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). It conducts research to achieve the dual goals of meeting direct human needs for water and maintaining the function and integrity of aquatic ecosystems.

The Paul Scherrer Institute PSI is the largest research centre for natural and engineering sciences within Switzerland. We perform cutting-edge research in the fields of matter and materials, energy and environment and human health. By performing fundamental and applied research, we work on sustainable solutions for major challenges facing society, science and economy.

For a collaboration project between the Laboratory for Waste Management and the microXAS beamline at the Swiss Light Source at PSI and the Department of Water Resources and Drinking Water (W+T) at Eawag, we are looking for a

Postdoctoral Fellow

X-ray Spectroscopy and Environmental Geochemistry

Your tasks
Microspectroscopic analyses on environmental samples can provide unique insights into molecular-level processes that control the fate and impact of trace elements in the environment. Such analyses however may be hampered by radiation-induced sample changes. Sample cooling offers a means to reduce such artifacts. In connection with ongoing research at Eawag and PSI on the environmental geochemistry of thallium, an environmentally highly relevant trace element, your two tasks are:

- Setup and installation of a cryostat system at the microXAS beamline at the Swiss Light Source that enables the microspectroscopic analysis of radiation- and redox-sensitive environmental samples
- Perform micro-XRF/XAS/XRD studies on the microscale distribution and speciation of thallium and its association with various host phases in soils, sediments or rocks

Your profile
You have a PhD degree in (environmental) geochemistry, mineralogy, chemistry, physics, material or environmental sciences. You are familiar with X-Ray absorption spectroscopy or other synchrotron based spectroscopic techniques and, ideally, their application in the field of environmental geochemistry. You are interested in environmental trace element geochemistry and in the further development, implementation and use of state-of-the-art synchrotron-based techniques for the elucidation of environmental processes. You enjoy working in an interdisciplinary research environment. Excellent communication skills in English are completing your application profile.

We offer
Our institutions are based on an interdisciplinary, innovative and dynamic collaboration. You will profit from a systematic training on the job, in addition to personal development possibilities and our pronounced vocational training culture. If you wish to optimally combine work and family life or other personal interests, we are able to support you with our modern employment conditions and the on-site infrastructure. Employment and main workplace will be at PSI, but you will also regularly work at Eawag (Dübendorf).

Your employment contract is limited to 2 years. For further information, please contact either Dr Andreas Voegelin (+41 58 765 54 70) from Eawag or Dr Daniel Grolimund (+41 56 310 47 82) or Dr Rainer Dähn (+41 56 310 21 75) from PSI.

Please submit your application online, including list of publications and addresses of referees, **via the PSI Jobs Opportunities portal** (position as a Postdoctoral Fellow; index no. 4402-00). Any other way of applying will not be considered. The following link will take you directly to the advertisement on the PSI Jobs Opportunities platform:

https://www.psi.ch/pa/job-opportunities/1444