



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 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 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. At the subinstitute "Catalytic Interfaces for Chemical Hydrogen Storage" (INW-1, Prof. Dr. Hans-Georg Steinrück), we investigate mechanisms and processes in (electro)chemical energy storage. For the purposes, we develop and use advanced (X-ray-based) methods as well as modern data reduction und data evaluation methods.

**We are looking to recruit a**

## **Scientific and technical lead of a high-energy X-ray beamline based on laboratory X-ray sources**

### **Your Job:**

- Scientific and technical lead of the high-energy X-ray beamline of based on laboratory X-ray sources
- Conception, design, and construction of the high-energy X-ray beamline at Forschungszentrum Jülich for the stroboscopic long-term characterization of energy-relevant materials and devices (e.g. catalytic reactors)
- Conception and implementation of a corresponding software for beamline control and data acquisition
- Design and implementation of a corresponding pipeline for data storage/data archiving, data reduction and data evaluation
- Configuration, alignment and commissioning of X-ray optics, diffractometers, detectors, etc.; including X-ray safety

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](http://www.fz-juelich.de)

- Long-term investigations of catalytic reactors for chemical hydrogen storage (in close cooperation with other subinstitutes at INW and other institutes at Forschungszentrum Jülich)
- Development of relevant questions in the field of long-term performance and aging of energy-relevant materials and devices
- Close cooperation with other institutes at Forschungszentrum Jülich and collaboration with other working groups
- Publication and presentation of results in high-ranking and recognized journals as well as at national and international conferences
- Participation in synchrotron beamtimes
- Supervisors of research staff, doctoral candidates, and students as well as technical personnel
- Acquisition and management of research projects
- Support in setting up the institute

#### **Your Profile:**

- Master's degree with PhD in physics, chemistry, materials science, chemical engineering, or related disciplines
- Extensive knowledge of X-ray diffraction, X-ray scattering, X-ray optics, and X-ray instrumentation
- Profound experience in the integration of hardware and software in X-ray experimental setups
- Profound experience in the configuration and/or setup of an X-ray beamline at a synchrotron
- Profound experience in the areas of software for beamline control and data acquisition as well as in the areas of data storage/data archiving, data reduction and data evaluation
- Experience in the field of energy storage
- Experience in managing scientific staff, doctoral candidates or students
- Independent, goal-oriented, and strategic way of working
- Very independent and self-motivated way of working but also excellent teamwork skills
- High level of willingness to take an interest in new scientific areas/topics and to familiarize yourself with them quickly
- Strong social and communication skills for leading and collaborating with interdisciplinary teams
- High level of willingness to take on responsibility and develop your own research ideas
- Programming skills in Python and knowledge of technical drawing programs
- Fluency in written and spoken English and/or German

#### **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 working hours in a full-time position (39 hours/week) with the option of slightly reduced working hours
- Flexible work arrangements, e.g. working from home
- 30 days of annual leave and provision for days off between public holidays and

weekends (e.g. between Christmas and New Year)

- Capital-forming benefits and an employee pension scheme

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 initially 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) depending on the applicant's qualifications and the precise nature of the tasks assigned to them.

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.