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 Environmental Chemistry of Eawag and the NaToxAq Marie-Curie Initial Training Network offer a position as a

PhD Student in Environmental Chemistry

Topic: Natural Toxins and Drinking Water Quality – From Source to Tap

Background
This PhD project is part of a multidisciplinary European Training Network (ETN) on "Natural Toxins and Drinking Water Quality – From Source to Tap" (NaToxAq). The NaToxAq network is a collaborative research and training project with 10 partner institutions in 7 European countries and offers fully-funded fellowships to train 15 Early-Stage Researchers (ESRs, PhD level). NaToxAq aims to expand insight on natural toxin identity, analysis, fate, dissipation, removal during water treatment, health effects, and risk assessment under impact of climate change, to ensure safe and healthy waters for European consumers.

Plants, fungi and aquatic organisms can contaminate drinking water resources with hazardous toxins. Although of natural origin, the contamination is often anthropogenically triggered or accelerated, and under strong impact of climate change. NaToxAq will build an international training network facing these challenges of natural contamination. The ESRs will bring innovative solutions for safe water supply by creating models for predicting natural toxin loads and mitigation strategies on a catchment scale. These new insights will strengthen European policies, regulation of drinking water, and collaboration between academia and industrial/public enterprises also stimulating business potentials within the fields of water supply, monitoring and risk modelling. The NaToxAq network will be the first of its kind and thus has a marked potential to set standards within the field.

Stability of Natural Toxins in Surface Waters (ESR 10)
The PhD student hosted at Eawag in Switzerland will investigate the stability and possible transformation processes of emerging natural toxins in surface waters. The PhD student will isolate toxins and determine their abiotic hydrolysis rates, photochemical transformation mechanisms, and the interaction with dissolved organic matter and reactive oxygen species. This multidisciplinary project will advance our knowledge on degradation pathways and kinetics of natural toxins, deliver a more comprehensive understanding of their environmental half-lives, and allow to link chemical modifications to functional changes.

The successful candidate will have a Master's degree in environmental sciences, environmental chemistry or a related field, with substantial knowledge of analytical chemistry. Fluency in English (working language), creativity and initiative are critical requirements. For further information about the fellowship please contact the principle supervisor: Dr Elisabeth Janssen, Eawag - Department Environmental Chemistry (elisabeth.janssen@eawag.ch).

Duration of employment

The period of appointment for the Early-Stage Researcher is 36 months, starting 1 May 2017 or as soon as possible thereafter. The PhD enrollment will be at the Swiss Federal Institute of Technology Zurich (ETH), Switzerland.

Benefits
All fellows will receive a contract of employment as a full-time researcher for the relevant period of their appointment, which will include applicable benefits in the host country. All fellows will complete a comprehensive personalised career development programme, with targeted training measures and participate in a range of network events. Fellows will benefit from interdisciplinary cooperation and interaction within the network, providing them with the best preparation for a successful career in either academia or industry.

Marie Curie Fellowships for Early-Stage Researchers provide salaries in line with H2020-MSCA-ITN-2015. Additional allowances for mobility, travel and career development are also provided.

Experience and mobility conditions
To be eligible, applicants for Early-Stage Researcher fellowships must have no PhD and less than 4 years full-time equivalent research experience from the award of the degree which entitles them to undertake a doctorate. Applicants can be any nationality but at the time of selection must not have resided or carried out their main activity (e.g., work or studies) in Switzerland for more than 12 months in the 3 years immediately prior to the starting date of the fellowship. Short stays, such as holidays, are not taken into account.

The eligibility requirements for Marie Skłodowska Curie Fellowships are non-negotiable and ineligible applicants will not be considered. Further information and the full terms and conditions regarding eligibility are provided on http://ec.europa.eu/research/mariecurieactions/about-msca/actions/itn/index_en.htm

Application process
Candidates should provide the following information in their application in English:

- Cover Letter, stating which PhD project you are applying for and detailing your motivation and background for applying for the specific PhD project. Please indicate if you have applied for other NaToxAq PhD fellowships (if yes, which)
- A 1-page proposal for research activities to pursue in the PhD study program
- A detailed CV including technical and analytical skills and publications if applicable
- All academic level certificates (BSc and MSc) including university grades itemized by each course. Foreign documents should be sent as certified English translations.
- A synopsis (abstract) of the BSc and MSc thesis if applicable, or any previous research project
- 1-3 professional referees (Name, address, telephone & email)

The closing date for applications is 1 December 2016 and application received after this date will not be considered.

Additional information
We welcome applications from all qualified candidates regardless of age, gender, race, religion, nationality or ethnic background. 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 www.eawag.ch/en/aboutus/working/employment.

Further information on the NaToxAq project and consortium partners can be found on: www.natoxaq.eu.

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.

Apply now Print

Eawag: Swiss Federal Institute of Aquatic Science and Technology

Here you can find the online link to the application form:
https://apply.refline.ch/673277/0469/pub/1/index.html