

## PhD position in Environmental Microbiology

The Laboratory for Environmental Biotechnology at EPFL (Lausanne, Switzerland) offers a PhD position starting in Fall 2017 for a researcher to study the metabolism of organohalide respiration from a biochemical perspective. Organohalide respiration is a bacterial anaerobic energy metabolism dedicated to the use of halogenated compounds such as tetrachloroethene as terminal electron acceptor. Tetrachloroethene and other chlorinated ethenes represent major groundwater pollutants.

### The project

As the composition, topology and biochemistry of redox enzymes involved in the energy metabolism of organohalide respiration still remain largely unexplored, with the proposed project we aim at identifying and characterizing some of the proteins responsible for the transport of electrons from the quinone pool to the reductive dehalogenase, the terminal enzyme in organohalide respiration. Our model organisms are strictly anaerobic bacteria, however, recombinant protein technology will be used in *E. coli* and other hosts to produce and reconstitute these redox enzymes. Functional characterization of these enzymes will be achieved by means of standard biochemical methods.

### The candidate

Only highly motivated candidates with a Master degree and a strong background in biochemistry and microbiology will be considered. Experience with anaerobic cultivation and/or molecular biology techniques would be a distinct advantage. In our laboratory, the PhD student will take part in a small research group on this topic, therefore the candidate is expected to have a strong team spirit and good skills in communication.

### How to apply

To apply, please send a single PDF file merging the CV (incl. publication list), academic transcripts, a statement of research interests and three academic references to Prof. Christof Holliger ([christof.holliger@epfl.ch](mailto:christof.holliger@epfl.ch)) and Dr. Julien Maillard ([julien.maillard@epfl.ch](mailto:julien.maillard@epfl.ch)).

Interviews begin in June/July and will continue until the position is filled.