



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 IV - Institute of High-Frequency and Semiconductor System Technologies - Forschungsschwerpunkt Technologien der Mikroperipherik

Reference number: IV-116/25 (starting at 01/07/25 / until 31/01/27 / closing date for applications 04/04/25)

Working field:

Within a third-party funded research project TU Berlin will improve the reflow resistance of photonic wirebond through an innovative assembly technique and an adapted photonic wirebond design.

The tasks of the TU Berlin focusses on the reflow resistance of silicon-organic hybrid (SOH) photonic integrated circuits (PIC) with photonic wirebond (PWB) fabricated by two-photon polymerisation. The reliability of the reflow resistance and the thermal and optical stability of the PWBs will be extensively investigated. In addition, the reflow resistance will be improved through optimised AVT to ensure the performance of the PICs. The results of this work should contribute to increasing the efficiency and miniaturisation of optical data transmission.

Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) in Electrical engineering, photonics, physical engineering, physics or similar degree programs
- Knowledge and experience in
 - a) Optics, fibre optics and laser technology
 - b) Thermal/mechanical and optical simulations
 - c) Optical measurement technology
- Good knowledge of German and/or English required; willingness to acquire the respective missing language skills

Desirable:

- Knowledge of statistical design of experiments (DoE) and evaluation
- Experience with fs-lasers
- Programming skills
- Structured and independent way of working
- Willingness to take responsibility for subtasks
- Ability to work in a team, willingness to document

Please send your application with the **reference number** and the usual documents (one file max. 5 MB) only via email to **personal@tmp.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 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.

Technische Universität Berlin - Die Präsidentin - Fakultät IV- Institut für Hochfrequenz- und Halbleiter-Systemtechnologien - Elektrotechnik und Informatik, Forschungsschwerpunkt Technologien der Mikroperipherik, Prof. Dr.-Ing. Martin Schneider-Ramelow, Sekr. TIB 4/2-1, Gustav-Meyer-Allee 25, 13355 Berlin

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

