



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!

Understanding the fundamental physical and chemical properties of energy materials is crucial to realizing a sustainable and environmentally friendly future. At the Jülich Centre for Neutron Science - Neutron Analytics for Energy Research (JCNS-3), we investigate the dynamic and electronic properties of energy materials by employing various scattering techniques. Examples of our research interests are the structure and the dynamics and diffusion of protons and lithium ions in fuel cells and batteries, or the binding states of adsorbate molecules on catalyst surfaces.

**We are looking to recruit a**

## **Postdoc – Neutron Spectroscopy for Energy Materials**

### **Your Job:**

- Synthesis and physicochemical characterization of energy materials or representative model systems
- Characterization of the dynamical and structural properties of energy materials with a focus on neutron spectroscopy as main analysis technique, supported by complementary experimental techniques or theoretical simulations
- Hands-on participation in experiments at large scale facilities as well as the opportunity to design and construct instruments and/or sample environments
- Establishment of cooperation projects with institutes at Forschungszentrum Jülich working on energy materials
- Supervision of MSc and BSc students
- Presentation of research results at conferences and publication in peer-reviewed journals
- Representation of JCNS-3 in project meetings and on international conferences to foster our network

### **Your Profile:**

Basic qualifications:

- Completed Master's degree with subsequent PhD in Physics, Chemistry, Material

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)

Science or related disciplines

- Experience with neutron spectroscopy (e.g. INS, QENS, NSE) and the structural characterization of materials (e.g. powder diffraction)
- Experience in material synthesis and complementary characterization techniques, e.g. IR
- Motivated and creative approach to research with the ability to work independently and in collaborative teams

Preferred additional qualifications:

- Good written and oral communication skills in English
- Research background in energy materials (e.g. fuel cells, batteries, heterogeneous catalysts, interfaces)
- Proficiency in high-level programming languages, e.g. Python
- Previous supervision of graduate students, as well as laboratory or instrument responsibilities

### **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:

- The opportunity to be an active part in the establishing of our department
- Comprehensive training programs and individual opportunities for personal and professional development
- Access to a strong research network at the FZJ, and to the infrastructure of the Institute of Crystallography, RWTH Aachen University
- Comprehensive company health management
- Flexible working hours in a full-time position with the option of slightly reduced working hours ( <https://go.fzj.de/near-full-time> )
- The opportunity to work to some extent from home or another location within reasonable limits and in consultation with the supervisor
- 30 days of annual leave and provision for days off between public holidays and weekends (e.g. between Christmas and New Year)
- 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>

You will be employed for a fixed term of 2 years but with the prospect of longer-term employment. Salary and social security benefits will conform to the provisions of the Collective Agreement for the Public Service (TVöD-Bund), pay group 13, depending on your current qualifications and the precise nature of the tasks assigned to you. 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.

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.