

Eawag, the Swiss Federal Institute of Aquatic Science and Technology, is an internationally networked aquatic research institute within the ETH Domain (Swiss Federal Institutes of Technology). Eawag conducts research, education and expert consulting to achieve the dual goals of meeting direct human needs for water and maintaining the function and integrity of aquatic ecosystems.

The Department of Environmental Chemistry (Uchem) invites applications for a

## **PhD Position on the Bioaccumulation and Biotransformation of Organic Compounds in Aquatic Invertebrates**

Knowledge on the bioaccumulation and biotransformation of anthropogenic organic pollutants in aquatic organisms is essential to mechanistically link the environmental exposure with ecotoxicological effects. The aim of this research is to (1) study the different exposure uptake pathways of organic compounds in target invertebrates (*Hyalella azteca* and *Gammarus pulex*), (2) determine their spatial distribution within the organisms and (3) investigate the influence of their biotransformation as an important parameter that modulates bioaccumulation. Laboratory experiments with invertebrates will be analysed using liquid chromatography coupled to high resolution mass spectrometry as well as mass spectrometric imaging. The whole organism concentration dynamics will be studied using toxicokinetic modelling.

**If you are** excited about this topic, and you hold an M.Sc. in environmental, analytical, biological chemistry or similar, you are invited to apply. Prior experience in working with aquatic organisms and/or mass spectrometric methods are strong assets. The candidate must be eager to execute several laboratory techniques including (but not limited to) biological and chemical methods and then supplement these approaches with toxicokinetic modelling. We offer a very dynamic and collaborative research environment which profits from state-of-the-art infrastructure and support. In addition, the PhD student will further work alongside our collaborator at the University of Copenhagen for spectrometric imaging. The student will be registered in the Environmental Systems Science Department at ETH Zurich. Project funding is provided by the Swiss National Research Foundation and the intended start date is on 1 July 2019.

**Please submit your application by 30 May 2019.** Please include a letter of motivation explaining why you think you fit this position well, a CV with publications (if applicable), and the names and contact information of two referees.

**Eawag offers** a unique [research and working environment](#) and is committed to promoting equal opportunities for women and men and to support the compatibility of family and work. Applications from women are especially welcome. For more information about Eawag and our work conditions please consult [www.eawag.ch](http://www.eawag.ch) and [www.eawag.ch/en/aboutus/working/employment](http://www.eawag.ch/en/aboutus/working/employment).

For further information, please contact Prof. Juliane Hollender ([Juliane.Hollender@eawag.ch](mailto:Juliane.Hollender@eawag.ch)).

**We look forward to receiving your application.** Please send it ONLY through this webpage as other application methods will not be considered. Click on the link below to direct you to the application form.

<https://apply.refline.ch/673277/0703/pub/1/index.html>