Technische Universität Dresden (TUD), as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the Faculty of Electrical and Computer Engineering, Institute of Acoustics and Speech Communication, the Junior Professorship in Haptic Sensors offers a project position, subject to the availability of resources, as

**Research Associate (m/f/x)**
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting at the **next possible date**. The position comprises 75 % of the fulltime weekly hours. The position is **limited until December 31, 2024**. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG).

**Tasks:** The work includes research activities in the field of **fabrication and implementation of miniaturized pressure sensors for haptic applications**. The primary goal is divided into two categories. The initial part includes the design and fabrication of the flexible pressure sensors using appropriate nanomaterial and polymer. The prototypes should be developed on the basis of composites using graphene variants and PEDOT: PSS. The second part of the project includes the electromechanical characterization of the sensors on the basis of their tunnel junction mechanism. The sensors will then be implemented for tactile and haptic sensing applications. The obtained results will be presented and published in meetings, at conferences and in the form of scientific papers.

**Requirements:** university degree related to the field of physics or material science; high motivation and independent as well as scientific working style; open-mindedness for interdisciplinary cooperation and good English skills. Experience in the field of haptics, nanotechnology, sensors, mechatronics and flexible sensing technology is an advantage.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Please submit your comprehensive application including the usual documents by **January 2, 2023** (stamped arrival date of the university central mail service applies) to: **TU Dresden, Fakultät Elektrotechnik und Informationstechnik, Institut für Akustik und Sprachkommunikation, Juniorprofessur für Haptische Sensorik, Jun.-Prof. Anindya Nag, Helmholtzstr. 10, 01069 Dresden, Germany** or via the TU Dresden SecureMail Portal [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) by sending it as a single pdf-document to **anindya.nag@tu-dresden.de**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.