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 7,500 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 CO2-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 - High Throughput Electrochemical Testing of Energy Applications

Your Job:
You will be part of our research team that applies high-throughput experimentation to accelerate research in the emerging field of electrocatalysis. The use of multiple-principal element alloys, with their vast number of possible combinations necessitates efficient high-throughput experiments to systematically screen materials and understand their properties. We focus und electrochemical activity and stability as benchmarks for the evaluation of material libraries. The available PhD position mostly focuses on the following topics:

- Optimization of a high throughput electrochemical characterization of electrocatalytic reactions
- Benchmarking state of the art materials as a baseline for the developed system
- Study of next-generation materials degradation in real-time, operando
- Method development of innovative characterization techniques for electrocatalytic

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

reactions
- Collaboration with data scientists and automation specialists to further develop a reliable, fast, material testing process

Your Profile:
- Excellent master`s degree in Chemistry, Physics, 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, electrocatalysis, automation and data treatment, element analytics (Mass spectrometry, XPS, EDX)
- Intrinsic motivation to show initiative, creativity, and to work independently
- Basic knowledge of programming (e.g. Python, C, Matlab), or willingness to learn
- Excellent cooperation and communication skills and ability to work as part of the team
- Excellent organizational skills
- High motivation for pursuing a PhD within 3 years
- 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:
- Excellent environment to perform high-quality research and to implement own ideas in the development process
- Work with worldwide-unique electrochemical characterization techniques
- Excellent training in electrochemistry
- A lively scientific environment within the institute and possibilities for cooperation with excellent partners at the Friedrich-Alexander-Universität Erlangen-Nürnberg, the Forschungszentrum Jülich, the Helmholtz-Zentrum Berlin, and abroad
- Support options for combining career and family
- 30 days of annual leave and provision for days off between public holidays and weekends (e.g. between Christmas and New Year)
- 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
- Targeted services for international employees, e.g. through our International Advisory Service

In addition to exciting tasks and a collaborative working atmosphere in Jülich, we have a lot more to offer: https://go.fzj.de/benefits

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“). The monthly salaries in euros can be found on page 66 of the PDF download: https://go.fzj.de/bmi.tvoed Further information on doctoral degrees at Forschungszentrum Jülich including our other locations is available at: https://www.fz-juelich.de/gp/Careers_Docs

Place of employment: Nürnberg

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.

Further information on diversity and equal opportunities: https://go.fzj.de/equality