TU BERGAKADEMIE FREIBERG

TUBAF
Die Ressourcenuniversität.
Seit 1765.

Research Assistant (m/f/d)

Job offer reference number 9-E/2026

Faculty of Mechanical, Process and Energy Engineering

Scope of position: 0,75 FTE (30 hours/week)
Time limit: 31.12.2028

Remuneration: pay group E13 TV-L
Start: at the earliest opportunity

TU Bergakademie Freiberg is researching sustainable solutions to the global challenges facing the 21st century. The Institute of Mechanical Process Engineering and Mineral Processing (MVTAT) is conducting research into the **processing of primary raw materials**. The most important processes here are comminution and physical separation. In the context of digitalisation, it is crucial to link **inline/online data characterising the ore stream** with the status of the machine or the process result. State-of-the-art particle imaging methods and multidimensional particle property analysis provide deeper insights and a better understanding of processing. We are looking for a research assistant (m/f/d) to work on a **collaborative project with German and European industry partners**. The research will focus on the mechanical processing of ores containing critical raw materials. Particular focus will be given to the **digitalisation** of this process step. Image analysis and geometallurgical methods provide large data sets that can be used to **quantify yield and specific element concentrations through data analysis**. Another aspect of the research will be to search for proxies, i.e. patterns in the image data of the ore particles that can control the processing itself.

Your tasks

- Working on a research topic in the field of mineral processing technology/particle technology
- Further development and experimental research work on mineral processing and process control
- On- and off-line characterisation of material flows from ore processing, development of structure-process relationships
- Process modelling - data evaluation - digitization

What we expect from you

- Above-average university degree or master's degree in process engineering, environmental engineering, chemical engineering, physics, applied natural sciences or comparable
- Knowledge of the basic processes of mechanical process engineering
- Interest in scientific work and further scientific training (e.g. doctoral degree)
- Very good English language skills (verbal and written)

What you can expect from us

- Working at a family-friendly university with flexible working hours
- Remuneration in accordance with TV-L with attractive fringe benefits (e.g. capital-forming benefits, VBL company pension scheme)
- Opportunities for professional and personal development
- Discounted ticket for local public transportation (Jobticket), diverse cultural, sporting and health offerings

Applicants (m/f/d) must meet the employment requirements for the conclusion of fixed-term employment contracts in accordance with the WissZeitVG (German Academic Fixed-Term Contract Act).

Your application

Please send your application with the usual documents, quoting the reference number (9-E/2026)

by 13 February 2026, preferably by email to:

bewerbungen@tu-freiberg.de

or to:
TU Bergakademie Freiberg
Dezernat Personalangelegenheiten
09596 Freiberg

For further information please contact:

Prof. Urs A. Peuker
Tel.: 03731/392916, E-Mail:
Urs.Peuker@mvtat.tu-freiberg.de

Severely disabled persons or persons of equivalent status (m/f/d) will be given preferential consideration if they have the same qualifications, performance and abilities. Please enclose proof of this. The TU Bergakademie Freiberg specifically promotes the proportion of women and expressly invites qualified women to apply.

FAMILIE IN DER HOCHSCHULE
Zertifikat seit 2023 audit familiengerechte hochschule
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