

Faculty of Mechanical Science and Engineering

For the EU-funded research project *Smart Electronic Olfaction for Body Odor Diagnostics (SMELLODI)* the **Institute of Materials Science, Chair of Materials Science and Nanotechnology** offers, subject to resources being available, two positions as

Research Associate / PhD student (m/f/x)

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

in the field of computational materials science. The positions will start at the **next possible date**. They are limited for a period of up to 3 years and offers the chance to obtain further academic qualification (e. g. PhD). The period of employment is governed by the Fixed Term Research Contracts Acts (Wissenschaftszeitvertragsgesetz - WissZeitVG). Balancing family and career is an important issue. The positions are generally suitable for candidates seeking part-time employment. Please indicate the request in your application.

The positions are embedded in a cooperative research project (EIC Pathfinder Open) funded by the European Union which aims at the smart electronic recognition and transmission of body odors, paving the path for a new era of digitizing olfaction. The multi-disciplinary Smellodi group will prepare the grounds for the necessary innovations in order to make digital olfaction available as a technology addressing societal and economic challenges of the future. (<https://smellodi.eu/>)

Furthermore, they will be embedded within the Chair of Materials Science and Nanotechnology and strongly interacting with its more than 30 members. The scientific activities of the Chair are concerned with the development of innovative strategies for novel materials on the nanoscale within materials modelling, device simulations and its experimental investigation. For more information about our activities, please visit <https://www.nano-tud.de/>.

Tasks: The successful candidates will use modern approaches of computational materials science in combination with efficient methods for data analysis/machine learning to compute and predict properties of odor molecules and their interaction with sensor receptors.

Requirements: An excellent university degree in Physics, Chemistry, Materials Science, or a closely related area is required, as well as excellent communication and writing skills in English. Furthermore, personal initiative, independent work, as well as the ability to work in a team are necessary. Experience in computational material science (DFT, advanced MD) is desirable. We target at top-notch dedicated and proactive young scientists who plan to make their mark in science.

Applications from women are particularly welcome. The same applies to people with disabilities.

Please submit your comprehensive application documents as a **single PDF file**, including a letter of motivation, Curriculum Vitae, publication list by **April 8, 2022** (stamped arrival date of the university central mail service applies) via the TU Dresden SecureMail Portal <https://securemail.tu-dresden.de> by sending it as a single pdf document to jobs.nano@tu-dresden.de with the **Subject:"Application Smellodi, your_surname"** or to **TU Dresden, Fakultät Maschinenwesen, Institut für Werkstoffwissenschaft, Professur für Materialwissenschaft und Nanotechnik, Herrn Prof. Cuniberti, Helmholtzstr. 10, 01069 Dresden**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

About TU Dresden

The TU Dresden is among the top universities in Germany and Europe and one of the eleven German universities that were identified as an 'elite university' in June 2012. As a modern full-status university with 17 faculties it offers a wide academic range making it one of a very few in Germany.

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: <https://tudresden.de/karriere/datenschutzhinweis>.