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 actively shape the structural change in the Rhenish mining area together with us? With us you have the chance to join the newly founded Institute for Sustainable Hydrogen Economy (INW) with your ideas right from the start. Together with the H2 demonstration region, the INW forms the "Helmholtz Cluster for sustainable and Infrastructure-Compatible Hydrogen Economy" (HC-H2). Here, scientific foundations are laid in the field of innovative hydrogen technologies in order to advance research and development approaches with high sustainability potential and attractive economic prospects. You will be part of the subinstitute INW-1. In INW-1, the focus is on the elementary processes on the catalyst surface during the hydrogenation and dehydrogenation of hydrogen storage molecules. If you are interested in the topics of energy transition, sustainability and chemical hydrogen storage, then you are in your element here. Become part of the team and make the world a bit more sustainable!

We are offering a

PhD - Interfacial structures of LOHC molecules

Your Job:

- X-ray reflectivity measurements at solid-liquid interfaces of solid surfaces and LOHC molecules
- Design of cells for temperature-dependent X-ray reflectivity measurement
- Analysis of X-ray reflectivity measurements with modern analytical methods
- Electrochemical experiments with LOHC molecules
- Publication and presentation of results in high-ranking and recognized journals as well as at national and international conferences
- Collaboration with other research groups
- Support in the preparation of third-party funding proposals
- Support in establishing the institute

Your Profile:

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

- Master`s degree in physics, chemistry, material science, chemical engineering, or related disciplines
- Knowledge of X-ray methods
- Experience in the field of energy storage
- Experience with programming languages (ideally Python)
- Fluent in written and spoken English
- Very independent and self-motivated way of working but also excellent teamwork skills
- High motivation to take on responsibility and to contribute to the development of research ideas

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:

- Comprehensive training courses and individual opportunities for personal and professional further development
- Extensive company health management
- Ideal conditions for balancing work and private life, as well as a family-friendly corporate policy
- Flexible work (location) arrangements, e.g. remote work
- 30 days of annual leave (depending on agreed working time arrangements) 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 at Jülich, we have a lot more to offer: https://go.fzj.de/benefits

The position is initially for a fixed term of 3 years, with possible long-term prospects. 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“). 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: Brainergy Park Jülich

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.