



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 7,100 employees in one of Europe's biggest research centres and help us to shape change!

The Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons (ER-C) at the Forschungszentrum Jülich houses some of the world's most advanced electron microscopes and tools for nanocharacterisation. Our scientific research combines current issues in condensed matter physics and cryo-EM on biomacromolecules with the aim of advancing electron microscopy methods. Under one roof, the ER-C has a total of 15 electron microscopes including the PICO FEI Titan with a point resolution of 0.5 Å. The facility has been extended with state-of-the-art cryo-microscopes ThermoFisher Titan Krios, Talos Arctica both equipped with a Bioquantum K3 and Talos 120 as well as FIB-SEM Aquilos 2. At the Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons - Structural Biology (ER-C-3) we investigate the structural and molecular mechanism of membrane biology processes and push the development of cryo-EM related methodology. Our campus in Jülich hosts a vibrant electron microscopy, biophysics and structural biology community.

We are looking to recruit a

Cryo-EM Scientist

Your Job:

- Develop new acquisition schemes and workflows based on novel hardware to advance low-dose cryo-EM techniques
- Improve sample handling workflows focusing on single-particle and/or tomography data collection combined with CLEM/FIB-SEM approaches
- Support data acquisition and evaluation for in-house and external users on novel hardware, with the following possible focus areas: 3D image processing of single-particle and/or tomography data and/or FIB-SEM operation for the preparation of cryo-FIB lamellae of vitrified cells
- Improving methodology for high-resolution cryo-EM structure determination at the ER-C-3 for structural biology

Your Profile:

- Masters degree in biology, physics or related field

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

- Strong communication skills and ability to work with internal colleagues and external visitors in an international and interdisciplinary team
- Several years of experience in cryo-electron microscopy in structural biology or material science
- Experience with microscopy hardware and performing customized automation tasks using scripting

Our Offer:

- The chance to work at one of the largest research centers in Germany, with excellent scientific equipment and leading European computational resources, located on a green campus, and near the cultural centres Köln, Düsseldorf and Aachen. The Jülich Campus also hosts a vibrant biophysics, bioinformatics and structural biology community.
- Direct access to high-level cryo-EM infrastructure at the Ernst-Ruska Centre. The facility has been extended with state-of-the-art cryo-microscopes and FIB-SEMs of ThermoFisher Titan Krios, Talos Arctica and FIB-SEM Aquilos 2. Future extension of an ERC 2.0 facility already in planning.
- Excellent manufacturer support and very rapid response time for equipment maintenance and development in the context of the large Ernst Ruska-Centre facility.
- The development within a long-term supported scientific infrastructure is embedded in competitive structural biology research of the ER-C-3:
<https://www.fz-juelich.de/en/er-c/er-c-3/groups/cryo-em>
- Working in a dynamic team of researchers with backgrounds in different disciplines across biology, chemistry, physics and informatics to advance cryo-EM methods.
- A wide range of scientific challenges covering imaging, image processing and structure determination for structural biology.
- Full-time position with 30 days of annual leave
- Targeted services for international employees, e.g. through our International Advisory Service

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 in conformity with the provisions of the Collective Agreement for the Civil Service (TVöD).

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.