With around 17,000 students and 3,800 employees, Technische Universität Braunschweig is the largest technical university in northern Germany. It stands for strategic and performance-oriented thinking and acting, relevant research, committed teaching and the successful transfer of knowledge and technologies to business and society. We consistently advocate for family friendliness and equal opportunities.

Our research focuses on mobility, engineering for health, metrology, and the city of the future. Engineering and natural sciences form our core disciplines. These are closely networked with economics and social sciences, as well as education and the humanities.

Our campus is located in the middle of one of the most research-intensive regions in Europe. We cooperate successfully with more than 20 research institutions in our neighborhood, as well as with our international partner universities.

For the Institute of Particle Technology we are looking for a:

**Research Associate / Postdoc / Doctoral Candidate (m/f/d) in the field of battery process engineering with focus on solid-state batteries**

*(full-time/part-time – fixed-term)*

The position is initially limited for a period of 2 years. It is intended to serve the qualification of young scientists and offers the opportunity for a doctorate or for further scientific qualification. Depending on the assignment of duties and fulfillment of personal requirements, the position is paid up to the pay grade TV-L 13 (66.67%). A later increase to a full position is not excluded. As a post-doctoral researcher, direct full-time employment is possible.

The Institute of Particle Technology investigates the production, handling, formulation and processing of particulate solids, as well as the determination of the underlying physical and chemical relationships. An important interdisciplinary application of the research work is the subject area of battery process engineering.

Research work on battery electrode and cell production focuses on both conventional lithium-ion batteries and new materials and technologies, especially for solid-state batteries. The focus is on investigating process influences on the final battery product, and researching production processes for current and next-generation batteries on a pilot scale. Further focal points are the development of intelligent recycling processes and battery safety.

**Your Tasks:**

- Conduct research on the topic of sulfide-based solid state batteries and their production, especially in terms of extrusion
- Independent application and processing of research projects
- Planning and execution of tests for process and product development
- Independent evaluation and presentation of the results
- Publication of research results and participation in national and international conferences
- Support of university teaching (preparation and implementation of courses, as well as supervision of student work)
Your Qualifications:

- Completed scientific university studies in the field of engineering (in particular process engineering), natural sciences or comparable
- Knowledge of electrochemistry or battery process engineering
- Ideally previous experience in the field of coating technology
- Interest in independent research
- Enthusiasm for scientific and technical topics
- Analytical way of working
- Distinct communication skills and ability to work in a team
- Good English and German language skills

Our Benefits:

- Pay in line with the collective agreement according to EG 13 TV-L, depending on the assignment of tasks 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
- An interesting and varied job in a pleasant working atmosphere with a nice and motivated team
- A workplace that is basically 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, awarded the "Family-friendly university" audit since 2007
- A diverse range of continuing education and sports programs, as well as a lively campus life in an international atmosphere

What’s more to know:

We welcome applicants of all nationalities. At the same time, we welcome the interest of disabled persons and give preference to their applications in the case of equal suitability. Please indicate this in your application and enclose proof of your disability. Furthermore, based on the Lower Saxony Equal Opportunity Act (NGG), we are working to fulfill the equality mandate and are striving to reduce underrepresentation as defined by the NGG in all areas and positions. We are therefore particularly pleased to receive applications from women.

We store personal data for the purpose of carrying out the application process. By sending us your application, you agree that your data may be stored and processed electronically for application purposes in compliance with data protection regulations. For further information on data protection, please refer to our privacy policy at https://www.tu-braunschweig.de/datenschutzerklaerung-bewerbungen. We do not reimburse application costs.

Questions and Answers:

For more information, please call Carina Heck on +49 (0) 531 391-94642.

Apply

If we have aroused your interest, please send your application with relevant documents in PDF format, preferably by e-mail to c.heck@tu-braunschweig.de

or via mail to

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