as thereafter as possible.
- Health insurance and (Czech) social security are standard parts of the employment contract.
- 25 days of paid holiday per year + 5 sick days.
- Motivational bonus payments for high-quality publications.
- Funding for travel to conferences and international meetings.
- State-of-the-art laboratory equipment, including spectrometry and mass spectrometry instruments, advanced computing equipment and software, and access to journals and scientific databases.
- Comfortable office space and allowance for meals.
- International working environment (the working language is English), located on a green and spacious campus in Suchdol on the outskirts of Prague, 12 km from Prague Airport, with a 20-minute commute to Prague city center by public transportation or bike, and a 15-minute walk to several protected natural areas. The campus has various sports facilities, including a swimming pool, gym, athletic track, and indoor and outdoor playfields. The university also offers affordable on-campus accommodation, as well as holiday accommodation in the mountains outside Prague. Prague is one of the safest cities in the world with excellent public transportation, international accessibility, and healthcare.

Applications:

- To apply, please send a **single .pdf file** of less than 10 MB that contains the information stated below to the following email: pollchain@fzp.czu.cz.
- Motivation letter (1-2 pages) describing your expertise, research interests, why you consider yourself a good fit, and where you see yourself and your research in the future.
- Your CV, including your publications and any other relevant or interesting outputs (e.g., personal website, reports, data repositories, etc.).
- Contact details for 2-3 academic referees, such as your former supervisor, boss, or collaborator.
- Your preferred starting date.
- Include "POLLCHAIN postdoc" and your name in the subject line of the email and in the name of the .pdf file.

Review of applications will begin on **February 28, 2025**, and will continue until the position is filled.