



Technische Universität Berlin offers an open position:

## Research Assistant - salary grade E13 TV-L Berliner Hochschulen

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

### Faculty III - Institute of Chemical and Process Engineering / Energy, Comfort & Health in Buildings

Reference number: III-408/22 (starting at 01/08/22 / until 31/07/25 / closing date for applications 15/07/22)

**Working field:** Collaboration in research project SubWW (SubWW: A case study of an innovative heating network in suburban areas at the example of the built-up district of Leeste town center: Phase 2 realization). The project SubWW 2 aims to provide scientific support for the planning and implementation of a low carbon and economically viable heat supply concept in the town center of Leeste. In addition, the development of an adaptable energy management system and the identification of further supply areas in the direct proximity of the study area are planned. The project is considered to be one of the lighthouse projects of the heat transition within Germany and is planned as an interdisciplinary research project with links to economics and local participation.

The tasks include:

- Development of an energy management system to optimize the operation of a heat generator park
- Evaluation of different optimization approaches from economic, ecological and technical perspectives with regard to their suitability for implementation in an energy management system
- Conduct system tests and deploy the energy management system in a software-in-the-loop environment
- Implementation and evaluation of the developed energy management system on a hardware-in-the-loop test rig
- Presentation of results to scientific and non-scientific audiences
- Writing of scientific publications
- PhD thesis preparation is possible

### Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) in building services engineering, utility engineering, power engineering, process engineering, mechanical engineering, physical engineering or a comparable field of study
- An analytical, structured, solution-oriented, independent and scientific way of working is essential
- Knowledge in the field of building and plant simulation and/or system simulation ideally using Modelica is preferable
- Profound knowledge of measurement and control technology
- Knowledge in the field of building and plant simulation and/or system simulation ideally using Modelica is preferable
- Programming knowledge of a common programming language, ideally in Python
- Interest and high motivation to work on a challenging and forward-looking research project in order to make a significant contribution to the success of the energy transition
- A PhD is being pursued
- Business fluent in German or English

More information can be obtained from Prof. Dr. Martin Kriegel (Tel.: +49 (0)30 314 – 24170, Mail: kontakt@hri.tu-berlin.de).

Please send your application with the **reference number** and the usual documents (in a single pdf file, max. 5 MB) **by email to Prof. Dr. Martin Kriegel unter kontakt@hri.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 guarantee 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/) or quick access 214041.

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.

Technische Universität Berlin - Die Präsidentin - , **Fakultät III, Institut für Energietechnik, FG Energie, Komfort und Gesundheit in Gebäuden, Prof. Dr. Martin Kriegel, Sekr. HL 45, Marchstr. 4, 10587 Berlin**

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

