



The research group of Geoecology invites applications for

a PhD Position

as part of the DFG funded research project '*Dynamics in Phosphorus Pools in Soils and Sediments along the Land-Freshwater Continuum of Agricultural Catchments*'.

The position will be limited to three years and will start on January 15, 2019. The salary is in accordance with the German Public Service salary scale (65%, TV-L E13).

Pronounced amounts of the precious nutrient phosphorus (P) are transferred from arable soils into interconnected vegetated buffer strips, drainage channels and stream beds due to erosion and surface run-off. Here, interim storage occurs, but P can be re-released from soils and sediments due to dynamic biogeochemical processes and redox conditions, thereby increasing the risk of eutrophication in downstream water bodies. Due to methodological limitations, changes of P pools in soils and sediments and transformation pathways involved still remain barely understood.

The prospective PhD candidate will study the dynamics of P retention in an agricultural catchment in South Germany by using an innovative isotopic labeling approach, which is based on the analysis of the stable oxygen isotope signature in phosphate ($\delta^{18}\text{O}_{\text{PO}_4}$).

Qualifications and skills:

- M.Sc. degree in Geoecology, Geochemistry, Environmental Sciences, Soil Science, Physical Geography, Microbiology, Biology, Environmental Chemistry, or similar.
- Excellent knowledge of and laboratory experience in wet chemistry is required.
- Extended knowledge of stable isotopes in the environment.
- Very good English communication and writing skills.
- High motivation and commitment to interdisciplinary research particularly focusing on environmental issues.

The position will be open until qualified candidates are identified. We particularly encourage female applicants to apply for this position. Disabled persons will be preferred in case of equal qualification.

Please send your application (including a cover letter, full CV, copies of certificates, and names, telephone numbers and email addresses of two academic referees) as a single PDF file attached to an email to: Dr. Harald Neidhardt (harald.neidhardt[at]uni-tuebingen.de). Application deadline is November 15th 2018.