

Post-doc position in the frame of : project

15 month Post-doc position at EcoLab laboratory in Toulouse (CNRS-University of Toulouse) in collaboration with ISTO laboratory in Orléans

Duration: 15 months

Starting: autumn 2016

The candidate must have a PhD in environmental science.

Job Description

The Position

In the frame of the ANR TRAM (TRACE METAL LEGACY on MOUNTAIN AQUATIC ECOGEOCHEMISTRY) project we are proposing a 15 month post-doctoral position in mountain hydrology at ECOLAB laboratory in Toulouse.

As transport of PHTE (Potentially Harmful Trace Elements) is strongly linked with the suspended matter, this study will first focus on the transport solid in mountain catchments from the Pyrenees. Added to this, solid transport is one of the key parameter that bridge stream dynamic to paleo-proxies related to solid discharge recorded in lake sediments or in peat. We will first apply and adapt (develop new modules if needed) a simple model of runoff and solid transport at the watershed scale.

The candidate should be a hydrologist with an experience in hydrological modelling, serious basements in database management and mapping (GIS) and knowledge in paleo-limnology and soil erosion. An interdisciplinary approach between hydrology and paleo-limnology is proposed to develop new indicators of runoff and sediment transport over the last 1000 years, calibrated with current dataset and knowledge in mountain hydrology.

Specifically you will:

- (1) Use and implement a hydrological model at the Pyrenees scale (SWAT model) to describe the hydrological dynamics in the mountain lakes watersheds.
- (2) Extract indicators from existing paleo limnological dataset in link with hydrological dynamics
- (3) Cross hydrological and paleo-limnological datasets to identify the long term drivers of runoff and erosion, in order to identify semi quantitative proxies of erosion and runoff.

Valorisation through scientific publications, the dissemination of results via participation to meetings and other communication events will be encouraged. Review of applications will start on 15th July 2016 and will be open until the position is filled. Please send your application and related information (CV, short statement of interests, names and contacts of at least two referees) via email as a single .pdf file.

Who we are:

<http://www.agence-nationale-recherche.fr/?Project=ANR-15-CE01-0008>

<http://www.ecolab.omp.eu/>

<http://www.isto.cnrs-orleans.fr/>

Applications should be sent to stephane.binet@ensat.fr or anaelle.simonneau@univ-orleans.fr