



Start your PhD – Apply Now!

Green Hydrogen and Electrocatalysis are your passion!

Join our Technical Electrocatalysis Team to develop advanced electrocatalysts for water electrolysis and be involved in high profile research at the forefront of science.

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

What are the critical requirements for operating low temperature water electrolyzer at high current density? How can you scale the highly complex interface between electrode and electrolyte to achieve high performance?

Your focus will be on the structural and electrochemical diagnostics of catalyst-coated membranes for water electrolysis. Promising electrode material candidates will be tested in fully automatic test stations under realistic conditions. You will learn and improve your skills and knowledge in preparation, characterization and testing of porous electrode materials for technical application.

What You Will Do

- Coating and structural characterization of catalyst-coated membranes.
- Apply electrochemical diagnostic tools for low-temperature water electrolysis.
- Perform in situ/ex situ characterization methods to describe and simulate the electrode - electrolyte interface including the ionomer distribution.
- Develop strategies for scalability and configuration of next generation of catalyst-coated membranes.

What is Required

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

Desired Experiences

- Experience with preparation, coating and characterization of porous electrode materials and/or
- Experience in water electrolysis or fuel cell testing 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 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 Özasan 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.