

Freie Universität Berlin - Fachbereich Geowissenschaften - Institut für Geologische Wissenschaften Impact and Planetary Physics, SFB 1759



The SFB 1759 "Habitability as a fundamental planetary process: Towards a paradigm shift away from our perception of the uniqueness of Earth" is a newly established Collaborative Research Center studying habitability for life as we know it based on fundamental physio-geo-chemical processes set by the planet's evolution. The study of planetary habitability in this SFB is therefore oriented along the planetary boundary conditions set by astronomy, physics, chemistry and geology, rather than Earth-specific biological evolution. By focusing on the environments in which life may (or may not) evolve, the SFB will be able to define which signatures (such as trace elements in an atmosphere) can be explained by abiotic processes, and which would indeed need some form of extraterrestrial life, leading to a new database of potential biosignatures as well as traces of habitability. As finding potential biosignatures or traces of habitability may also impact society, the SFB takes a holistic approach and investigates also ethical considerations, how scientists communicate scientific results to the public and how these are discussed in social media, as well as the general perception of the public and factors influencing this. In the SFB, different views on one of the most important questions of humanity — are we alone in the universe? — will therefore be examined hand in hand with different perspectives in natural sciences, social sciences, and humanities. More information: <https://www.geo.fu-berlin.de/en/geol/fachrichtungen/planet/projects/SFB1759> The planned position is offered at the Freie Universität Berlin, Institute of Geological Sciences, in Berlin, Germany. Review of applications will start on the day after the application deadline until the position is filled. The earliest starting date of the position is the 1 October 2026. The starting dates are flexible but funding is limited to 30 June 2030. Applications should be written in English and include a cover letter, the names and email addresses two referees, CV, copies of degree certificates and transcripts, all combined into a single pdf (max. 10 MB). It is possible to apply for multiple positions offered within the SFB at the same time, please indicate the reference code(s) for the position(s) that you are applying for and email your application to coord@sfb1759-planetary-habitability.de.

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

full-time job limited till 30.06.2030 salary grade (Entgeltgruppe) 13 TV-L FU reference
code: SFB1759-B03-KW

City: Berlin; Starting date (earliest): At the earliest possible; Duration: befristet bis
30.06.2030 für die Dauer des Projekts; Remuneration: Entgeltgruppe 13 TV-L FU;
Reference number: SFB1759-B03-KW; Closing date: 10/08/26

Tasks

In this project we will investigate the subsurface environment and the evolution of the groundwater table on Mars through time by combining numerical models of large-scale impacts, impact-induced hydrothermal systems, interior evolution, and water-rock reactions. This combined modelling approach will provide a unique framework to investigate the formation and evolution of subsurface habitable environments on Mars. The Postdoctoral researcher will address two major topics (impact effects on the subsurface environment and formation of hydrothermal systems), working with a model to investigate the formation and evolution of hydrothermal systems, and by including extensive changes to the iSALE code, requiring experience in using the iSALE code and

code development in general. For more information, please contact Kai Wünnemann (Kai.Wuennemann@mfn.berlin).

Requirements

Requirements:

Completed PhD in Planetary Sciences or a related field by the time of employment.

Desirable:

- Excellent academic record and doctorate/PhD thesis
- Practical experience in the numerical modeling of geodynamic processes—ideally of impacts—and programming skills in Python, Fortran, or C
- Good analytical and problem-solving skills, good communication skills, and the ability to work independently and as part of a team
- Very good written and spoken English (B2/C1)

Application

Applications should be sent by e-mail, together with significant documents (complete CV incl. all certificates, letter of motivation, references), indicating the **reference code, no later than August 10th, 2026** in PDF format (preferably as one document) to Herrn Prof. Dr. Kai Wünnemann: coord@sfb1759-planetary-habitability.de or postal to

Freie Universität Berlin
Fachbereich Geowissenschaften
Institut für Geologische Wissenschaften
Impact and Planetary Physics, SFB 1759
Herrn Prof. Dr. Kai Wünnemann
Malteserstr. 74-100
Haus D, 12249 Berlin (Lankwitz)

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.

Freie Universität Berlin is an equal opportunity employer.

More information at <https://stellenticket.de/206054/BUA/>
Offer visible until 10/08/26

