



University of Zurich (UZH) and Eawag, the Swiss Federal Institute of Aquatic Science and Technology (Duebendorf, Switzerland), are internationally recognized institutes that are committed to the ecological, economical and social management of water. They offer excellent laboratory and field facilities for interdisciplinary research, large-scale experimental facilities, and long-term research programs and data sets. These institutions share common goals towards education, research, and technology transfer at the highest international level.

The Altermatt lab at the Department of Evolutionary Biology and Environmental studies (UZH) and the Department of Aquatic Ecology (Eawag) **has a vacancy for a**

PhD position in Ecology (4 years)

“Distribution, diversity and indicator status of groundwater amphipods in Swiss drinking water wells (*AmphiWell*)”

Amphipods are among the most common invertebrates in streams, rivers and lakes. They play a key role in the functioning of these ecosystems and are regularly used for monitoring and bioindication. While the diversity and distribution of the epigeal (above ground) amphipods is well documented, there is a significant and largely unknown diversity of amphipods in hypogean (below ground) habitats. The project *AmphiWell* will establish scientific baseline data about the diversity and distribution of amphipods in Swiss groundwaters. Using a citizen science approach, the PhD project will focus on identifying the diversity of amphipods in groundwater and its contribution to the ecological infrastructure of Switzerland. The project is in close collaboration with respective stakeholders (water providers). In a parallel postdoc project, these data will be used to establish eDNA metabarcoding methods to monitor groundwater from a biological perspective. Goals of the PhD project are:

- 1) First Swiss-wide documentation of the diversity and distribution of groundwater amphipod communities with a focus on drinking water wells.
- 2) Molecular and morphological identification of all species, including possible description of species new to science.
- 3) Documenting the distribution of endemic amphipod species and potential threats. Identify diversity hotspots and integrate them in the ecological infrastructure of Switzerland.

The position is to be filled with a motivated candidate, capable of conducting a large-scale biodiversity project on groundwater amphipods, using a citizen science approach.

The PhD student fellow will use a combination of citizen science approaches, large-scale field sampling, molecular and morphological analysis and description of groundwater amphipods of the genus *Niphargus* to describe their diversity across Switzerland. A high independence and intellectual contribution to the project is desired, with the opportunity to build on existing data and to integrate into an ongoing project (www.amphipod.ch). The project is co-funded by the Swiss Federal Office for the Environment (BAFU/FOEN) and some interest in stakeholder interactions would be wanted.

To apply, you must have a completed Master's degree in Ecology, Zoology, Molecular Ecology or a closely related science field. Applicants ideally should have some knowledge on spatial data analysis, invertebrate taxonomy and ecology, and molecular analyses. Experience in field work and/or programming is an asset. An excellent standard of written and spoken English is required. Applicants should have a valid driver licence and good German and/or French language skills. The successful applicant will be based in in the group of Prof. Dr. Florian Altermatt (www.altermattlab.ch) at Eawag and UZH in Duebendorf/Zurich and be part of the Zurich Life Science Graduate School. Dr. Roman Alther (Eawag/UZH) and Prof. Dr. Cene Fišer (University of Ljubljana) are further project partners. The position will be for a period of four years, and should start in summer 2020.

We are looking for a highly motivated, enthusiastic and independent person with a passion for science to join our highly international team. Zurich hosts many other research groups in ecology and biodiversity research, and is among the world's leading cities in terms of science, culture and quality of life. Applications from women are especially welcome.

For further information about the position please consult www.altermattlab.ch or contact Prof. Dr. Florian Altermatt: florian.altermatt@eawag.ch.

Applications must be submitted by April 15 2020. Your application should include a letter of motivation, a complete CV, relevant diplomas, and names and contact information for three references.

We look forward to receive your application through this webpage. *Any other way of applying will not be considered.* Please click on the link below, this will take you directly to the application form.

<https://apply.refline.ch/673277/0779/pub/1/index.html>