



Technische Universität Berlin



Technische Universität Berlin offers an open position:

2 Positions - Research Assistant - salary grade E13 TV-L Berliner Hochschulen

Part-time employment may be possible; under the reserve that funds are granted
There is the possibility of a doctorate.

Faculty III - Institute of Energy technology / Heat transfer and heat conversion

Reference number: III-719/24 (starting at the earliest possible / limited until 31/10/2027 / closing date for applications 07/02/25)

Working field:

We are looking for a dedicated research associate for a project on development and demonstration of absorption refrigeration systems for industrial application. These systems are considered to be particularly efficient as they utilize waste heat or solar heat to generate cooling. The EU-funded project involves industrial and scientific partners from various European countries.

One of the main tasks of TU Berlin is the development and design of efficient cycles through stationary and dynamic modelling, both conceptually and through participation in the implementation. TU Berlin is embedded in an international working group that works together from the development of ideas through to realization and proof of operation. Design and fabrication by the industrial partner of TU Berlin are to be supported, as well as the planning and implementation on site in Spain and Greece .

You hold a university degree (Master, Diploma or equivalent) in energy or process engineering, physical engineering or a closely related field of study? You are committed, and interested in solutions for a CO₂-neutral and decentralized energy supply? Then we look forward to receiving your detailed and targeted application.

Your Responsibilities:

- Simulation and analysis of cycle variations, and recommendations for implementation
- Thermo-hydraulic design, heat exchanger design, support of construction work
- Assisting with the planning, commissioning, and operation of the systems
- Scientific analysis of the operating results
- Guidance of student employees and supervision of final theses as part of the project
- Dissemination of project results through relevant publications in scientific journals, and presentations at international conferences
- Project management and organization of international project meetings in Berlin

Requirements:

- Successfully completed scientific university degree (Diploma, Master's or equivalent) in energy or process engineering, physical engineering or a closely related degree programme
- Very good knowledge of absorption refrigeration technology and thermodynamics, fluid dynamics, and energy engineering systems; to be demonstrated by suitable courses taken, project work, or relevant work experience
- Experience in the steady-state and dynamic modelling of system components such as heat exchangers, piping, pumps, throttles and flash tanks for multi-component fluids
- Good conduct of German and/or English; willingness to acquire the respective missing language skills

Desirable:

- Experience in scientific project work, preferably in international teams
- Proficiency in handling of tools for data processing, analysis and visualization, and corresponding basic programming skills, e.g. in Python or MATLAB
- Experience in plant automation (PLC programming)
- A friendly and clear communication style

Please send your application with the usual documents (at minimum consisting of a convincing letter of motivation, CV, certificates), stating **the reference number**, exclusively by e-mail in a single PDF file to Prof. Dr. Stefan Elbel - via:

Rewitch.WM@wuw.tu-berlin.de

Please be aware that incomplete applications will not be considered in the further application process.

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/.

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/>

