TU Bergakademie Freiberg

TUBAF
Die Ressourcenuniversität.
Seit 1765.

Research Assistant (m/f/d)

Reference Number 142-E/2026

Department of Materials Science and Materials Technology
Institute for Nonferrous Metallurgy and Ultra-Pure Materials

Workload: 0.75 FTE (30 hours/week)
Start Date: October 1, 2026

Compensation: E 13 TV-L
Contract End Date: May 31, 2030

The Faculty of Materials Science and Materials Technology, Institute of Non-Ferrous Metallurgy and Ultra-Pure Materials, is seeking to fill the above-mentioned position on a fixed-term basis as part of a third-party-funded project.

These are your tasks:

- Conducting a literature review on relevant pyrometallurgical processes (copper recycling from intermediate products, desulfurization, slag design, reduction using H2, NH3, and plasma, and utilization of resulting waste streams)
- Planning and conducting pyrometallurgical crucible experiments using H_2, NH_3, and plasma (in melt and fluidized bed)
- Planning and supervising upscaled pilot experiments (TSL & TBRC)
- Process modeling and optimization using simulation tools (FactSage, HSC Sim)
- Collaboration with industry partners and an international team
- Presentation of project results at project meetings, international conferences, and in publications in scientific journals
- Providing technical advice to project partners
- Documentation of results and preparation of reports
- Management of TUBAF activities within the scope of the project

What we expect from you:

- A university diploma, master's degree, or Ph.D. in metallurgy, process engineering, materials science, chemistry, earth sciences, or a comparable degree
- Knowledge of pyrometallurgy and thermodynamic modeling (HSC SimFactSage) is a plus
- Knowledge of copper metallurgy, recycling processes, and the use of H_2
- Willingness and ability to write reports and prepare publications on research results
- Willingness to travel for work
- Very good English skills (spoken and written); Willingness to learn German; ability to work independently; self-motivation and strong teamwork skills; willingness to pursue further qualifications (Ph.D. candidate, postdoctoral fellow)
- Organizational skills and willingness to lead the project both scientifically and administratively

What you can except from us:

- Family-friendly working conditions and flexible work hours
- Compensation in accordance with the TV-L collective bargaining agreement, including attractive benefits (e.g., contributions to asset-building plans, company pension plan (VBL))
- Opportunities for professional and personal development (e.g., a Ph.D.)
- Discounted commuter pass, diverse cultural, sports, and wellness programs

Your Application:

Please send your application with the usual documents, **quoting the reference number (142-E/2026)**
preferred until 23.08.2026 by E-Mail:

bewerbungen@tu-freiberg.de

or to:

TU Bergakademie Freiberg
Dezernat Personalangelegenheiten
09596 Freiberg

For further information, please contact Prof. Dr. -Ing. Alexandros Charitos, E-Mail: Alexandros.Charitos@inemet.tu-freiberg.de Phone: 03731 39-2303 or Ludwig Blenau, M.Sc. E-Mail: Ludwig.Blenau@inemet.tu-freiberg.de

The applicant must meet the hiring requirements for fixed-term employment contracts according to the WissZeitVG. Applicants with disabilities will receive preferential consideration, provided they possess equal qualifications. For consideration, we ask you to submit proof of your disabled status together with your application documents. TU Bergakademie is committed to increasing the number of women in teaching and research positions, hence qualified female candidates are especially encouraged to apply.

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Zertifikat seit 2023 audit familiengerechte hochschule
Innovative Hochschule
WELTOFFENE HOCHSCHULEN GEGEN FREMDENFEINDLICHKEIT