



### Technische Universität Berlin



Technische Universität Berlin offers an open position:

# Research Associate with permanent tasks (PostDoc) - salary grade E14 TV-L Berliner Hochschulen

part-time employment may be possible

## Faculty IV - Institute of High-Frequency and Semiconductor System Technologies / High-Frequency System Technologies

Reference number: IV-296/25 (starting at the earliest possible / unlimited / closing date for applications 08/08/25)

#### Working field:

The Department of High Frequency Systems was founded within the Faculty of Electrical Engineering and Computer Science at TU Berlin and is dedicated to microwave and millimeter wave technology with strong connections to systems and communication technology. It is equipped with state-of-the-art laboratories and an anechoic measurement chamber, which are suitable for the development and evaluation of radio parts and antenna systems down to the sub-THz range. The department is headed by Prof. Wilhelm Keusgen, who has many years of experience in mm-wave and microwave technology.

The research work in the department aims to develop new technologies for sixth generation (6G) mobile communications networks. We are particularly interested in novel physical layer, front-end and antenna technologies for mobile communication in the mm-wave and sub-THz frequency bands (30 – 300 GHz). To support us in this work, we are looking for a research assistant with a doctorate as soon as possible.

The position is intended to be a full-time position and includes teaching tasks with practical relevance as well as the management of research projects, the scientific and technical guidance of the research assistants, coordination with project partners and the independent acquisition of third-party funding projects.

#### **Potential Tasks:**

- Management of research projects, technical guidance of the scientific staff conducting research, financial planning, project planning and management, material resource management, coordination with project partners, independent writing of scientific publications and independent acquisition of third-party funded projects
- Setup and management of the antenna and high-frequency laboratory
- Carry out research and development of multi-antennas systems and intelligent reflective surfaces for future 6G radios.
- Supervise research assistants who pursue their PhD, student assistants, B.Sc students and M.Sc students.
- · Implementation of courses, internships and student projects

### Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) and very good completed PhD degree in a field related to Communication Engineering, Microwave Engineering, Wireless Systems
- Interdisciplinary knowledge in the fields of microwave engineering, digital signal processing, mobile communications theory, real-time signal processing, high frequency electronics, wireless systems engineering and simulation
- Many years of experience in teaching, especially in courses with a practical focus
- · Experience with antenna and microwave design
- Experience with microwave test and measurement instruments
- Knowledge of electromagnetic design tools
- · Sound programming skills in scientific programming languages such as MATLAB® and Python
- The ability to teach in German and/or in English is required; willingness to acquire the respective missing language skills
- A team player who can work with a high level of independence and has a proactive and solution-oriented attitude, is
  desired
- After completing the university degree programme, at least three years of academic or specialist practical work in a full-time employment relationship

Please send your application with the reference number and the usual documents:

- a curriculum vitae, stating clearly and precisely their education history, earned degrees and previous academic
  institutions;
- letters of recommendation from academic advisors, PhD thesis supervisors, academic instructors;
- published research work, including PhD thesis in electronic form;
- a letter of motivation and purpose
- official grade transcripts with certified translation in English or German if the original documents are in a different language.

To:

## Technische Universität Berlin - Die Präsidentin - Fak. IV, Sekr. HFT 1-1, Fachgebiet Hochfrequenzsysteme, Einsteinufer 25, 10587 Berlin

Applications can be sent in written form, electronic form, or both. We prefer electronic submission, please send applications in electronic form, specifying the **reference number** of the opening, to Julia Meister: **sekretariat@hfs.tu-berlin.de**.

Application documents sent by post 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 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/ 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. 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/