

PhD position P2/1 “Biogeochemical transformation in the groundwater-surface water transition zone”

at the **Helmholtz Centre for Environmental Research, UFZ, Leipzig, Department of Hydrogeology**. The position can be filled as early as **July 1st 2017 (duration: 3 years)**. The salary is based on the public-service regulations of the state of Baden-Württemberg (**TV-L E13, 75%**).

More than 50 % of the landscape is drained by first and second order streams. Consequently, the initial chemical signature of stream water as well as overall water quality in rivers is largely governed by processes in lower order headwater streams, which are typically fed by diffuse groundwater seepage occurring along the channels. The transition zone between groundwater and surface water constitutes a potentially reactive interface with steep redox gradients enhancing biogeochemical reactivity. Transformation of agrochemicals within this zone shall be identified and quantified by field-based approaches including regular sampling, online sensing, and the use of stable isotopes as environmental tracers. The attained data will subsequently be used to set up and calibrate a physically based reactive transport model. The model will then be used to explore attenuation scenarios over a range of potential boundary conditions. Support will be provided by partner projects related to compound-specific isotope analysis and molecular biology.

The potential candidate should have a Diploma or Master degree in hydrology, hydrogeology, geoecology, environmental sciences or engineering with a focus on water, or a related field and should have an excellent understanding of biogeochemical processes and the modeling thereof. Experience in field work would be an additional asset.

CAMPOS and the participating Universities offer structured PhD programs that support PhD students in their career phase as well as programs to support women in research and teaching and thus encourage applications from qualified female scientists. In the case of equivalent qualified and experienced candidates, physically challenged applicants are given preference.

Further information can be provided by: **Dr. Jan Fleckenstein** (jan.fleckenstein@ufz.de; phone: +49 (0) 341 235 1207) or **Dr. Marc Schwientek** (marc.schwientek@uni-tuebingen.de; phone: +49 (0) 7071/29-73559).

Please submit **applications** to info@campos.uni-tuebingen.de (ONE pdf-file, max. 5MB). Applications should include a letter of motivation, a CV, transcripts or degree certificates including grades, proof of special qualifications, prints of publications if applicable, and a list of at least two referees.