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 (FAU) 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.

The successful candidate will be part of the Electrochemical Energy Conversion Team led by Dr. Serhiy Cherevko as part of the Electrocatalysis research unit of HI ERN. Our aim is to significantly contribute to the development of electrochemical energy conversion as a future key player for electromobility and the energy policy in general. Further information can be found here: http://www.hi-ern.de/hi-ern/eec

We are looking to recruit a

Postdoc - Electrocatalysis / Water Electrolysis

Your Job:
• Electrochemical measurements of activity and stability of different oxygen evolution reaction electrocatalysts and support materials using unique experimental methods
• Optimization and further development of the experimental setups to test electrocatalysts at conditions approaching real
• Preparation, investigation and optimization of catalyst layers based on novel catalysts, supports and ionomers
• Catalysts and catalyst layers characterization, incl. identical location microscopy
• Analysis and communication of the obtained experimental data
• Close collaboration with partners within HI ERN, FAU and outside, including industrial partners

We look forward to receiving your application until 29.09.2020 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
• Writing papers and presenting the results at conferences; writing progress reports
• Representing of the institute at internal and external project meetings
• Active participation in the training, mentoring and supervision of students

This position is related to our activities within a collaborative research project (including partners from industry and academia) on the development of advanced membrane electrode assemblies for proton exchange membrane water electrolysers. Our part in this multidisciplinary research project is to further develop the existing experimental tools for catalyst and catalyst layer characterization, perform electrochemical and dissolution measurements on catalysts and supports, and provide new mechanistic insights in activity and degradation of advanced supported catalysts. A recent publication related to this project can be found at the following link https://doi.org/10.1038/s41929-018-0085-6

Your Profile:
• Excellent university degree (master) in Chemistry, Physics, Surface Science or related disciplines and a completed PhD
• Very good knowledge of fundamental electrochemistry
• Previous experience in preparation of membrane electrode assemblies for water electrolysers and/or fuel cells and in performing cell tests
• Previous experience in characterization of catalysts and/or catalysts layers using physico-chemical characterization tools, especially TEM, is desired
• Experience or strong interest in the development of novel experimental tools
• Strong interest in pursuing research in a multidisciplinary project related to generation of green hydrogen using water electrolysis
• 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:
• 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 numerous partners in Germany and abroad
• An excellent international environment to perform sound, high-quality research at the international level and daily, hands-on experience in worldwide-unique electrochemical characterization techniques
• Active participation in project meetings, as well as on national and international conferences to present the results and to develop further competences
• Interaction and cooperation with world-leading industrial partners and strong support and mentoring for setting up a future career in science and/or the industry
• A comprehensive further training programme
• Various opportunities to reconcile work and private life
• Full-time position with the option of slightly reduced working hours
• Limited for 2 years with possible longer-term prospects
• Salary and social benefits in conformity with the provisions of the Collective Agreement for the Civil Service (TVöD). Depending on the applicant’s qualifications and the precise nature of the tasks, salary grade EG 13 TVöD-Bund
• Place of employment: Erlangen

Forschungszentrum Jülich promotes equal opportunities and diversity in its employment relations. We also welcome applications from disabled persons.