



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 join us in actively shaping structural change in the Rhenish mining area? With us, you have the opportunity to support the newly founded Institute for a Sustainable Hydrogen Economy (INW) with your ideas right from the start. Together with the H₂ demonstration region, the INW forms the "Helmholtz Cluster for a 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. They will be part of the Reaction Engineering for Chemical Hydrogen Storage (INW-3) institute division. The focus here will be on detailed reaction engineering investigation of catalyst materials in relevant process environments and operating scenarios as well as the development of innovative reactor concepts. If you are interested in the topics of energy transition, sustainability and chemical hydrogen storage, then you are in your element here.

Join our team to the next possible date as

PostDoc - Hydrogen Processing, Purification and Electrochemical Compression

Your Job:

Hydrogen is a key element of the energy system of the future. However, in many processes it is only produced in limited purity and/or is only available at low pressures. Your task is to develop processes for the purification of hydrogen obtained from diol-based carrier molecules and to evaluate possibilities for the use of electrochemical compression processes. In this PostDoc position you will have the opportunity to test a variety of approaches, develop innovative concepts and create the basis for future-oriented third-party funded projects. Become part of a dedicated team that develops creative solutions for complex chemical and process engineering problem.

- Dehydrogenation processes: Construction of a test stand for the dehydrogenation of diol-based carrier molecules

We look forward to receiving your application until 29.06.2025 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

- Explorative research: Development and testing of new concepts in the field of gas treatment and electrochemical compression
- Development of ideas: Identification of promising topics for future third-party funding projects
- Diversity of topics: working on interdisciplinary issues, e.g. novel reactors, hybrid heating systems or process optimisation
- Team building: Support in building an interdisciplinary research team by selecting and mentoring junior researchers and promoting a collaborative working culture
- Project preparation: Development of concepts and preliminary studies for research proposals
- Scientific networking: Establishing collaborations with partners from industry and research
- Publication and dissemination: Dissemination of your results through publications in high-ranking journals and presentations at international conferences

Your Profile:

- Very good university degree (Master) in the fields of chemical engineering, process engineering, chemistry, material science or a comparable discipline with PhD
- Broad expertise and the ability to work in an interdisciplinary manner
- Creativity and a strong spirit of discovery to develop new research approaches
- Experience in planning and conducting experimental studies
- Very good data analysis and Science writing skills
- Ability to work in a team, initiative and strong communication skills
- Very good written and spoken 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 support you in your work with:

- 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
- 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>

We offer you an exciting and varied role in an international and interdisciplinary working environment. The position is for a fixed term of 2 years, with possible long-term prospects. Salary and social benefits will conform to the provisions of the Collective Agreement for the Public Service (TVöD-Bund), pay group EG 13, depending on the applicant's qualifications and the precise nature of the tasks assigned to them. All information about the Collective Agreement for the Public Service (TVöD-Bund) can be found on the BMI website: <https://go.fzj.de/bmi.tvloed> . The monthly salaries in euros can be found on page 66 of the PDF download.

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.

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