Technische Universität Braunschweig

Zertifikat seit 2007 audit familiengerechte hochschule

INES Institut für Energie- und Systemverfahrenstechnik

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 Energy and Process Systems Engineering (InES)* at the *Faculty of Mechanical Engineering* is looking for a

Group Leader (m/f/d) in the field of battery research

The vacancy offered here is a full-time position under E14 TV-L starting as fixed position for 3 years, with the potential to be made permanent. The possibility of a “Habilitation” within the guidelines of the Faculty of Mechanical Engineering is possible and highly encouraged.

At InES, our focus is on the development of innovative operando methods and tailored mathematical models to better understand and develop energy systems and materials (such as lithium-ion batteries, next-generation batteries, fuel cells, electrolyzers). Our institute has 200 m² of electrochemical labs and is equipped with a large set of devices (e. g. UV/Vis, GC, HPLC, NMR, FT-IT, optical imaging) for the aforementioned research focus. Permanent institute staff in administration and as lab technician is supporting us thereby.

Our research activities are embedded in the interdisciplinary **Battery Lab Factory** of the TU Braunschweig (BLB), which is a joint endeavour of several departments and institutes on knowledge-based cell design as well as the production process of lithium-ion batteries. In view of sustainability, we will be leading member in the newly established **Center of Circular Production of Next Batteries and Fuel Cells** (CPC).

Your tasks:

- You will advise research in the area of batteries.
- You will apply for and coordinate research projects from third-party funds.
- You will publish research findings and participate in national and international conferences.
- You will be involved in teaching at the University (preparation and implementation of courses as well as supervision of students’ work). I.e. you will teach in the field of energy systems and/or elective courses within the faculty with topics of your choice.
- You will assist to administrate your team, e. g., with finance planning and purchase of consumables and larger equipment / devices.
- You have furthermore the chance to

- continue and extend the **interdisciplinary and cross-methodological research** direction at InES to develop operando methods, optimize electrochemical **energy storage systems** and/or **materials**;
- initiate **research collaborations** within and beyond the departments and research facilities of the TU Braunschweig as well as national and international partners

As academic staff of the TU Braunschweig, you play an important role in society through your research and teaching, but also, in function of the needs and your personal interests, through your participation in the public debate, contributions to policy-supporting research projects for governments from the local to the European level, and participation in research-for-development projects. You will have the chance to take up an active role in councils, educational committees, working groups of the university and in particular, of the faculty of mechanical engineering you will belong to.

Your Qualifications:

- You hold a PhD in **Engineering** or **Energy-related studies** or equivalent.
- You have a strong background in **electrochemical methods** and optimization / synthesis of materials as they are key tools for the aforementioned objectives.
- You have a strong **research profile** in the field of interest, proven by **publications** in prominent international journals. International research experience or industrial experience is an important advantage.
- You enjoy academic education; first **teaching** experience is needed.
- You possess **organisational** skills and have a **cooperative** attitude. You also possess leadership capacities within a university context.
- The official language used at the TU Braunschweig is **German**. A good command of German and English is required. (The TU Braunschweig provides courses in academic English and German.)

We offer:

- Work on exciting future-oriented research topics in an inspiring work environment as part of the university community
- A vibrant campus life in an international atmosphere with lots of intercultural offers and international cooperations
- Pay in accordance with the collective agreement TV-L (a special payment at the end of the year as well as a supplementary benefit in the form of a company pension, comparable to a company pension in the private sector) including 30 days' vacation per year
- Flexible working and part-time options and a family-friendly university culture, awarded the "Family-friendly university" audit since 2007
- Special continuing education programs for young scientists, a postdoc program, as well as other offerings from the Central Personnel Development Department and sports activities.

The TU Braunschweig is a research-intensive university that carries out both fundamental and applied scientific research. Our university is highly inter- and multidisciplinary focused and strives for **excellence**. In this regard, InES actively works together with **research partners** in **Germany and abroad** (mainly University of Rhode Island, US; University of Science and Technology Sydney, Australia; Tokyo Institute of Technology, Yokohama, Japan; Kyoto University, Japan; Tel Aviv University Jerusalem, Israel) and provides our students with an academic education that is based on high-quality scientific research.

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 form of evidence of your handicap 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 contact Prof. Dr.-Ing. Daniel Schröder, d.schroeder(at) tu-braunschweig.de (www.tu-braunschweig.de/ines).

Deadline for applications is 15th of February 2024.

Are you interested? Please send your application preferably via E-Mail to **bewerbungen-ines@tu-braunschweig.de**