Open PhD position in Geomicrobiology

‘Microbial Fe cycling during the genesis of Banded Iron Formations’

We are seeking a PhD student to investigate the role of microbial iron cycling during the genesis of Banded Iron Formations (BIF). Specifically, we will determine to what extent repeated alternations of Fe(II) oxidation and Fe(III) reduction might have progressed in ancient sedimentary environments, what secondary minerals were formed during microbial Fe cycling, and how this influenced the trace metal and nutrient content of the secondary minerals in BIFs. We will combine laboratory cultivation experiments with microscopic, geochemical and mineralogical analyses to follow microbial activity and mineral transformation.

The candidate will be given many opportunities to be creative and innovative, to apply state-of-the-art geochemical analyses, microbial physiological studies, microscopic and spectroscopic techniques, and to work on a challenging, highly relevant topic within a large network of (inter)national collaborators.

Start date for successful applicants is fall 2020. Employment (TVL E13, 65%, 3 years) will be arranged by the University of Tübingen. The university seeks to raise the number of women in research and teaching and therefore urges qualified women to apply. Disabled persons will be preferred in case of equal qualification.

Requirements:

- Strong background and/or interest in Geomicrobiology, Geochemistry, Mineralogy and early Earth processes
- Ability to work independently and in a team
- Excellent management and communication skills
- Highly motivated for interdisciplinary research
- 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 September 15th, 2020 to: Prof. Dr. Andreas Kappler (andreas.kappler@uni-tuebingen.de), Geomicrobiology, Center for Applied Geosciences, University of Tübingen, Germany. https://uni-tuebingen.de/de/104138