



Two open PhD positions in Geomicrobiology

‘Microbial Fe cycling and the fate of carbon during permafrost thaw’

We are seeking two PhD students with experience in geochemistry and/or microbiology to investigate the role of microbial iron cycling in determining the fate of carbon during permafrost thaw. Specifically, we will determine to what extent the formation, transformation and dissolution of iron-organic matter complexes and iron minerals with sorbed and co-precipitated organic matter control the bioavailability of organic compounds and the formation of greenhouse gases (CO₂, CH₄, N₂O) during permafrost thaw. We will combine field analyses and field sampling (Abisko, Stordalen Mire, Sweden) with laboratory incubation experiments with geochemical, molecular, microscopic and mineralogical analyses to follow microbial activity, greenhouse gas formation and the transformation of iron-carbon aggregates.

The two candidates will be given many opportunities to be creative and innovative, to apply state-of-the-art geochemical analyses, molecular techniques, microbial physiological studies, microscopy and spectroscopy, and to work on a challenging, highly relevant topic within a large network of (inter)national collaborators (Sweden, UK, Denmark, US).

Start date for successful applicants is early 2021. Employment (TVL E13, 65%, 3 years) will be arranged by the University of Tübingen. The university seeks to raise the number of

Requirements:

- Strong background and/or interest in Geomicrobiology, Microbial Ecology, Geochemistry, Mineralogy and Climate Change
- Ability to work independently and in a team
- Interest in field work
- Excellent management and communication skills
- Highly motivated for interdisciplinary research

women in research and teaching and therefore urges qualified women to apply. Disabled persons will be preferred in case of equal qualification.

For more information and to apply, please send a CV, motivation letter and overview of techniques and methods previously used by email before October 15th, 2020 to:

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