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

We are looking to recruit a

Team leader - machine learning and big data analytics in X-ray science

Your Job:

- Scientific and technical lead of a team focusing on machine learning and big data analytics in X-ray science
- Development and application of machine learning tools for X-ray data analysis and reduction
- Development and application of big data analytics for large X-ray data sets
- Application of Bayesian methods to X-ray data
- Combinatorial analysis of various data from complementary measurements
- Development of scientific questions in the field of X-ray data analysis
- Publication of computer code in repositories
- 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

We look forward to receiving your application until 04.07.2025 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

well as at national and international conferences
- Participation in synchrotron beamtimes
- Supervision of research staff, doctoral candidates, and students as well as technical personell
- 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, computer science or a related discipline
- Extensive knowledge of X-ray science
- Profound experience in data analysis, machine learning and big data analytics
- Extensive experience in Bayesian methods and with computer code repositories
- Experience in the field of energy storage
- Experience in managing scientific stuff, doctoral candidates, or students
- 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
- Fluent in written and spoken English
- Very independent, self-motivated, goal-oriented, and strategic way of working but also excellent teamwork skills
- Willingness for regular business trips

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:
- Exciting and diverse role in an international and interdisciplinary working environment
- Comprehensive training courses and individual opportunities for personal and professional further development
- Extensive company health management
- An attractive flexitime arrangement and flexible working time models that take your individual needs into account: full-time position with 39 hours/week, close to full-time or within the framework of top sharing (two qualified employees share a full-time position)
- Flexible work (location) arrangements, e.g. remote work
- 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
- 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 14, 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.tvoed . 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