

Eawag, the Swiss Federal Institute of Aquatic Science and Technology, is a Swiss-based and internationally networked aquatic research institute within the ETH domain. It is committed to the ecologically, economically and socially responsible management of water resources and aquatic ecosystems.

The Department of Urban Water Management announces a

## PhD Position in Environmental Engineering

**Focus.** Your research will focus on assessing spatio-temporal variations of micropollutants in sewer systems with an emphasis on the transformation of illicit drug target residues, pharmaceuticals and personal care products.

**Content.** Advanced analytical methods allow the detection of lowest concentrations of micropollutants in wastewater. The transformation of micropollutants in sewers is an important, yet poorly investigated, aspect in the context of determining i) illicit drug consumption by means of wastewater analyses and ii) the contribution of direct discharges into natural receiving waters. A first task is the identification of relevant variables influencing the transformation of micropollutants in lab scale experiments. The second task will be to verify and generalize hypothesis in full scale experiments. In a third step methods should be developed to reliably quantify the relevant variables throughout entire catchments.

**Additional job details.** Your research is part of *SEWPROF*, a European Marie Curie Initial Training Network. *SEWPROF*'s main objective is to provide an integrated approach towards public health monitoring. Innovative approaches will deliver near-real-time profiling of community-wide health and lifestyle through the analysis of human biomarkers in wastewater using a wide-range of methods including hyphenated mass-spectrometry techniques, bio-analytical techniques and real-time sensing. *SEWPROF* combines training through research with a carefully designed, strongly interlinked and dedicated programme of research projects. Each trainee is expected to do secondments and/or visits to different institutions to promote transnational and interdisciplinary training.

**Profile.** The successful candidate is expected to hold an MSc degree in environmental engineering sciences, environmental chemistry or relevant related fields and has a strong interest in scientific research. A strong background in mathematical modelling of environmental processes is an asset. Experience with geo-spatial analyses (GIS and statistics) and an interest in performing chemical analyses are desired. Fluency in English is required. German at a working level makes communication with local practitioners (full scale experiments) easier.

**The candidate must satisfy the eligibility requirements for an Early Stage Researcher under the European Commission Framework 7 Early Stage Training Scheme.** You are either an EU citizen or from outside the EU (subject to relevant immigration formalities), who has spent less than 12 months in Switzerland in the last three years (at the time of recruitment). You must also be in the first four years (full-time equivalent) of your research career. This is measured from the date when the degree was obtained that would formally entitle you to embark on a doctorate, either in the country in which the degree was obtained or in Switzerland.

**Benefits.** A full employment contract. Benefits associated with Marie Curie Fellowships including full social security, mobility and travel allowances, and a career exploratory allowance. The research project will be conducted at Eawag, which has a broad range of expertise in aquatic sciences, including urban water management, process engineering, chemistry, and toxicology. The supervisors maintain strong interactions with the Institute of Environmental Engineering and collaborate internationally. Both Eawag and ETHZ are located within the Zurich metropolitan area. The city of Zurich is continuously ranked among the top cities in the world for quality of life and is within close proximity to the Swiss Alps.

**Starting date, duration and supervision.** The duration of the position will be three years. Starting date is negotiable, yet as soon as possible after 1 February 2013. The PhD degree will be awarded by the Swiss Federal Institute of Technology Zürich (ETHZ).

**Application procedure and deadline.** Please submit your application in English – including a concise statement describing the motivation to work on this research project, curriculum vitae, copies of your academic qualifications and names and contact information of two references – through our online application tool. The deadline for applications is 15 December 2012 or until the position is filled. Informal inquiries before submitting an application are encouraged.

For further information please consult [www.eawag.ch](http://www.eawag.ch) or contact:  
Dr Christoph Ort, Email [christoph.ort@eawag.ch](mailto:christoph.ort@eawag.ch).

We look forward to receive your application. The quickest way is to apply online. Please click on the link below. This will take you directly to the application form.  
<http://internet1.refline.ch/673277/0158/++publications++/1/index.html>