



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

Faculty V - Institute of Fluid Dynamics and Technical Acoustics / Chair of Technical Acoustic

Reference number: V-712/24 (starting at 01/04/25 / limited until 30/06/2028 / closing date for applications 31/01/25)

Working field:

As part of this role, future scenarios involving unmanned aerial systems (UAS) will be simulated, and their impact on humans will be studied. The focus will be on examining the effects of distinctive acoustic characteristics (psychoacoustics) of drones, the changes in noise with multiple sources, and aspects related to distance. The goal is to simulate and evaluate defined, prototypical traffic scenarios involving UAS.

Key responsibilities include:

- Modeling sound sources, sound propagation, including superposition effects, and the impact at the point of reception
- Conducting experimental studies to assess the resulting sounds concerning various noise effects
- Supervising students working on thesis projects related to the topic

The findings from this research will contribute to the development of guidelines for effective protection against noise disturbance caused by UAS traffic.

This exciting and diverse role offers an inclusive and appreciative working atmosphere within a committed and diverse team, numerous opportunities for professional development, room for your ideas and mentoring by experienced scientists, flexible working models, including the possibility of partial remote work.

Requirements:

- completed academic degree (Master, Diplom or equivalent) in an engineering Field or an area closely related to engineering acoustics
- In-depth knowledge of acoustics and signal processing
- Good understanding of psychoacoustics
- Basic knowledge of acoustic measurement techniques
- Experience with Python
- Proficiency in German and/or English; willingness to acquire the missing language skills

Desired Qualifications:

- Experience in planning, conducting, and analyzing scientific experiments related to human auditory perception
- Knowledge of statistical methods, particularly inferential statistics

Please send your application with the **reference number** and the usual documents **only by email in one pdf document to Prof. Dr.-Ing. Ennes Sarradj via ta7@akustik.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.

Technische Universität Berlin - Die Präsidentin - Fakultät V, Institut für Strömungsmechanik und Technische Akustik, FG Technische Akustik, Prof. Dr.-Ing. Sarradj, Sekr. TA 7, Einsteinufer 25, 10587 Berlin

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

