



Conducting research for a changing society: This is what drives us at Forschungszentrum Jülich. As a member of the Helmholtz Association, we aim to tackle the grand societal challenges of our time and conduct research into the possibilities of a digitized society, a climate-friendly energy system, and a resource-efficient economy. Work together with around 7,400 employees in one of Europe's biggest research centres and help us to shape change!

Would you like to contribute to the energy transition in Germany through your work? Then the Helmholtz Institute Erlangen-Nürnberg (for Renewable Energy) (HI ERN) is the right place for you! The HI ERN forms the core of the close partnership between Forschungszentrum Jülich, Helmholtz-Zentrum Berlin for Materials and Energy, and Friedrich-Alexander-Universität Erlangen-Nürnberg at the Erlangen site. The collaboration relates to the areas of innovative materials and processes for photovoltaic energy systems and hydrogen as a storage and carrier medium for CO<sub>2</sub>-neutral energy. Support us researching and developing solutions for the climate-neutral, sustainable, and cost-effective utilization of renewable energies. Further information about the HI ERN and its pioneering research projects can be found at <https://www.hi-ern.de>

**We are offering a**

## **PhD Position – Characterization of new catalyst layer structures and electrolytes for polymer electrolyte water electrolysis**

### **Your Job:**

The electrocatalytic interface engineering department led by Prof. Dr.-Ing. Simon Thiele focuses on synthesis, manufacturing, analysis and simulation of functional materials to find an optimum structure on small scales from the micrometer to the nanometer scale. The investigated materials and systems play an essential role in sustainable technologies like water- and CO<sub>2</sub>-electrolyzers, as well as in fuel cells. Some of your responsibilities will include:

- Design and set-up of new testing equipment and procedures for application-driven characterization of new materials for water electrolysis
- Manufacturing of catalyst layers and membrane electrode assemblies (MEAs) for electrochemical characterization

The job will be advertised until the position has been successfully filled. You should therefore submit your application as soon as possible. We look forward to receiving your application via our **Online-Recruitment-System!**

### **Questions about the vacancy?**

Get in touch with us by using **our contact form**. Please note that for technical reasons we cannot accept applications via email. [www.fz-juelich.de](http://www.fz-juelich.de)

- Physical, spectroscopic, and electrochemical characterization of MEAs prior to, during, and after operation
- Participation in project meetings.
- Coordination with internal and external partners
- Publication and presentation of research results in relevant journals and at international conferences

#### **Your Profile:**

- Excellent master's degree in Process Engineering, Chemical Engineering, Mechanical Engineering or a similar discipline
- Strong interest in pursuing research on electrochemical systems
- Experience in one (or more) of the following areas is desirable: electrochemistry, additive manufacturing
- High motivation for pursuing a PhD within 3 years
- Excellent organizational skills
- Ability to show initiative and work independently
- Excellent cooperation and communication skills and ability to work as part of a team
- Excellent skills in spoken and written English

#### **Our Offer:**

We work on the very latest issues that impact our society and are offering you the chance to actively help in shaping the change! We offer ideal conditions for you to complete your doctoral degree:

- Further development of your personal strengths, e.g. through an extensive range of training courses; a structured program of continuing education and networking opportunities specifically for doctoral researchers via JuDocS, the Jülich Center for Doctoral Researchers and Supervisors: <https://www.fz-juelich.de/en/judocs>
- Extensive company health management
- Ideal conditions for balancing work and private life, as well as a family-friendly corporate policy
- Targeted services for international employees, e.g. through our International Advisory Service

The position is for a fixed term of 3 years. Pay in line with 75 % of pay group 13 of the Collective Agreement for the Public Service (TVöD-Bund) and additionally 60 % of a monthly salary as special payment („Christmas bonus“). All information about the Collective Agreement for the Public Service (TVöD-Bund) can be found on the BMI website: <https://go.fzj.de/bmi.tvloed> . The monthly salaries in euros can be found on page 66 of the PDF download. Further information on doctoral degrees at Forschungszentrum Jülich (including its various branch offices) is available at <https://www.fz-juelich.de/en/careers/phd>

Place of employment: Erlangen

We welcome applications from people with diverse backgrounds, e.g. in terms of age, gender, disability, sexual orientation / identity, and social, ethnic and religious origin. A diverse and inclusive working environment with equal opportunities in which everyone can realize their potential is important to us.