Technische Universität Berlin

Technische Universität Berlin offers an open position:

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 - Institute of Energy Technology / Hermann-Rietschel-Institute, Energy, Comfort and Health in Buildings
Reference number: III-98/25 (starting at the earliest possible / limited until 31/12/2027 / closing date for applications 16/05/25)

Working field:

Scientists at the Hermann Rietschel Institute have been researching the energy-efficient use of system technology in buildings and neighborhoods for 140 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 "InStra", we are investigating the innovative use of radiant heating systems. We are pursuing a new approach to room heating and optimizing not the heating system, but the associated room. The focus is therefore on the radiation properties of the unheated room surface.
We will show: By optimizing the design of the unheated room surface, the actual heating load can be reduced by up to 30% to create a thermally balanced condition.

We are looking for you to support our team!
Using simulative and experimental investigation methods, you will examine the energy potential of radiation-reflecting, unheated surfaces in a wide range of practical applications. As part of your research work

- you analyze the energy potential of the new heating concept simulatively and experimentally,
- develop design recommendations for interiors that increase the energy efficiency of radiant heating systems and
- publish your research results in specialist journals, at scientific conferences and in scientific Journals.

Requirements:

- Successfully completed scientific university degree (Diploma, Master's or equivalent) in the field of building technology, building physics, physics, civil engineering, mechanical engineering or similar
- Very good scientific knowledge in the field of heat transfer
- Previous knowledge of physical modeling, ideally in Modelica
- Previous experience in conducting experimental studies
- Experience in the publication of research results
- Good knowledge of German and/or English required; willingness to acquire the respective missing language skills

Desirable:

- High motivation and initiative
- Team and organizational skills
- Good knowledge in the field of data acquisition and analysis
- Very good PC skills (hardware and software)
- Experience in planning and conducting scientific studies
- Flexibility and interest in new challenges

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.personalabteilung.tu-berlin.de/menue/jobs/