



PhD Project in Geomicrobiology

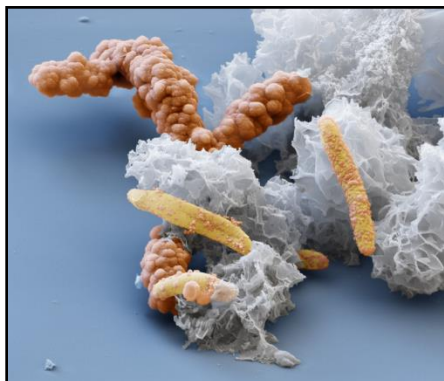
The research group for Geomicrobiology at the Institute for Geosciences at the University of Tübingen is looking for a PhD student (Geomicrobiologist, (Bio-)Geochemist) who will work on:

'Distribution and activity of microaerophilic, nitrate-reducing and phototrophic iron(II)-oxidizing bacteria in freshwater and marine sediments'



Iron-oxidizing bacteria can use O₂, nitrate or light energy to catalyze Fe(II) oxidation and potentially coexist in surface sediments in close proximity. It is unknown, however, how these different physiological groups interact and compete with each other in freshwater and marine sediments and how this interrelation influences the formation of biominerals and the environmental fate of trace metals and nutrients.

This PhD position offers the possibility to study the activity of these three physiological groups of Fe(II)-oxidizing bacteria in marine sediments from Aarhus Bay (Denmark) and freshwater sediments from Lake Constance. Approaches will include field work as well as laboratory experiments, in particular cultivation of iron(II)-oxidizing bacteria in chemostats and stratified columns combined with trace metal and nutrient mobility. Laboratory experiments include the development and application of molecular biological assays to determine the spatial distribution and activity of these microorganisms in the environment (including fluorescent in-situ hybridization). Field sampling will also be part of the project that is funded by the European Research Council (ERC).



We are offering a PhD position in an interdisciplinary, international, young and dynamic team of microbiologists, geochemists and geoscientists. This position provides an opportunity for the candidate to be creative and innovative, and to work on a challenging topic which combines various fields within environmental sciences. Ideal candidates should have a **solid background in environmental microbiology and/or biogeochemistry**. Applicants must have the ability to work in a team, have good communication skills and should be highly motivated and committed to pursuing interdisciplinary research. Good computer and language skills (English) are necessary. The candidate will have the opportunity to participate in field work and present his/her results in international journals and conferences.

The starting date is **March 15th 2015** or as soon as possible thereafter. The employment (TVL E13, 50%, 3 years) will be arranged by the administration of the University of Tübingen. Disabled persons will be preferred in case of equal qualification.

Applications including CV, motivation letter, overview of techniques and methods used in the past should be sent by email before January 15th 2014 to:

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More information including recent publications on the advertised PhD topic can be found on our website:
<http://www.geo.uni-tuebingen.de/arbeitsgruppen/angewandte-geowissenschaften/geomikrobiologie.html>