

At the TU Bergakademie Freiberg, Faculty of Mechanical, Process and Energy Engineering, Institute of Energy Process Engineering and Chemical Engineering, Professorship of Reaction Engineering invites applications for the position of

Research Associate (m/f/d) – reference number 32-E/2024



to join our research group at the earliest possible time.

Pay grade: according to German pay grade E13 TV-L
Hours: 1,0 FTE (40 hours/week; part-time may be possible)
Contract type: 30 months

Job description:

The research project deals with Three Way Catalysts used for the efficient exhaust gas aftertreatment of passenger cars operating with actual and future CO₂-neutral gasoline. The study aims the elucidation of deactivation mechanisms to develop counterstrategies for the improvement of the long-term performance of the catalysts. The research is embedded into a consortium consisting of another research institute and different industry partners. The project is financed by public means.

The work includes:

- Research on the deactivation mechanisms of Three Way Catalysts useful for passenger cars operating with actual and future CO₂-neutral gasoline
- Physico-chemical characterization of the active sites of the catalysts and adsorbates formed during the operation of the catalysts
- Investigation of the effect of operation conditions on adsorbates and their impact on catalyst lifetime and activity
- Targeted development and proof of counterstrategies based on the knowledge gained in order to improve the long-term stability

What you can expect from us:

- 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 German federal states in accordance with the personal requirements
- A wide range of networking, mentoring and development opportunities
- Attractive fringe benefits, e.g., asset-based benefits (VL), company pension schemes (VBL), health management; Job Ticket for public transportation

What we expect from you:

- University diploma or master degree or doctorate in the fields of natural sciences and engineering
- Good written and spoken German and English skills
- Independent scientific work as well as scientific curiosity and the ability to work in a team

**For further information please contact Prof. Dr. Sven Kureti, phone: +49 3731 39 4482,
e-mail: kureti@iec.tu-freiberg.de**

The applicant (m/f/d) must meet the hiring requirements for a fixed-term contract according to the WissZeitVG. Applicants with disabilities will receive preferential consideration, providing they possess equal qualification. For consideration, we ask you to submit proof of your disabled status together with your application documents. TU Bergakademie Freiberg is committed to increase the number of women in teaching and research positions, hence qualified female candidates are especially encouraged to apply.

Written applications including CV, list of publications, motivation letter and copies of all relevant qualification documents (certificates, diplomas) should be submitted by **March 8, 2024** stating the **reference number (32-E/2024)** to the following address:

**TU Bergakademie Freiberg, Dezernat für Personalangelegenheiten, 09596 Freiberg
or by e-mail to: bewerbungen@tu-freiberg.de**

Your application documents will not be returned, please only submit copies. TU Bergakademie Freiberg is always looking for scientific personnel from various disciplines. Further information can be found at <https://tu-freiberg.de/en/job-opportunities>.