

Postdoctoral Researcher (f/m/d)

Disch Group | Institute of Physical Chemistry

Foto: Thomas Josek

The University of Cologne is one of the largest and most research-intensive universities in Germany, offering a wide range of subjects. With its six faculties and its interfaculty centres, it offers a broad spectrum of scientific disciplines and internationally outstanding profile areas, supported by the administration with its services.

The Disch Group at the Institute of Physical Chemistry studies the structural, magnetic, and dynamic properties of nanoparticles. Advanced X-ray and neutron scattering techniques are applied to address length scales ranging from the atomic and nanoscale intraparticle structure and magnetization to mesoscale correlations in self-organized nanostructures.

The BMBF-funded Röntgen-Angstrom Cluster project nPDFSAS aims at combining Small-Angle Scattering and PDF analysis to study nanostructured electrode materials. This German-Swedish collaboration also actively participates in instrumentation projects at MAX IV and ESS in Lund, Sweden.

YOUR TASKS

- » analyze structural and magnetic properties of nanoparticles and their assemblies
- » carry out and evaluate X-ray and neutron scattering experiments at external facilities
- » participate in the development of the project and contribute ideas
- » collaborate with international research groups
- » participate in mentoring of students and PhD candidates
- » present and discuss results in seminars and at conferences
- » publish results in peer-reviewed scientific journals

YOUR PROFILE

- » excellent Ph.D. degree in Chemistry, Physics, or a closely related field
- » strong background in solid state materials chemistry
- » hands-on experience in X-ray and/or neutron scattering techniques
- » strong experience in powder diffraction and Rietveld analysis (experience in PDF analysis will be beneficial)
- » programming skills (python) or willingness to learn
- » excellent oral and written communication skills in English

WE OFFER YOU

- » a versatile, collaborative research project
- » a diverse and fair working environment
- » support in reconciling work and family life
- » flexible working time models
- » extensive advanced training opportunities
- » occupational health management offers
- » local transport ticket at a discount for UoC employees

The position is available at the earliest possible time on a full-time basis. It is limited to a term of 2 years. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

The University of Cologne is committed to equal opportunities and diversity. Women are especially encouraged to apply and will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from people with disabilities / special needs or of equal status.

Please apply online at: <https://jobportal.uni-koeln.de> with proof of the sought qualifications. The reference number is Wiss2110-17.

Please include your CV with details on your achievements, copies of your degree certificates, a motivation letter, and names of two potential referees.

The application deadline is 30.11.2021.

If you have any questions, please contact Dr. Sabrina Disch (sabrina.disch@uni-koeln.de).