

**Fully funded PhD position in High-Pressure Geoscience
at the Bayerisches Geoinstitut, University of Bayreuth (Germany)**

The Bayerisches Geoinstitut (BGI) at the University of Bayreuth (UBT), Germany, invites applications for a fully funded PhD position in high-pressure-temperature experimental geophysics and geochemistry. This position is supported by a research grant awarded to Prof. Tomo Katsura by the German Research Foundation (DFG).

Research Focus

You will pioneer cutting-edge research using state-of-the-art ultrahigh-pressure multi-anvil apparatus to investigate:

- Melting relations between bridgmanite and davemaoite in the $\text{MgSiO}_3\text{--CaSiO}_3$ system at mid-mantle pressures
- Mid-mantle pressure conditions and their implications for Earth's evolution
- Magma ocean solidification processes and mantle geochemical differentiation

Based on your progress and interests, you may develop an additional project in consultation with Prof. Katsura, allowing for research creativity and personal development.

What we offer

- **Competitive Funding:** €3,400 gross monthly salary (net ~€2,200-2,400, based on standard deductions in Germany) for three years
- **World-Class Facilities:** Access to BGI's internationally renowned high-pressure laboratories
- **Mentorship:** Direct supervision by Prof. Katsura and collaboration with leading Earth science researchers
- **Professional Development:** Opportunities for conference presentations, publications, and international collaborations under the supervision of Prof. Katsura
- **Start Date:** October 1, 2025 (flexible to accommodate your needs)

Ideal Candidate

We seek a motivated individual with:

- Master's degree in Earth sciences, materials science, or related field (completed or near completion)
- A strong foundation in physics, chemistry, and mathematics, particularly thermochemistry, at the undergraduate level
- Passion for experimental research and deep Earth processes
- English communication skills
- Ability to work independently and collaboratively

About Us

The Bayerisches Geoinstitut is a premier research center for mineral physics and deep Earth studies. Our team combines experimental expertise with theoretical modeling to understand Earth and planetary interiors. You'll join a vibrant, international research community in Bayreuth, a beautiful historic city in Bavaria with an excellent quality of life.

Application Process

Please compile the following documents into a single PDF and send to Prof. Tomoo Katsura at tomoo.katsura@uni-bayreuth.de:

1. Motivation letter (1-2 pages) explaining your research interests and career goals
2. Detailed curriculum vitae



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3. Complete academic transcripts
4. Names and contact information for two references (recommendation letters not required initially)

Selection Process

Applications will be considered on a rolling basis. Early applications, particularly by 30th June 2025, are encouraged. After reviewing the submitted documents, selection will proceed through the following steps.

1. Oral examination of thermochemistry via Zoom
2. Oral examination of paper review via Zoom
3. Research seminar via Zoom
4. On-site interview by performing a test experiment under the supervision of a postdoctoral researcher

Contact

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For questions about the position or project details, please contact Prof. Katsura via email.

The University of Bayreuth is an equal opportunity employer and welcomes applications from all qualified individuals.