Open PhD position in Mineralogy/Geochemistry
‘Weathering of silicate minerals by iron-metabolizing bacteria’

We are seeking a PhD student to investigate the transformation of Fe-bearing silicate minerals into secondary iron phases during microbial driven soil formation under different climatic regimes. We will use the Chilean coastal range, one of the most dramatic climate and vegetation gradients on Earth, as a natural laboratory in which to study the abundance and distribution of iron mineralization at different stages of soil formation, as well as laboratory experiments to study weathering mechanisms in detail. This work is part of the Earthshape project (www.earthshape.net), a large, inter-disciplinary consortium of microbiologists, geochemists, geologists, ecologist and soil scientists. This project will provide the candidate many opportunities to be creative and innovative, to work on a challenging and environmentally relevant topic within a large network of international collaborators, and to conduct fieldwork in Chile.

Requirements:
• Strong background in Mineralogy and/or Geochemistry, ideally with experiences in XRD and SEM analytics
• Ability to work independently and in a team
• Excellent management and communication skills
• Highly motivated for interdisciplinary research
• Good computer and language (English) skills
• Field work experience is essential

Start date for successful applicants is January 2019.

Employment (TVL E13, 75%, 3 years) will be arranged by the Technische Universität Berlin. 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 to: Prof. Dr. Thomas Neumann (neumann@tu-berlin.de).

https://www.geochemie.tu-berlin.de