



Job advertisement

Research associate for sustainable mobile electrical energy systems

The **Chair for Mobile Electric Energy Systems**, newly founded in August 2022, at the Institute for Electromagnetic Compatibility of the Faculty of Electrical Engineering, Information Technology, Physics researches the electrical energy supply of aircraft, ships, satellites, automobiles and other vehicles. Using systems engineering approaches, new types of vehicle electrical systems are being developed and tested in the laboratory. The developed energy systems should contribute to reducing CO₂ emissions in the transport sector, true to the motto of the chair: ***Advance the energy transition with the electrification of vehicles!***

The position at the chair is to be filled immediately. The contract period is initially limited to 2 years, with an extension being sought.

The Technical University of Braunschweig with 17,800 students and around 3,800 employees offers a wide range of teaching and research opportunities with excellent facilities and a personal atmosphere at the same time.

Your tasks

- Research in the field of energy systems of vehicles and publication of new research results in professional journals and at conferences
- Development of new aircraft energy system architectures
- Participation in the establishment of a research network on the topic of vehicle electrical systems
- Application for and processing of research projects
- Participation in the construction and operation of an on-board network laboratory
- Participation in teaching and supervision of student work

The research can focus on aircraft on-board networks within the framework of the mobility research focus and the Sustainable and Energy-Efficient Aviation (SE²A) cluster of excellence. Further information on the Cluster of Excellence SE²A can be found here <https://www.tu-braunschweig.de/en/se2a>.

The research focus can be chosen more system-oriented (e.g. optimization of the overall system) or with a purely technical focus (e.g. implementation of new DC on-board networks) according to your own strengths.

Your profile

- Very good or good master's degree (or comparable degree) in the fields of electrical engineering, industrial engineering, physics, computer science or mechanical engineering
- Ambitious and independent in working on research projects
- Interested in applied research
- Very good written and spoken English

In-depth knowledge in the field of energy technology as well as experience in the field of modeling and simulation of electrical systems are desirable.

Mastery of the German language is not required.

Our offer

- Research freedom and at the same time support from our team
- Opportunity for a doctorate with good supervision
- Outstanding research infrastructure
- Opportunity to get involved in university teaching
- Participation in shaping the energy transition through optimizations in the transport sector

The position is intended to serve the qualification of young academics and offers the opportunity for a doctorate in electrical engineering. Payment is made depending on the assignment of tasks and the fulfilment of personal requirements up to salary group 13 TV-L. The position is generally suitable for part-time work, but should be occupied 100 percent.

For more information, please call +49 (0) 531-391-7764 (Prof. Dr. Michael Terörde) or contact him via email (michael.teroerde@tu-braunschweig.de).

Application process

Your application should include a short motivation letter, your curriculum vitae including your educational background, work experiences and publications, and copies of relevant diplomas or certificates.

Applications from people of all nationalities are welcome. Handicapped applicants will be preferred if equally qualified, proof must be attached. Applications from women are particularly welcome.

Personal data is stored for the purpose of carrying out the application process. Application costs cannot be reimbursed. Please understand that applications that are not considered can only be returned with an addressed and sufficiently stamped return envelope.

Applications are preferably submitted in electronic form to:

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Institute for Electromagnetic Compatibility
Chair for Mobile Electric Energy Systems
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