Open PhD position in Geomicobiology/Biogeochemistry

'Arsenic mobilization by anaerobic methane-oxidizing bacteria in groundwater systems in Hanoi/Vietnam'

We are seeking an environmental microbiologist or biogeochemist to investigate arsenic mobilization in groundwater systems in the Hanoi area (Vietnam). This project will focus on experiments with cultures of anaerobic Fe(III)-reducing methane-oxidizing microorganisms. We will carry out field sampling (drilling) campaigns followed by laboratory incubation experiments with geochemical, physiological and molecular biological analyses to follow microbial growth, metabolic activity, methane oxidation, Fe(III) mineral reduction and arsenic mobilization using techniques such as anaerobic cultivation, isotope labeling, gas chromatography, wet-chemistry, ICP-MS, XRD, Mössbauer spectroscopy, electron microscopy.

The PhD student will be given many opportunities to be creative and innovative, to apply state-of-the art microbiological, molecular, geochemical, microscopic and spectroscopic analyses. This PhD student will work closely together with a second PhD student from this joint project with Prof. Sara Kleindienst's group at the University of Stuttgart (see open position in Stuttgart here: https://careers.uni-stuttgart.de/job/Stuttgart-PhD-Student-Position-in-Environmental-Microbiology/971915955/).

Start date for successful applicant is summer/fall 2024. Employment (TVL E13, 75%, 3 years) will be arranged by the University of Tübingen.

Requirements:

- Strong background in Environmental Microbiology, Biogeochemistry and/or Geochemistry.
- Interest in field work (Vietnam)
- Ability to work independently and in a team.
- Excellent management and communication skills.
- Good computer and language (English) skills.

For more information and to apply, please send a CV, motivation letter and overview of techniques and methods previously used by email before April 12th, 2024 to:

Prof. Dr. Andreas Kappler (andreas.kappler@uni-tuebingen.de), Geomicrobiology, Department of Geosciences, University of Tübingen, Germany. *https://uni-tuebingen.de/de/104138*