



At Technische Universität Bergakademie Freiberg, Faculty of Mechanical, Process and Energy Engineering, Institute of Ceramics, Glass and Construction Materials, the temporary position of

Scientific Assistant (m/f/d) – Position number 198-E/2020



to conduct scientific research within the third-party funded project "Alternative fiber materials based on Cu-slags" can be filled at the earliest possible date.

Rate: 13 TV-L; 0,5 VZÄ
Duration: immediately until project end 31.12.2022

The efficient use of limited raw materials and the reduction or avoidance of waste is one of the most important challenges of modern society. A joint research and development project with two other TUBAF institutes is intended to evaluate the potential of copper slag as a raw material for the glass industry and to determine the technological implementation into a fibre drawing process.

Description of the position:

The tasks lie in experimental glass chemistry: The slag system should be described and characterized fundamentally. The scientific focus is on the phase reactions and phase separation processes, respectively. The second main area of activity is the production of glass fibres, which is to be modified and further developed for the specific requirements of the slag system. You will characterize the resulting fibres both chemically and mechanically and quantify their suitability as construction materials (filler or aggregate, glass fibre mats), for refractory materials or in textiles (yarns e.g. heat protection fabric). You will present your scientific knowledge in publications and (inter-) national conferences.

You can expect from us:

- interdisciplinary, scientific work and support in a small and motivated team
- Independent and responsible activity in the institute's laboratories, as well as integration into the new research building and the infrastructure of the centre for efficient high-temperature material conversion (ZeHS)
- (inter-)national conference participation as well as international research exchange/internships if desired
- working at a family-friendly university with flexible working hours
- remuneration according to the provisions of the collective agreement for the public service of the federal states in accordance with the personal requirements

What we expect:

- excellent or very good university diploma or master's degree in chemistry, materials science, mineralogy or other relevant subject areas; excellent or very good performance in natural science basic courses
- basic knowledge in the field of amorphous materials or glass including first practical experiences
- experimental skill and technical understanding; independence
- advanced German skills, as well as safe spoken and written English

**For further information please contact Mrs. J.-Prof. Sindy Fuhrmann.
E-Mail: sindy.fuhrmann@ikgb.tu-freiberg.de.**

Applicants (m /f/d) must meet the employment requirements for temporary employment contracts in accordance with the *WissZeitVG*. TU Bergakademie Freiberg is committed to increasing the number of women in teaching and research positions. Qualified female scientists are therefore invited to apply. Severely disabled applicants will be given preferential consideration in the event of equal suitability.

Please send your application and relevant documents with reference to the **position number (198-E/2020), until 31.10.2020** to:

TU Bergakademie Freiberg - Dezernat für Personalangelegenheiten - 09596 Freiberg, Germany

Your application documents will not be returned, therefore please send only copies. Interview costs will not be covered. TU Bergakademie Freiberg is further looking for scientific personnel of diverse specialization. For further information: <http://tu-freiberg.de/wirtschaft/karriere/stellenausschreibungen>