

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 System Analysis, Integrated Assessment and Modelling ([Siam](#)) is offering a

PostDoc position in the modelling and analysis of coupled human-water systems

We are looking for a scholar with a broad interest in the characterization of coupled human-water systems using mathematical modeling and/or data science. The postdoctoral researcher will integrate Prof. Dr Marc Müller's group on coupled human-water system, where he/she/they will participate in ongoing research with a sizeable portion of their time allocated to developing their own research program.

Relevant topics of current research within the group include: (i) the relationship between water resources and armed conflict, (ii) the food-security implications of migration, trade, and global land acquisitions, (iii) the relationship between water security and human rights in the context of extractive industries, (iv) trans-boundary governance of internationally shared rivers and aquifers and (v) the detection and attribution of socio-hydrologic change in data-scarce environments.

The successful candidate will have:

- A PhD in either water resources (e.g., hydrology, environmental engineering, or a comparable discipline), data science (e.g., statistics, spatial science, GIS) or quantitative social science (e.g., economics or policy analysis) with the willingness to gain literacy in the other disciplines
- Broad expertise in socio-environmental data science that includes one or (ideally) more of following domains: geospatial data analysis, data visualization, applied econometrics and causal inference, complex networks, machine learning, and remote sensing. Expertise in environmental (hydrological, land surface, or crop) modeling, behavioral modeling or microeconomic theory is a plus
- Fluency in R, or in a comparable programming language (e.g., Python, Javascript) with the willingness and ability to quickly transition to R. Experience in parallel or high-performance computing and/or Google Earth Engine is a plus
- A strong publication record and a proficient mastery of the English language, both written and spoken

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. The compatibility of career and family is of central importance to us. For more information about Eawag and our work conditions please consult www.eawag.ch and www.eawag.ch/en/aboutus/working/employment.

The deadline for applications is 5 July 2023 or until the position is filled. The start is planned for 1 September 2023 or to be agreed between parties. The initial period of employment will be one year with possibility of extension upon mutual agreement.

For further information about the position, please contact recruiting@eawag.ch.

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

<https://apply.refline.ch/673277/1058/pub/1/index.html>