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 Surface Waters Research and Management (Surf) has vacancies for

3 PhD student positions

each one in the field of Microbial Ecology, Inorganic Geochemistry and Organic Geochemistry

These PhD positions are part of the interdisciplinary 3-year research project "The regulation of Nitrogen Turnover in Lakes", funded by the Swiss National Science Foundation. Human activity has more than doubled the natural N cycle by fertilizer production and other sources. A large fraction of this N is transported to the oceans by rivers, where it can cause problematic eutrophication in coastal waters. Lakes are important sites of denitrification and N burial. In this project we will conduct a detailed interdisciplinary investigation of the processes and environmental parameters that control nitrogen removal in lakes.

The PhD positions offered will conduct

- investigations into the microbial community involved in nitrogen cycling and will determine the active microbial pathways responsible for N removal
- experimental characterization of nitrogen transformation processes on lake sediment cores, determine removal rates by direct chemical analyses and implement a physical-biogeochemical lake model
- characterization of organic compounds in sediments, application of stable isotope labeling techniques, and analysis of the products of nitrogen turnover in the water column

A team of experienced scientists from Eawag and ETH Zurich will support you in your work.

We seek applications from individuals with a profound interest in Microbial Ecology /inorganic and organic Geochemistry and Limnology. You should hold a MSc degree (or equivalent) in a relevant discipline (environmental sciences, biology, chemistry, geology). Experience in Microbiology and Molecular Biology laboratory techniques and specifically metagenomics is an advantage, as is applicable knowledge of aquatic ecology and ecosystems. Experience in chemical/analytical laboratory techniques, good lab skills and aptitude for fieldwork are required. We expect good writing and conversation skills in English. Since you will be working in a collaborative project, good team skills are also required.

At Eawag you will join either the Microbial Ecology group, the Geochemistry group Sensors and Analytic, or the Biogeochemistry group, and you will have the opportunity to work with researchers from several other research groups of the Surface Waters research department of Eawag, located at the Centre of Ecology, Evolution and Biogeochemistry in Kastanienbaum, Lucerne, Switzerland. Eawag Kastanienbaum lies at the shore of beautiful Lake Lucerne and offers a friendly, collaborative and interdisciplinary working environment, state of the art laboratories, and excellent working and living conditions. The successful candidates will be enrolled at ETH Zurich, one of the highest ranked Universities in Europe.

The starting date for the position is anticipated for March 2017 or as soon as possible. For further information, please contact Dr Beat Müller (beat.mueller@eawag.ch; +41 58 765 2149).

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 and http://www.eawag.ch/en/aboutus/working/employment/.

Applications should be submitted by 20 November 2016. Your application should include a letter describing your interests and their relevance to this position, a complete CV, university diplomas, and the names and contact information for two references.

We look forward to receiving your application. Please submit your application via the Eawag Jobs & Career webpage, any other way of applying will not be considered. The link below will take you directly to the application form.
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