



## Start your PhD – Apply Now!

### Advances Nanomaterials and Electrocatalysis are your passion!

Join our Technical Electrocatalysis Team to develop advanced electrocatalysts for polymer electrolyte membrane fuel cells (PEMFCs) and be involved in high profile research at the forefront of science.

Visit our web page: <http://www.tu-braunschweig.de/itc/oezaslan>

**What chemical and structural properties do nanomaterials need to improve the performance of PEMFCs? To what extent can the rational design of nanomaterials accelerate green hydrogen technology in the near future?**

Your focus will be on the design and functionalization of nanomaterials as electrocatalysts for PEMFC applications. Tailoring the structure and chemical distribution of nanomaterials enables the improvement of performance and durability for PEMFC. You will learn and improve your skills and knowledge in designing and modifying nanomaterials for electrocatalysis.

#### What You Will Do

- Prepare functional nanomaterials with controlled structural and chemical properties.
- Perform advanced microscopic and spectroscopic tools to characterize the nanomaterials.
- Conduct electrochemical measurements of PEMFC.
- Develop new synthesis strategies to tailor the physicochemical and electrocatalytic properties of nanomaterials.

#### What is Required

- Successfully completed Master's degree in Chemistry, Material Sciences, Chemical Engineering, Physics or related fields.

#### Desired Experiences

- Experience with synthesis, modification and characterization of nanomaterials and/or
- Experience in electrochemistry and/or
- Experience in structure/morphology characterization is an advantage and highly desirable.

**The position is 67 % (E13 TV-L) funded over a duration of three years and can be filled as soon as possible. Apply now by e-mail to [itec-recruiting@tu-braunschweig.de](mailto:itec-recruiting@tu-braunschweig.de) with a single file as pdf format (cover letter, curriculum vitae, copies of Bachelor and Master certificates and references) or by post no later than 15.01.2023.**

Any Questions? Send an e-mail to Professor Dr. Mehtap Özaslan [m.oezaslan@tu-braunschweig.de](mailto:m.oezaslan@tu-braunschweig.de)

#### About your new university

The academic community at Technische Universität (TU) Braunschweig (<http://www.tu-braunschweig.de>), Germany founded in 1745, comprises 17,800 students as well as 3,800 staff members and offers an outstanding teaching and research environment with excellent equipment. The TU Braunschweig is a member of the TU9, German Universities of Technology.

Salary is depending on task assignment and fulfillment of personal requirements according to German salary group TV-L E13 (salary agreement for public service employees). The TU Braunschweig seeks a reduction of the underrepresentation in the sense of the NGG in all areas and positions. Therefore, applications from women are highly welcome. Candidates with disabilities will be preferred if equally qualified. Please enclose proof. Personal data and documents relating to the application process will be stored electronically (<https://www.tu-braunschweig.de/datenschutzerklaerung>). Please note that application costs cannot be refunded. Please understand that applications can only be returned against a self-addressed, sufficiently stamped envelope.

Post: Technische Universität Braunschweig, Institut für Technische Chemie,  
Franz-Liszt-Str. 35a (PVZ), 38106 Braunschweig | Germany