



Technische Universität Berlin



Research Assistant - salary grade E13 TV-L Berliner Hochschulen

Part-time employment may be possible; under the reserve that funds are granted

Faculty II - Mathematics and Natural Sciences, Faculty II - Mathematics and Natural Sciences, Institute of Physics and Astronomy, Terahertz and Laser Spectroscopy

Reference number: II-351/25 (starting at 01/11/25 / limited until 31/10/2027 / closing date for applications 12/09/25)

Your responsibility:

The research tasks include the development and construction of a compact THz ellipsometer device, based on the time-domain principle. The development project will be pursued in a cooperation with the company SENTECH Instruments GmbH. The goal is an ellipsometer demonstrator which is suited for the quantitative analysis of soil, sand and regolith samples. In order to do this, the polarization-dependent optical response of suitable reference samples in the infrared and THz spectral range shall be measured in ATR geometry. The optical response shall be evaluated in optical models with the intention to derive information about the composition and particle size in the samples.

Your profile:

- successfully completed scientific university studies (Master's degree, diploma or equivalent) in physics or a related subject area
- fundamental knowledge in applied Optics
- hands on experience with femtosecond lasers and/or ellipsometry
- capability to work in an interdisciplinary, international team is desired
- first practical experiences in programming with Python or LabVIEW are desirable
- good knowledge of German and/or English required; willingness to acquire the respective missing language skills

For further information, please contact Prof. Dr. Michael Gensch (Tel.: +49 (0)30 314-26644, e-mail: michael.gensch@tu-berlin.de).

How to apply:

Please send your application with the **reference number** and the appropriate documents (combined in a single pdf file, max 5 MB) by email to Prof. Dr. Michael Gensch (**michael.gensch@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 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.jobs.tu-berlin.de>

