



Technische Universität Berlin offers an open position:

Research Assistant - salary grade E 13 TV-L Berliner Hochschulen

part-time employment may be possible

Faculty III - Institute of Chemical and Process Engineering / Process Dynamics and Operations Group

Reference number: III-75/25 (starting at 15/03/25 / limited until 14/03/2028 / closing date for applications 14/03/25)

Working field:

The Process Dynamics and Operations Group is looking for a new employee for an exciting third-party funded project as part of the DFG Priority Program 2331 "Machine Learning in Chemical Engineering". In the project, a data-driven real-time controller is to be developed in cooperation with TU Dortmund, which makes a batch process operable under uncertainties.

The following specific tasks are to be addressed:

- Parameter estimation and uncertainty quantification using Bayesian inversion
- Constructive planning and construction of a pervaporation cell and connection to the existing batch column
- Planning and execution of experimental measurement series as a data basis for model development and training of machine learning algorithms
- Modeling of the pervaporation process

You can find further information on the group at www.tu.berlin/dbta.

Requirements:

The department is based in chemical engineering, but candidates from other engineering disciplines or backgrounds are always welcome. Regarding the described position, we are interested in colleagues with the following qualifications and interests:

- A successfully completed scientific university degree (Master, Diploma or equivalent) in field of process engineering, chemical engineering, computational engineering science, or similar is required
- Our team and our research work is very international; a good knowledge of German and/or English is therefore required; willingness to learn the respective missing language skills is expected
- Advanced knowledge of process modelling is required, in particular the smooth formulation of equation systems in the absence or occurrence of additional effects
- Basic knowledge of planning and conducting practical experiments is also required

Desirable:

- Practical experience in the operation of process plants is recommended
- Basic knowledge of plant automation and programming in process control systems
- Independent, well-organized way of working

Please send your application **with the reference number** and the usual documents (CV, records/grades, application letter, all combined in a single pdf file, max. 5 MB) by email to **Prof. Dr.-Ing. habil. Jens-Uwe Repke** (sekr@dbta.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/.

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.

Technische Universität Berlin - Die Präsidentin - Fakultät III, Institut für Prozess- und Verfahrenstechnik, FG Dynamik und Betrieb technischer Anlagen, Prof. Dr.-Ing. habil. Jens-Uwe Repke, Sekr. KWT 9, Straße des 17. Juni 135, 10623 Berlin

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

