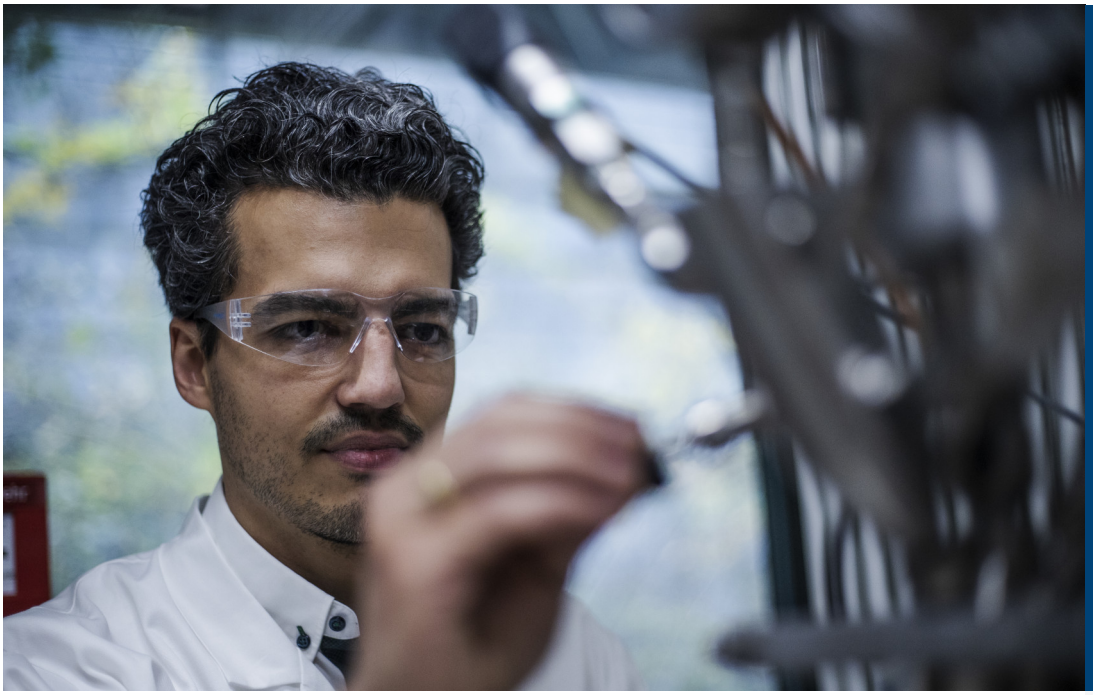

Conducting research for a changing society: This is what drives us at Forschungszentrum Jülich. As a member of the Helmholtz Association, we aim to tackle the grand societal challenges of our time and conduct research into the possibilities of a digitized society, a climate-friendly energy system, and 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 - New Synthesis Methods and Production of Polymers and Membranes for PEM Fuel Cells and Electrolyzers

Your Job:
You will join the "Electrocatalytic Interface Engineering" department, led by Prof. Dr.-Ing. Simon Thiele, and the "Membrane Polymer Synthesis" (MPS) team by Dr. Jochen Kerres. The department focuses on the production, analysis, and simulation of functionally optimized structures from the nanometer to the micrometer scale in electrochemically active materials, as well as the development of new materials for catalysis, polymer electrolytes, and polymer electrolyte membranes. Your main responsibilities include:

- Synthesizing and analyzing proton-conducting solid electrolyte polymers
- Producing and characterizing acidic membranes for fuel cells and electrolyzers operating up to 90 degrees Celsius

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

- Publishing and presenting research results at project meetings, in relevant scientific journals, and at national and international conferences

Your Profile:

- Master's degree in chemistry or materials science, completed with excellent grades
- In-depth knowledge (specialization) in synthetic and analytical polymer chemistry as well as in membrane technology
- Knowledge in the field of alkaline solid electrolyte polymers and their application in electrochemical membrane processes such as fuel cells and water electrolysis would be an asset
- High motivation for pursuing a PhD within 3 years
- Ability to show initiative and work independently
- 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 scientific and technical infrastructure for conducting high-quality research
- Work with globally unique analytical measurement methods
- International, interdisciplinary work environment on an attractive campus (FAU South Campus), including many collaboration opportunities with partners at Friedrich-Alexander-Universität Erlangen-Nürnberg, Forschungszentrum Jülich, Helmholtz-Zentrum Berlin, and international institutions
- Collaboration with world-leading industry partners
- Ideal conditions for balancing work and private life, as well as a family-friendly corporate policy
- 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)
- 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

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