

## PhD student (m,f,d), for 3 years with 29,87 hours (75%, TVL E13)

The Department of Tectonics and Resources at the Institute of Geology, Mineralogy and Geophysics (<https://www.gmg.ruhr-uni-bochum.de/tektonik-und-rohstoffe>) invites applications for a 3-year PhD position in the framework of a DFG-funded research project *'The role of mafic-ultramafic bodies in the origin of the early continental crust'*. We are looking for an excellent and highly motivated doctoral student who is interested in pursuing fundamental research in the field of Archean Geology.

### Your tasks:

You will be studying the origin of Archean tonalite-trondjemite-granodiorite (TTG) by applying a multi-disciplinary approach combining field work, petrology, bulk-rock geochemistry, phase equilibrium and trace element modelling, as well as stable and radiogenic isotope analysis of zircon and other key accessory minerals. This project will give you the opportunity to employ a range of analytical techniques that can be applied to different subdisciplines in the geosciences. The project will envisage collaborations with national and international universities and colleagues giving you the opportunity to learn from other experienced researchers and broaden your network.

Project tasks include:

- Fieldwork in remote Archean terrains
- Acquisition of mineral major and trace elements using microprobe and laser ablation ICPMS techniques
- Phase equilibrium and trace element modelling of mafic systems
- In-situ oxygen isotope analysis in zircon using the SIMS
- U-Pb geochronology and trace element analysis in zircon
- Data interpretation and presentation of results at international conferences and in peer-reviewed scientific publications
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### Your profile:

- MSc or equivalent degree in **Earth Sciences**
- Good knowledge in metamorphic and igneous petrology
- Field experience in metamorphic and igneous terrains, and motivation to conduct field work in remote areas
- Experience with electron microprobe (EPMA) and/or laser-ablation ICPMS techniques is desired
- Experience with thermodynamic modelling and isotope geochemistry is an advantage
- Good written and spoken English skills
- High motivation to work within an international team

### Our offerings:

- Challenging and varied tasks with a high degree of personal responsibility
- Support from and cooperation with an international research team
- Employment at one of Germany's largest universities in the University Alliance Ruhr network

**Additional information:**

If the position is funded by third-party funds the employee has no teaching obligation.

**Contact details for your application:**

Please send your application **until 10.06.2022** as a single pdf document (including CV, motivation letter, 2 references and copies of BSc and MSc diplomas—including attended courses and obtained grades) by e-mail to **Dr. Silvia Volante** ([silvia.volante@rub.de](mailto:silvia.volante@rub.de)).

Travel expenses for interviews cannot be refunded.

You are welcome to contact Dr. Silvia Volante for further questions about the project.