Technische Universität Berlin

Research Assistant - salary grade E13 TV-L Berliner Hochschulen

part-time employment may be possible, under the reserve that funds are granted

Faculty III - Process Sciences, Faculty III - Process Sciences - Institute of Energy Technology / Hermann-Rietschel-Institute, Energy, Comfort and Health in Buildings
Reference number: III-335/25 (starting at 01/10/25 / limited until 30/09/2030 / closing date for applications 05/09/25)

Your responsibility:

Scientists at the Hermann Rietschel Institute have been researching the energy-efficient use of system technology in buildings and neighborhoods for 125 years. Our research profile aims to minimize the tension between the main topics

- Contamination control,
- Indoor Environmental Quality (IEQ) and
- Energy-efficient systems engineering in buildings and districts.

Our expertise in the development of physical and AI-supported simulation models as well as the development and maintenance of numerous test laboratories enables us to offer a range of services from basic research to prototype development.

In our new research project “Heat-TransX”, we are investigating the thermal transformation of low-temperature distribution systems using heat pumps.

The aim of the research project is to develop a compact booster heat pump that is integrated into the heat transfer station and enables a temperature increase from the primary to the secondary network. The solution is intended to be suitable for installation in basement rooms, use a natural refrigerant, and be optimally coordinated in terms of control systems. Extensive laboratory and field tests are planned to validate the technology. HRI will be responsible for the system controller and system integration.

Do you want to actively contribute to the energy transition? Then become part of our team and help us develop solutions for the district heating systems of the future!

For more information about the position, please contact us: Prof. Dr.-Ing. M. Kriegel, Tel.: +49 (0)30 314 – 24170, Mail: kontakt@hri.tu-berlin.de

Your profile:

- Successfully completed university degree (Diploma, Master’s degree or equivalent), preferably in the field of building technology, control engineering, physics, renewable energy systems, or a related field
- Excellent scientific knowledge in the following areas:
  o Control engineering
  o Thermodynamics
  o Heat transfer
- Prior experience in physical modeling, simulation, and process optimization
- Experience in developing tools, e.g., in Python
  o Development of measurement and control software
- Prior experience in conducting experimental studies
- Experience in publishing research results
- Good written and spoken German or English; willingness to acquire the missing language skills if necessary
- Good knowledge in the field of data acquisition and analysis is an advantage
- Very good PC skills (hardware and software) are an advantage
- Experience in planning and conducting scientific studies is desirable
- Flexibility and interest in new challenges is desired

How to apply:

Your application documents can be sent by e-mail to **kontakt@hri.tu-berlin.de** or by post, **quoting the reference number**: **Technische Universität Berlin, FG Energie, Komfort & Gesundheit in Gebäuden, Prof. Dr.-Ing. M. Kriegel, Sekr. HL 45, Marchstr. 4, 10587 Berlin**.

For cost reasons, the application documents will not be returned. Please submit copies only.

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.

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