

The Environmental Microbiology Laboratory (EML) in the School of Architecture, Civil and Environmental Engineering, EPFL, is seeking

**A post-doctoral researcher**

**to investigate the mechanistic underpinnings of uranium isotopic fractionation**

**Requirements:**

- educational and research background in environmental chemistry or geochemistry
- knowledge of redox processes and aqueous speciation is an asset
- computer skills: Word, Excel, Powerpoint
- language: fluent English
- self-motivation, scientific curiosity, critical thinking and rigor in experimental work
- good communication skills and ability to work as part of an international team
- enthusiasm, willingness to learn, good organizational skills

**Work description :**

The project deals with relating the isotopic fractionation of uranium during reduction to the mechanism(s) of reduction (both biological and abiotic). It will involve *ab initio* calculations with a collaborator in Japan, laboratory experiments with uranium and various reducing agents, the use of spectroscopy and microscopy to decipher mechanistic details of uranium reduction.

**Tasks:**

- perform experiments with natural uranium under anaerobic conditions
- travel to Japan for 6 months-1 year to perform *ab initio* calculations
- characterize uranium species using a variety of spectroscopic tools
- perform first-class scientific research
- participate in general laboratory tasks
- write publications
- attend and present at international conferences

**We are offering :**

- an opportunity to develop a scientific career in the context of an interdisciplinary project
- an opportunity to learn high-end techniques and approach
- excellent research conditions and competitive remuneration
- a multi-cultural and stimulating scientific environment

**Start date :** June 1st, 2017

for further information, please contact Professor Rizlan Bernier-Latmani via e-mail:  
[rizlan.bernier-latmani@epfl.ch](mailto:rizlan.bernier-latmani@epfl.ch)

Applicants should submit a letter of interest, a curriculum vitae, university diplomas and contact information for three references by email to [rizlan.bernier-latmani@epfl.ch](mailto:rizlan.bernier-latmani@epfl.ch)