

PhD-student position Did microbial mats colonize a hot springs field in an Archean tidal flat?

The chair of General Geology and Earth History, Department of Geosciences at Friedrich-Schiller-University Jena invites applications for a

PhD-student position (m/f/d) for three years at salary level TV-L E13 66%, subject to final funding decision by DFG.

The research project focuses on the environmental setting of Early Life. It involves the study of clastic sedimentary strata in the central Barberton Greenstone Belt of South Africa where preliminary geologic, sedimentologic and geochronologic data suggest that microbially colonized tidal sands of the Moodies Group (~ 3.22 Ga) may have been deposited between hot springs and sand volcanoes associated with the intrusion of a laccolith at depth. The conditions, processes and consequences of this special biosphere-geosphere relationship are subject of this project. Research is initially field-oriented but will also employ diverse analytical techniques. The project is affiliated with the ICDP BASE drilling project which explored Archean surface environments in this region in 2021-2022.

We expect

- a M.Sc. degree in geosciences
- demonstrated expertise in sedimentology, field work, stratigraphy, sedimentary petrography, geochronology, geochemistry, and/or geomicrobiology
- proficiency in written and spoken English in scientific environments (presentations, publications, and conference participation); willingness to learn German if not a native speaker
- willingness to travel and to engage in international cooperation with related geoscience disciplines
- driver's license and driving experience
- demonstrated ability to work in a mountainous environment under moderately strenuous conditions; corresponding level of physical fitness.
- excellent social skills and a high level of motivation
- · interest in and engagement in limited academic teaching

We offer

- a position in an multidisciplinary, experienced research group working on world-class rocks in a vigorous, multidisciplinary international environment.
- Pleasant working atmosphere in a friendly team
- Remuneration in accordance with public service pay scale

- Creative and independent research environment with excellent analytical infrastructure
- Work at a modern and traditional comprehensive university in the City of Light Jena, with attractive leisure and recreational facilities
- University health program, a wide range of university sports activities
- 28 to 30 days of vacation per calendar year

The position is subject to final funding decision by DFG, expected February 2024, and then available immediately. The duration of the project is 36 months. Research results should be documented through a PhD dissertation and published in internationally recognized geoscience journals. For further information, please contact Prof. Christoph Heubeck (christoph.heubeck@uni-jena.de). Applicants should e-mail their application as a single pdf file which includes an informative cover letter, a CV with statement of research interests, a copy of the M.Sc. degree certificate, any other relevant documents, and contact information for two suggested references. Review of applications will begin Feb. 28, 2024 at the latest. Once shortlisted, we will arrange for a phone or teleconference interview.