Zürich September 2015



Vacancy for a PhD student in hydrology

Starting date: as soon as possible (fall/winter)

We announce a position for one PhD student within a funded three-year research project on hillslope and catchment hydrology at the University of Zurich, Department of Geography, Unit Hydrology & Climate (<u>http://www.geo.uzh.ch/h2k/</u>).

Previous studies in the Alpthal catchment in Switzerland have focused on the spatial and temporal variability in shallow groundwater responses to rainfall events and related it to topography and streamflow responses. This research project builds on these studies and further investigates shallow groundwater and subsurface stormflow generation in this small mountainous headwater catchment. This will further improve our understanding of floods, low flows and water quality in pre-alpine catchments. In particular this project will address 1) the spatial and temporal variability in shallow groundwater quality (electrical conductivity, isotopic composition, base cation concentrations) and its relation to topography and flushing frequency, 2) spatial and temporal variability in rain water contributions to groundwater, 3) how spatial variability in shallow groundwater composition affects hydrograph separation results and 4) spatial variability in runoff across the catchment and the depth below surface at which most of the runoff is generated.

Applicants should have a Diploma or MSc degree in hydrology, earth sciences, environmental sciences or in a closely related field. Strong fieldwork, data management, data processing and numerical skills are a prerequisite. Previous experience in the establishment and maintenance of a hydrological monitoring network is considered a plus. We encourage applications from enthusiastic dedicated individuals with good oral and written communication skills (in English) who enjoy working in a team.

We offer an interdisciplinary, international work environment and a formal PhD program (http://www.geo.uzh.ch/en/graduate-school/). Salary is according to the salary scale of the Swiss National Science Foundation (SNF).

Please send your application, including a cover letter that states your motivation for this position and relevant field experience, CV, relevant diploma(s), an example of your own scientific writing (if available) and the names and contact details of at least two potential references in one pdf-file (smaller than 5MB) to ilja.vanmeerveld@geo.uzh.ch with 'Hillslope PhD' as subject line. Review of applications will begin on October 5, 2015, and continue until the position is filled (after October 15 please check on http://www.geo.uzh.ch/en/units/h2k/about-us-contact/open-positions whether the position is still open).

For questions please contact Dr. Ilja van Meerveld (<u>ilja.vanmeerveld@geo.uzh.ch</u>) or Prof. Jan Seibert (<u>jan.seibert@geo.uzh.ch</u>)