



Technische Universität Berlin



Technische Universität Berlin offers an open position:

3 position - Research Assistant - salary grade E13 TV-L Berliner Hochschulen - 1st qualification period (PhD candidate)

part-time employment may be possible

Institute of High-Frequency and Semiconductor System Technologies / High-Frequency Technologies/Photonics

Reference number: IV-120/25 (starting at the earliest possible / for 5 years / closing date for applications 08/05/25)

Working field:

- Support in the teaching and practical laboratory courses offered by the department
- Collaboration in current research projects of the department, possibly including laboratory and/or cleanroom work (support to development of new processes)
- Own research in the field under the direction of the chair
- Teaching duties are performed

Requirements:

- Successfully completed scientific university studies (Master's degree, diploma or equivalent) in electrical engineering, optics/photonics, physics or a closely related subject area
- The ability to teach in German and/or in English is required; willingness to acquire the missing language skills
- At least one of the following qualifications:
- Experimental work on microwave photonics and/or optical communication systems
- Experience in cleanroom nanofabrication
- Familiarity with in numerical simulations (e.g. in Python, Octave, Matlab, or similar)
- Experience with microwave engineering and/or antenna design, including electromagnetic simulation tools (CST Microwave Studio, HFSS, or similar)
- Familiarity with photonic integrated circuits design, fabrication and testing, including RF/optical simulation software (e.g. CST Microwave Studio, COMSOL, Lumerical, Synopsys Optodesigner, or similar)
- Experience in analog integrated circuits, especially in MMIC/RFIC design (e.g. using Keysight ADS, Cadence, or similar) and testing

Desired skills:

- Ability to work in a team
- Strong motivation and independence
- Experience in one or more of the following topics is a strong plus:
- Experimental work on microwave photonics and optical communication systems
- Experience in cleanroom nanofabrication
- Familiarity with in numerical simulations (e.g. in Python, Octave, Matlab, or similar)
- Experience with microwave engineering and/or antenna design, including electromagnetic simulation tools (CST Microwave Studio, HFSS, or similar)
- Familiarity with photonic integrated circuits design, fabrication and testing, including RF/optical simulation software (e.g. CST Microwave Studio, COMSOL, Lumerical, Synopsys Optodesigner, or similar)
- Experience in analog integrated circuits, especially in MMIC/RFIC design (e.g. using Keysight ADS, Cadence, or similar) and testing

Please send your application (preferably in English) indicating the **reference number** preferably via email to **burla@tu-berlin.de**. Alternatively, applications can be send in writing together with a digital version (USB drive) to: Technische Universität Berlin - Fakultät IV, Fachgebiet Hochfrequenztechnik-Photonik, Prof. Dr. Maurizio Burla, Sekr. HFT 4, Einsteinufer 25, 10587 Berlin.

Required application material:

1. One-page motivation letter, stating why you want to apply for this position and to join the group
2. Detailed CV (resume) with a publication list
3. Academic transcript of B.Sc. and M.Sc. education, including individual exam marks (and, if applicable, an explanation about the equivalence to the German academic grading system)
4. Details and contact of at least two academic referees that know you well (please feel free to include recommendation letters, in case you already have them)

Please note that applications with incomplete application material will not be considered.

For cost reasons, 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.

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/>

