

Internal university call for applications

At the TU Bergakademie Freiberg Faculty of Chemistry, Physics and Biosciences, Institute of Applied Physics, a position is available as a

Research Assistant (m/f/d) – reference number 85-E/2025

as part of a third-party funded project.

Pay grade: according to German pay grade E13 TV-L
Hours: 0,75 FTE (30 hours/week)
Contract type: 31.12.2027



The main focus of research at the Institute for Applied Physics at the TU Bergakademie Freiberg is the investigation and integration of new materials for semiconductor devices. Ultra-wide bandgap (UWBG) semiconductors are promising candidates for future power electronic devices. The characterization of UWBG materials is challenging and requires new technologies. In the third-party funded project "SSPV-4-UWBG", research is being carried out together with academic and industrial partners to develop a contactless, non-destructive characterization by the surface photovoltage (SPV) technique.

Job description:

- Working on a research project targeting future power semiconductor materials
- Development of a non-destructive characterization method by evaluation of the surface photovoltage
- Clean room process development for fabrication of UWBG electronic devices
- Comparison of the results with state-of-the-art optical defect spectroscopy methods like photoluminescence and microwave detected photoconductivity
- Presentation of results at national and international conferences and preparation of scientific papers for publication in peer-reviewed journals

What you can expect from us:

- A varied and responsible job in the laboratories of the Institute of Applied Physics; excellent research infrastructure; integration of your research work into a scientific network
- Working at a family-friendly university with flexible working hours
- Remuneration in accordance with the provisions of the TV-L
- Attractive additional benefits, e.g. capital-forming benefits (VL), company pension scheme (VBL), health management; training by experienced employees, extensive training opportunities, discounted ticket for local public transport (job ticket); Active support for doctoral projects

What we expect from you:

- A university diploma or master degree with a focus on physics, electrical engineering, materials science or Applied Natural Science (specialization in solid-state physics or photovoltaics and semiconductor technology)
- Advanced knowledge in solid-state and physics and semiconductor technology
- Knowledge and practical experience in optical and/or electrical defect spectroscopy
- Willingness to obtain scientific qualifications
- Interdisciplinary collaboration, ability to work in a team, flexibility and working in a clean room
- Independent, goal-oriented and structured way of working as well as a high level of personal commitment
- Good English and German language skills, both written and spoken

For further questions on the content of the individual topics, please contact Prof. Johannes Heitmann, Phone:

03731/39-4002; E-Mail: sekretariat.iap@physik.tu-freiberg.de

Please also see our website: <https://tu-freiberg.de/fakultaet2/angph>

The applicant (m/f/d) must meet the hiring requirements for a fixed-term contract according to the WissZeitVG. Applicants with disabilities will receive preferential consideration, providing they possess equal qualification. For consideration, we ask you to submit proof of your disabled status together with your application documents. TU Bergakademie Freiberg is committed to increase the number of women in teaching and research positions, hence qualified female candidates are especially encouraged to apply.

Please send your application with a cover letter/motivation letter, CV, copies of all relevant certificates, quoting the **job advertisement reference number (85-E/2025) by 15.07.2025** to:

**TU Bergakademie Freiberg, Dezernat für Personalangelegenheiten, 09596 Freiberg
or by e-mail to: bewerbungen@tu-freiberg.de**

Interview costs will not be covered. The TU Bergakademie Freiberg is also looking for staff from various disciplines. Further information can be found at: <https://tu-freiberg.de/stellenangebote>