



Vacancy for:

PhD position in Soil Hydrology

Starting date: 1. March 2011

Within the framework of the project „*Coupled soil-plant water dynamics – Environmental drivers and species effects*“ funded by the German Research Foundation (DFG) in collaboration with the Institute for Landscape Biogeochemistry of the Leibniz Centre for Agricultural Landscape Research (ZALF), we invite applications for a TV-L 13 position, 65% for 3 years.

The proposed project plans to quantitatively characterise the interaction between plant water use – as affected by rooting patterns and physiology of different plant functional groups – and the hydrological water balance of an ecosystem. A main emphasis will be put on the effects of droughts and rewetting on this interaction. We will focus on the morphological and physiological parameters and on functional adaptations of plants to changes in soil water supply and stand specific properties, which drive water uptake capacity and actual water uptake. The effect of plants and vegetation on preferential flow paths, soil water storage, hydraulic redistribution and water infiltration capacity is in the second focus of this project. The methodological focus of this project is the further development and application of new innovative techniques that allow the continuous tracing of isotope signatures in soil water and transpiration at high temporal resolution. This PhD will focus on the soil hydrological processes of this project.

All applicants should have a Diplom or MSc degree in hydrology, soil science, ecology or in a closely related field. We encourage applications from enthusiastic dedicated individuals with strong quantitative skills as well as good writing skills who enjoy working in a team. Knowledge of stable isotope hydrology and experimental methods in soil science would be an asset. A driving license (class B) is required. We offer an interdisciplinary, international work environment within a formal PhD program (<http://www.gs.esgc.uni-freiburg.de/>). An intensive exchange of the PhD students between Freiburg and Berlin is foreseen. Salary is according the official salary scale for public employees (25,000€ to 35,000€ p.a.).

Please send your application including a cover letter, CV, an example of your own scientific writing (if available), a statement of research interests, certificate & transcript of your highest degree earned and the names and contact details of at least two potential references in one pdf-file to Markus Weiler (markus.weiler@hydrology.uni-freiburg.de). Application deadline is Jan 20th 2011.