

DFG-supported PhD position in Volcanology and Glass Science at the Bavarian Geoinstitut for Experimental Geochemistry and Geophysics (BGI, University of Bayreuth, Germany)

Applications are being received now until the position is filled

PhD in “Experimental and numerical studies of the nanoscale dynamics of silicate melts: Applications to glass formation and magma fragmentation”

Position. A PhD position is now open at [BGI \(University of Bayreuth, Germany\)](#) for a student to work on a research project focusing on glass formation and dynamics of volcanic eruptions. The project is funded by the German Research Foundation ([DFG](#)) and lies at the crossover between materials (glass) science and experimental volcanology. The project aims at exploring an exciting and emerging aspect of both disciplines: the formation of nanosized heterogeneities in silicate melts and their impact on melt viscosity, with crucial implications for glass formation, magma fragmentation and volcanic eruptions. The research will be conducted in close collaboration between BGI and the [Technical University of Clausthal](#) (TUC). A team composed of two doctoral students will be formed who will study natural and technical silicate melts and their application in volcanology and glass technology, respectively. Each candidate will have the advantage of learning the strategies and methodologies from both disciplines.

Working environment. The multifaced high-temperature and high-pressure (HT-HP) experimental work will be integrated with high-resolution spectroscopic and microscopic investigations, and numerical modelling of magma viscosity and dynamics. These approaches will be combined according to the candidate's profile and expectations. We offer state-of-the-art experimental facilities, access to the most modern analytical and computational methods, an international and interdisciplinary research group and network. The PhD student will benefit from an inclusive and friendly collaborative work environment. We encourage applicants from underrepresented groups to apply, who will be given preferential consideration over other applicants with equal qualifications.

Requirements. The candidate should have a Master's degree in materials science, physics or volcanology. Priority will be given to candidates with good math and scientific coding skills (e.g. Python and/or R). Interest in performing HT-HP experiments, good communication skills in English and the capacity to work independently are required.

Supervisor and collaborators. The candidate will be advised by [D. Di Genova](#) (BGI), working in collaboration with [J. Deubener](#) (TUC, Germany), [H. Keppler](#) and [G. Steinle-Neumann](#) (BGI), and [A. Zandona](#) (CNRS Orléans – CEMHTI, France). Interaction with the scientific [staff](#) at BGI will be encouraged.

Project duration and Salary. Funding will be available for 3 years. The salary is based on remuneration salary grade [E 13 TV-L](#) (0.75 working-time) of the pay scale for the German public sector.

Application. The application (a single pdf file) should include: a CV, official academic transcripts of marks and certificates, contact details for two suitable references, a cover letter detailing academic career and research experience, a statement on your motivation for applying in this research area and how you see your background as suitable for the project. Please send your application by email (single pdf file, max. 5 MB) to D. Di Genova (daniilo.di-genova@uni-bayreuth.de). Candidates are encouraged to contact D. Di Genova for inquiries about the position. By submitting your application via email you consent to have your data electronically processed and saved.