



UNIVERSITY  
OF COLOGNE

Faculty of Mathematics and Natural Sciences



Foto: Simon Wegener

## Post-doctoral position (f/m/x) in Surface Science: Thin Molecular Layers on Metal Surfaces

Institut of light and matter | group Professor Meerholz

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

Join our cutting-edge research team in the field of organic electronics! We are seeking a highly motivated and skilled post-doctoral researcher (f/m/x) to work on the synthesis and characterization of graphene nanoribbons on metal surfaces.

### YOUR TASKS

- » Set up and maintain the experimental equipment used in UHV surface science studies
- » Design and execute experiments for the synthesis and characterization of graphene nanoribbons on metal surfaces
- » Fabrication of thin molecular layers and their characterization
- » Analyse and interpret data using advanced programming tools
- » Collaborate with our interdisciplinary team and contribute to high-impact publications
- » Present findings at international conferences and workshops
- » Assist in raising third-party funding to support our research initiatives

### YOUR PROFILE

- » Doctoral degree in physics, chemistry, or a related scientific discipline
- » Knowledge of experimental techniques under ultra-high vacuum (UHV)
- » Experience with Low-Energy Electron Diffraction (LEED) and Ultraviolet Photoelectron Spectroscopy (UPS)
- » Knowledge of surface synthesis methods
- » Proficiency in programming for data analysis and experimental control
- » Ability to contribute to raising third-party funding

### WE OFFER

- » Access to state-of-the-art facilities and equipment
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Flexible working time models
- » Opportunity to work remotely

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 01.01.2026 on a full-time basis (39,83 hours per week). The position is to be filled for a fixed term until 31.12.2027. There is an option to extend the position for a further two years after the end of December 31 2027. If the applicant meets the relevant wage requirements and personal qualifications, the salary will be based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications without a photo under: <https://jobportal.uni-koeln.de>. The reference number is Wiss2507-02. The application deadline is 08.09.2025. For further inquiries, please contact Professor Dr Klaus Meerholz ([klaus.meerholz@uni-koeln.de](mailto:klaus.meerholz@uni-koeln.de)) and take a look at our [FAQs](#).



HR EXCELLENCE IN RESEARCH