



With around 17,000 students and 3,800 employees, the **Technische Universität Braunschweig** is one of Germany's leading institutes of technology. It stands for strategic and performance-oriented thinking and acting, relevant research, committed teaching, and the successful transfer of knowledge and technologies to the economy and society. We consistently advocate for family friendliness and equal opportunities.

Our research focuses are mobility, engineering for health, metrology, and city of the future. Strong engineering and natural sciences are our core disciplines. These are closely interconnected with economics, social and educational sciences and humanities.

Our campus is located in the midst of one of the most research-intensive regions in Europe. We work successfully together with over 20 research institutions in our neighborhood as we do with our international partner universities.

Starting from the earliest possible date, the Institute of Internal Combustion Engines and Fuel Cells (ivb) is looking for a

Research Associate (m/f/d) for the topic Simulation of metal hydrides for compressor applications (EG 13 TV-L, full-time)

The position is to be filled on a fixed-term basis for a period of 2 years. The successful applicant will be given the opportunity to pursue a doctorate.

Hydrogen is regarded as a future energy carrier that is also suitable for use in mobility. This requires the establishment of an appropriate infrastructure. The requirements for hydrogen refueling stations are diverse. In the "Thermal Management of Hydrogen Refueling Station Systems" (THEWA) project, several institutes of the TU Braunschweig, in collaboration with industry, are developing a tool that will enable the optimized design of such stations. At the ivb, in cooperation with other project partners, models for metal hydride hydrogen compressors are being developed, which will subsequently be integrated into the overall system.

Your tasks

- You conduct team-orientated research in the field of "metal hydrides for compressor applications"
- You publish your research results and take part in national and international conferences as part of a team
- You are committed to supporting university teaching (preparation and realisation of courses and supervision of student work).

Your Qualifications

- You have a university degree (Master's degree or equivalent) in Chemistry, chem. Engineering, Mechanical Engineering, Physics or a comparable specialisation.
- You speak (very) good English (German is an advantage, but not a requirement)
- You have experience in the field of thermodynamics and knowledge of simulation software (Modelica) (if available)
- You demonstrate a responsible, solution-orientated and structured way of working
- You are flexible, empathetic, reliable and can work well in a team
- You are aiming for a doctorate.

We offer

- a workplace that is generally suitable for part-time work, but should be fully staffed, as well as flexible working and part-time models and a family-friendly university culture, which has been recognised with the "Family-friendly university" audit since 2007
- a wide range of further education and sports programmes as well as a lively campus life in an international atmosphere.

- an interesting and varied job in a pleasant working atmosphere with a friendly and motivated team in the "Fuel Cell" group
- a pay scale in accordance with EG 13 TV-L depending on the tasks assigned and fulfilment of personal requirements
- a special payment at the end of the year as well as a supplementary pension as a company pension, comparable to a company pension in the private sector

Further notes

We welcome applicants of all nationalities. At the same time, we encourage people with severe disabilities to apply. Applications from severely disabled persons will be given preference if they are equally qualified. Please attach a proof of disability to your application. We are also working on the fulfilment of the Central Equality Plan based on the Lower Saxony Equal Rights Act (*Niedersächsisches Gleichberechtigungsgesetz*—NGG) and strive to reduce under-representation in all areas and positions as defined by the NGG. Therefore, applications from woman are particularly welcome in this case.

The personal data will be stored for the purpose of processing the application. By submitting your application, you agree that your data may be stored and processed electronically for application purposes in compliance with the provisions of data protection law. Further information on data protection can be found in our data protection regulations at <https://www.tu-braunschweig.de/datenschutzerklaerung-bewerbungen> . Application costs cannot be reimbursed.

Questions and Answers

For more information, please call Michael Heere on +49 (0) 531 391-66902.

Deadline for applications is 14.02.2024

Are you interested? Please send your application preferably via email to **m.heere@tu-braunschweig.de**

or via mail to

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