

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!

At the Jülich Centre for Neutron Science - Quantum Materials and Collective functionalities. In the field of "Complex Oxides", we are investigating how novel materials can be made usable for information technology.

We are now offering a project for an exciting

Master Thesis - Fabrication and characterization of oxide layers for novel materials in information technology

Your Job:

By specifically controlling the oxygen content in complex oxides such as LaSrMnO3, it is possible to create completely new materials that can be either antiferromagnetic insulators or ferromagnetic conductors. As a Master's student, you will have the opportunity to study this phase transition in detail and help shape the future of information technology. Become part of our team and contribute to groundbreaking discoveries! Your tasks include in particular

- Fabrication of the oxide layers by means of sputter deposition or spin coating
- Characterization of the properties using magnetometry, conductivity measurements, X-ray diffraction, neutron scattering and electron microscopy

Your Profile:

- You are currently studying in a master's program physics, chemistry, materials science, nanoscience or a related subject at a university
- You have an interest and ideally also previous knowledge in the field of solid state physics, physical chemistry, nanotechnology, nanoscience, and ideally also previous

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

Phenomena (JCNS-2), we develop and use scattering methods to determine structural and magnetic order and excitations in novel quantum, nano and functional materials in order to achieve an understanding of macroscopic properties and



knowledge of scattering methods and magnetometry

- Independent and responsible way of working, commitment, high degree of teamwork, as well as enjoyment of cooperative collaboration
- You have a very good command of 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:

- An interesting and socially relevant topic for your thesis with future-oriented topics
- Ideal conditions for gaining practical experience alongside your studies
- Excellent scientific equipment
- Qualified supervision by academic colleagues
- The opportunity to work autonomously in the preparation and implementation of the tasks assigned
- The possibility of working remotely for part of the time, e.g. working from home
- Flexible working hours
- A large research campus with green spaces, offering the best opportunities for networking with colleagues and also pursuing sports alongside work

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 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.