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. For more information on HI ERN and its main research areas, please visit https://www.hi-ern.de

We are offering an interesting

PhD Position - Filming nanocatalysts for renewable energies

Your Job:

At the Electrocatalysis department of Prof. Karl Mayrhofer, we offer a PhD position within the team Nanoanalysis of Electrochemical Processes. Lead by Dr. Andreas Hutzler, the team is investigating degradation mechanisms within the framework of green energy conversion and climate change. The open position aims to understand catalyst stability at the nanoscale during electrochemical processes via operando liquid-phase transmission electron microscopy (LP-TEM). Your tasks:

- Self-motivated and independent planning, execution, and analysis of research in the scope of operando electrocatalysis using LP-TEM
- Execution of TEM analyses as part of our TEM facility at HI ERN
- Presentation of scientific results at national and international conferences as well as publication in peer-reviewed journals

Your Profile:

- An excellent master's degree with strong background in nano science, materials

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

science, chemistry, chemical engineering, physics or related
- Experience with modeling of reaction kinetics, catalysis studies - in particular electrocatalysis and Python programming
- Experience within the following fields is highly beneficial: Transmission electron microscopy, Electrochemistry, Image analysis, Big data handling
- Strong self-initiative and willingness to learn and to quickly gain an understanding of new subject areas
- Joy in working independently, as well as within a team
- Strong problem-solving skills
- Fluency in English (written and oral)

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 scientific and technical infrastructure for conducting high-quality research
- Working with globally unique analytical measurement methods
- International, interdisciplinary working environment on an attractive campus (FAU Südgelände) including many cooperation opportunities with partners from the Friedrich-Alexander-Universität Erlangen-
- The opportunity to pursuit your PhD in cooperation with the Faculty of Engineering at Friedrich-Alexander-University Erlangen-Nürnberg, one of the most innovative universities world-wide
- A highly supportive and dynamic team spirit at HI ERN - we highlight a strong can-do attitude
- Access to the graduate schools of FAU and FZJ with many continuing education opportunities
- A wide range of options for balancing work and family life
- Possibility of mobile working
- Flexible working hours
- 30 days of annual leave and provision for days off between public holidays and weekends (e.g. between Christmas and New Year)

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 euro can be found on the BMI website: https://go.fzj.de/bmi.tvoed.entgelt 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.

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