



**Technische Universität Berlin**



Technische Universität Berlin offers an open position:

## **Research Assistant - 0.67 working time - salary grade 13 TV-L Berliner Hochschulen**

**Faculty II - Institute of Chemistry / BasCat - UniCat BASF JointLab**

**Reference number:** II-605/24 (starting at 01/01/25 / limited until 31/12/2026 / closing date for applications 15/11/24)

### **Working field:**

Unlocking new raw materials, new catalysts, and new processes is necessary to achieve a sustainable, energy- and atom-efficient circular economy (closed carbon cycle). BasCat - UniCat BASF JointLab explores possibilities to use green hydrogen and waste (e.g., plastic waste, biomass, carbon dioxide from exhaust gases) as raw materials. Our mission is to produce essential platform chemicals (e.g., higher alcohols and hydrocarbons) in sustainable value chains. The focus of the interdisciplinary project team at the Technical University of Berlin is on heterogeneous catalysis.

In collaborations within different projects, we aim to improve the technology of CO<sub>2</sub> conversion for e.g., one-step processes to convert alternative syngas mixtures into valuable products. The desired products serve as constituents of SAF (sustainable aviation fuels) and sustainable base chemicals. The tasks at hand are:

- Kinetic studies in high pressure flow reactors
- Integration of experimental work into a digital work-flow

The obtained data will be used by project partners for machine learning assisted simulation of reaction networks and prediction of catalytic performance.

### **Requirements:**

- Successfully completed scientific university degree (diploma, master's degree or equivalent) in chemistry or chemical engineering with above-average academic performance
- Knowledge in heterogeneous catalysis
- Experience in use of catalytic test reactors
- Experience in Data-Driven Catalysis Research (e.g., digitalization, python, data bases)
- Good knowledge of German and/or English required; willingness to acquire the respective missing language skills

### **Desirable qualifications:**

- Hands-on experience for high-pressure / multi reactor systems
- Experience in characterizing inorganic materials (solid catalysts)

Applications should include **the reference number** of the advertised position and the appropriate documents (e.g., cover letter, CV, copy of the certificates of your Diplom / Master degree, a summary of your M.Sc. Thesis, and a publication record if applicable). Please send your complete application in one single pdf file **via E-Mail to Dr. Michael Geske: [contact@bascap.tu-berlin.de](mailto:contact@bascap.tu-berlin.de)**.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guaranty for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: [https://www.abt2-t.tu-berlin.de/menue/themen\\_a\\_z/datenschutzerklaerung/](https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/).

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

The vacancy is also available on the internet at <https://www.personalabteilung.tu-berlin.de/menue/jobs/>

