

Technische Universität Dresden - "Friedrich List" Faculty of Transport and Traffic Sciences, Institute of Transport Planning and Road Traffic, Chair of Transport Ecology



TUD Dresden University of Technology, as a University of Excellence, is one of the leading and most dynamic research institutions in the country. The "Friedrich List" Faculty of Transport and Traffic Sciences is the largest academic competence center in the field of transportation sciences in Germany and researches all modes of transport and mobility needs. At the Chair of Transport Ecology, we examine how climate-friendly mobility and clean traffic can be understood today and in the future. 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.

Research Associate (m/f/x) in the work field "Clean Traffic, especially Analysis of Vehicle Emissions"

(subject to personal qualification, employees are remunerated according to salary group E 13 TV-L) At the "Friedrich List" Faculty of Transport and Traffic Sciences, Institute of Transport Planning and Road Traffic, the Chair of Transport Ecology offers a position as Research Associate (m/f/x) in the work field "Clean Traffic, especially Analysis of Vehicle Emissions" starting November 1, 2026. The position is limited until March 31, 2029 with the option of extension and prolongation. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position comprises 80% of the full-time weekly hours and offers the chance to obtain further academic qualification. Within the work field of "Analysis of Vehicle Emissions", you will become part of a Europe-wide research network analyzing vehicle emissions. The goal is to determine real-world emissions for the European vehicle fleets (passenger cars, light- and heavy-duty commercial vehicles) under a broad range of operating conditions. Ideally, the results will feed into European emission limit legislation, emission modelling, and air-quality management.

City: Dresden; Starting date (earliest): 01/11/26; Duration: bis 31.03.2029;
Remuneration: bei Vorliegen der persönlichen Voraussetzungen E 13 TV-L; Reference number: w26-231; Closing date: 14/10/26

Tasks

Our working group has built a unique database that contains Europe-wide remote emission sensing measurements from the past decades. You will continuously develop this database, integrate new field and laboratory measurements (remote sensing, plume chasing, PEMS, etc.) and evaluate them with advanced analytical and statistical methods. Multivariate analyses and machine learning approaches are particularly desired. You will cooperate with emission experts across Europe, be responsible for corresponding third-party funded projects, and ideally lead the research group composed of several researchers.

Your expertise will be incorporated into teaching, especially through supervising lectures, seminars and student projects (according to HSDAVO). You will publish your results at international conferences and in peer-reviewed journals. You will also take part in acquiring and managing further projects to expand the research field with the possibility of increasing your working hours.

Requirements

- at least a good university degree in transportation or industrial engineering, environmental engineering, physics, data science, computer science or related fields
 - proven experience in analyzing large datasets, e.g., with multivariate statistics or machine learning
 - experience with relational databases, e.g., PostgreSQL
 - knowledge of Linux, Git-Bash and virtual machine configuration
 - independence and initiative, combined with openness to discussion and feedback
 - English and German language skills – one at C1 level, the other at least B1
- A relevant PhD, documented experience in project leadership and in obtaining external funding are advantageous.

What we offer

- an exciting research and teaching position with development prospects
- flexible, family-friendly work arrangements, including home-office and mobile-office options
- ergonomically equipped workstation with a notebook
- access to high performance computing resources
- professional and personal further training at TUD
- public service social benefits (health insurance, vacation, discounted job ticket, employee sports, corporate benefits)
- an international team with motivated colleagues in an open, committed atmosphere

Application

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The university is a family-friendly university. 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.

Application: Please include in your application your motivation for the work and your ideas for developing the research group. Indicate which research questions you intend to address, which goals you aim to achieve within the first 24 months, and how you will approach the data analysis. Together with your curriculum vitae, list of publications, certificates, and an English summary of your master's/diploma or PhD thesis (whichever is the most recent), please submit your application documents exclusively by e-mail no later than October 14, 2026 (time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal <https://securemail.tu-dresden.de> as a single PDF file to jens.borken-kleefeld@tu-dresden.de.

Expenses incurred in attending interviews cannot be reimbursed.

TUD is a founding partner in the DRESDEN-concept alliance.

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://tu-dresden.de/karriere/datenschutzhinweis>.

More information at <https://stellenticket.de/207248/TUBS/>
Offer visible until 14/10/26

