



Departement Umweltwissenschaften

2-3 Year Postdoc Position in Nitrogen Isotope Biogeochemistry

The Aquatic and Isotope Biogeochemistry Group at the University of Basel invites applications for a Postdoc position in the field of nitrogen isotope biogeochemistry. We are seeking a highly motivated candidate with experience in stable isotope biogeochemistry in aquatic environments who demonstrates interest in geochemical and (micro-) biological processes also in engineered (wastewater) systems. An expertise in nitrogen isotope/massspectrometric techniques and bioreactor work will be an asset. The successful candidate will be part of an SNF-funded Sinergia project (three postdocs and one PhD), which aims at testing isotopic and molecular tools to understand links between biogeochemical pathways, the performance of microbial communities, and environmental conditions during autotrophic nitrogen removal in mixed nitritation-anammox systems. The postdoctoral project will make use of an established set-up of enriched and mixed-culture nitritation-anammox reactors at the laboratory and pilot scale, focusing on the isotope effects of anaerobic nitrate formation by anammox, and testing the potential of nitrate/nitrite nitrogen and oxygen isotope measurements to diagnose biochemical reactions in waste water treatment systems employing partial nitrification and anammox. The planned experiments are expected to advance our understanding of the environmental controls on anammox and its isotopic fingerprints also in natural environments.

The project will be conducted in close collaboration with the Eawag in Dübendorf and Kastanienbaum (Dr. A. Joss, Dr. H. Bürgmann), and with the Empa in Dübendorf (Dr. J. Mohn). The full-time appointment will be for two years, with a possible extension for another year. Start date: **1. October 2017 or later**. A PhD degree is required. Candidates should submit a letter of application, a CV including a list of publications, and addresses of at least two referees to **Prof. Dr. Moritz Lehmann** (moritz.lehmann@unibas.ch), University of Basel. Review of applications will begin **May 1, 2017** and will continue until the position is filled. For further information please contact Prof. M. Lehmann or see **https://biogeochem.duw.unibas.ch**.

Basel, 12. March, 2017