

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 Molecular Environmental Geochemistry Group (Department Water Resources and Drinking Water) and the Aquatic Geochemistry Group (Department Surface Waters Research & Management) have a vacancy for a

## 24-month postdoc position (f/m/d) in a project on arsenic release from excavated rocks into water resources

**About the project**: Excavated rocks from underground construction represent a major waste stream in many densely populated regions. In Switzerland, uncontaminated excavated material must be reused to largest possible extent, for example for the restoration of littoral zones in lakes or the recultivation of gravel pits. However, rocks can contain naturally elevated levels of arsenic and other trace elements that necessitate an assessment of reuse-related risks to surface or groundwater resources. This project involves:

- A field study on the geochemical dynamics of As and other trace elements in a lake during the deposition of excavated rocks for restoration purposes
- Laboratory experiments on the release of As and other trace elements from excavated material as a function of its properties (composition, mineralogy, speciation, texture) and biogeochemical conditions

The work will include the use of state-of-the-art analytical techniques for the characterization of solutions, colloids, and solids. This applied biogeochemical research project should lead to new insights regarding the potential for trace element leaching from excavated rocks under different scenarios that are of direct relevance and interest to practice.

We are looking for a highly motivated postdoctoral researcher with expertise in environmental (bio)geochemistry, trace element geochemistry and/or environmental geology. Candidates should hold a PhD in environmental or Earth sciences or similar. Fieldwork experience, an interest in coupling biogeochemical and physical processes and in applied research, and experimental and analytical skills are highly desirable. The successful candidate should have excellent problem-solving skills, be adept at working independently and collaboratively, and have a proven publication record. Fluency in German is of great advantage The project offers the opportunity to collaborate with other research groups at Eawag and other institutions and to engage in collaboration and exchange with stakeholders from practice.

**Workplace:** The main workplace will be at Eawag Dübendorf (near Zürich); with regular stays at Eawag Kastanienbaum (near Lucerne).

**Eawag is** a modern employer and offers an excellent working environment where staff can contribute their strengths, experience and ways of thinking. We promote gender equality and are committed to staff diversity and inclusion. Female applicants and applicants from under-represented groups are especially encouraged. The compatibility of career and family is of central importance to us. For more information about Eawag and our work conditions please consult <a href="www.eawag.ch/en/aboutus/working/employment">www.eawag.ch/en/aboutus/working/employment</a>.



**Application**: Please submit the following documents:

- Curriculum vitae (CV) detailing your academic qualifications and research or other professional experience
- A cover letter describing your research interests, relevant skills, motivation for the project, how you
  meet the postdoc profile, and your earliest possible starting date
- Contact information for two professional references
- Proof of a PhD degree. Candidates who have not yet completed their PhD or have not been awarded their official degree yet will be considered if degree completion or a scheduled PhD defence date before 31 December 2024 is confirmed by the supervisor or institute

**Review of applications will begin on 5 August 2024** and the position will remain open until filled. The ideal starting date for the position is 1 September 2024 or as soon as possible thereafter.

For further information please contact Dr. Andreas Voegelin or Dr David Janssen.

**We look forward to receiving your application.** Please send it through this webpage, as any other way of applying will not be considered. A click on the link below will take you directly to the application form.

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