



Postdoctoral Researcher in Experimental Geochemistry and Planetary Differentiation

The Bayerisches Geoinstitut (BGI) at the University of Bayreuth, Germany, invites applications for a postdoctoral research position funded by the German Research Foundation (DFG).

The successful candidate will join the research group of Dr. Yuan Li and investigate the geochemical behaviour of volatile elements, such as sulfur, carbon, and nitrogen, under conditions relevant to the differentiation of terrestrial planets. The research aims to improve our understanding of planetary core and mantle formation and the distribution of volatile and chalcophile elements during early planetary evolution.

Main responsibilities

- Design and conduct high-pressure and high-temperature experiments relevant to planetary core-mantle differentiation
- Investigate the solubility and partitioning behaviour of volatile elements among metallic and silicate phases
- Characterize experimental products using analytical techniques such as electron probe microanalysis (EPMA), scanning electron microscopy (SEM), secondary ion mass spectrometry (SIMS), and laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS)
- Interpret experimental data using thermodynamic and geochemical models
- Present research findings at national and international conferences
- Prepare manuscripts for publication in peer-reviewed journals
- Collaborate with researchers and technical staff at the Bayerisches Geoinstitut
- Contribute to the supervision of students, where appropriate

Candidate profile

Applicants should have:

- A PhD in geochemistry, experimental petrology, mineralogy, planetary science, or a closely related discipline
- Experience with high-pressure and high-temperature experimental techniques
- A strong background in geochemistry, planetary differentiation, or element partitioning
- Experience in the chemical and microstructural analysis of experimental samples
- A good publication record appropriate to the applicant's career stage



- The ability to work both independently and collaboratively in an international research environment

Position and research environment

The position is based at the Bayerisches Geoinstitut, University of Bayreuth, an internationally recognized research centre for experimental geoscience, high-pressure research, and planetary materials.

The position is available from the earliest possible date and is initially funded for two years, with the possibility of extension subject to the availability of funding. It is a full-time position, with remuneration according to salary grade TV-L E13 under the German public-sector employment agreement, subject to the applicant fulfilling the relevant personal and professional requirements.

The University of Bayreuth values diversity and is committed to equal opportunities. Women are strongly encouraged to apply. Applicants with disabilities will be given preferential consideration when equally qualified.

Application procedure

Applications should include:

1. A cover letter outlining the applicant's research interests, motivation for joining the project, and suitability for the position
2. A curriculum vitae, including a complete list of publications
3. A brief research statement summarizing the applicant's previous research experience, key findings, and future research interests
4. Copies of relevant academic certificates
5. Names and contact details of two academic referees

Please submit the complete application as a single PDF file to:

Dr. Yuan Li
Bayerisches Geoinstitut
University of Bayreuth
Email: Yuan.Li@uni-bayreuth.de