

Freie Universität Berlin - Fachbereich Geowissenschaften - Institut für Geologische Wissenschaften AB Mineralogie-Petrologie



The mineralogy-petrology research group of Prof. Dr. Timm John at Freie University Berlin is a dynamic, international, and diverse team of researchers dedicated to understanding fluid-solid interaction processes across a wide range of geological environments. We combine field observations with petrological and geochemical analyses, experiments, and advanced thermodynamic and transport modelling to quantitatively constrain the timescales, as well as the petrophysical and mechanical responses, of fluid-rock interactions. Our research spans a breadth of topics—from subduction zones and mid-crustal environments to ore-forming systems and emerging fields such as urban mining—offering a stimulating and interdisciplinary scientific setting.

Research assistant (postdoc) (f/m/d)

full-time job limited to 3 years salary grade (Entgeltgruppe) 13 TV-L FU reference code: DFG-GR-2026

City: Berlin; Starting date (earliest): At the earliest possible; Duration: befristet auf 3 Jahre; Remuneration: Entgeltgruppe 13 TV-L FU; Reference number: DFG-GR-2026; Closing date: 06/07/26

Tasks

Job description:

The overarching goal of this DFG-funded project is to constrain the timescales and duration of fluid-mediated rock transformation processes in contrasting metamorphic environments where garnet growth and replacement occur. By doing so, the project aims to place robust temporal constraints on metamorphic processes. The position is part of a larger project in which the aim is to describe and quantify the textural and compositional characteristics of garnet growth mechanisms through a combination of experimental work, study of natural samples, and numerical reactive-transport modelling. The candidate's role will be to apply solution isotope geochemical methods with the aim of establishing absolute timing of metamorphic processes through radiogenic isotope analysis (chronology) and constrain the duration of these processes using the stable Li and Mg isotope systems (chronometry). This isotope work will be done in supplement to detailed textural and major element analysis of garnet zoning, allowing for the time constraints to be correlated with metamorphic conditions and growth mechanisms. As such, it will be necessary to sample garnet in-situ via micro-sampling methods. Further, spatially positioned stable isotope analyses will be fit using pre-existing numerical transport and fractionation models to constrain timescales. The extent to which the candidate works on the petrological-thermodynamical constraints and/or the continued development of numerical models will be at the discretion of the candidate.

Requirements

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Completed university degree (Master's/Diploma) in Mineralogy, Geology or Chemistry.
Doctorate in Mineralogy, Geology or Chemistry.

Desirable:

In this position the ability to work independently in a clean lab is absolutely essential. Experience with micro-sampling methods such as micro-milling or laser drilling is ideal. Extensive experience with analytical chemistry, e.g., independent use of ICP-MS and TIMS, as well as the development of corresponding measurement protocols. Excellent written and spoken English skills, particularly experience in scientific writing. The candidate possesses a high level of motivation for independent scientific work, a willingness to learn new tasks, a sense of responsibility, and the ability to work in a team.

For further information, please contact Dr. Josephine Moore (josephine.moore@fu-berlin.de / +49 30 838 57087).

Application

Applications should be sent by e-mail, together with significant documents, indicating the **reference code, no later than July 06th** in PDF format (preferably as one document) to Dr. Josephine Moore: josephine.moore@fu-berlin.de or postal to

Freie Universität Berlin
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Institut für Geologische Wissenschaften
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With an electronic application, you acknowledge that FU Berlin saves and processes your data. FU Berlin cannot guarantee the security of your personal data if you send your application over an unencrypted connection.

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More information at <https://stellenticket.de/204728/BUA/>
Offer visible until 06/07/26

