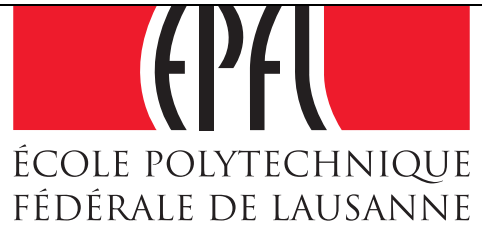


**ATMOSPHERE-REGOLITH-VEGETATION
FEEDBACKS GROUP, ARVE**

**SCHOOL OF ARCHITECTURE, CIVIL &
ENVIRONMENTAL ENGINEERING, ENAC
ENVIRONMENTAL ENGINEERING
INSTITUTE, IIE, EPFL, SWITZERLAND**



April 2010

PhD: Reconstructing human induced land-cover change during the Holocene

We are looking for a motivated student with a background in geography, archaeology, earth sciences, biology, environmental studies and/or related fields to join a new, interdisciplinary research team at the Ecole Polytechnique Federale de Lausanne (EPFL) in Switzerland (<http://arve.epfl.ch>). This is a fully-funded Ph.D. research studentship for up to four years with an attractive living-wage salary. The general research focus of the team is on the role of the Earth's land surface in influencing and possibly amplifying abrupt climate change. Our research encompasses soils science, environmental physics, biogeochemistry, hydrology, climate modelling and remote sensing.

The doctoral project will be defined in collaboration with the student, but will be aimed at reconstructing land-cover change at continental scales during the Holocene. This will mainly involve the compilation and computer-based analysis of large spatial datasets, including palaeoecological and archaeological data. The applicant will also be expected to undertake some socio-economic modeling of pre-industrial societies. Research aims include the role of early agricultural societies in determining land-cover change and its impact on climate. A background in palynology and environmental archaeology is desirable, together with a working knowledge of GIS and spatial analysis. Much of the work will be computer-based, and the applicant will need a general competency and willingness to work with computers.

In addition to research, Ph.D. students at the EPFL must complete about one semester worth of taught courses as part of their doctoral training.

The working language in the group is English, the doctoral dissertation will be written in English, and fluency in both written and spoken English is essential. French is the language spoken in and around Lausanne. Students of all nationalities will be considered and residence permits for non-Swiss students can be arranged.

Lausanne is a small city of about 150,000 inhabitants, located on the north shore of Lake Geneva in western Switzerland. Situated between the high plateau of the Jura and the foothills of the Alps, Lausanne has a mild, Atlantic-influenced climate, with warm summers and cool winters. There is enormous opportunity for outdoor sports based from Lausanne, and because of the excellent public transport network in Switzerland, it is possible and practical to reach most parts of the country without a car.

Employment is contingent on entry to the EPFL doctoral program. General information on the EPFL's graduate school is available at <http://phd.epfl.ch>

For more information please contact Dr Basil Davis basil.davis@epfl.ch Tel +41 216 93 80 38 or Prof Jed Kaplan jed.kaplan@epfl.ch

Consideration of applications will begin immediately, and will continue until the position is filled. The expected start date is summer 2010. To apply please email a covering letter detailing your skills and motivation for the post, together with your CV to basil.davis@epfl.ch.