



UNIVERSITY
OF COLOGNE

Faculty of Mathematics and Natural Sciences

Postdoc – Precursor and Materials Synthesis (f/m/x)

Chair of Inorganic and Materials Chemistry

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.

The Chair of Inorganic and Materials Chemistry (<https://nanochemistry.uni-koeln.de>) is an international and interdisciplinary research group focussing on functional materials synthesis from molecular precursors. We are looking for an enthusiastic postdoc with background in molecular chemistry to develop new precursors for the fabrication of metal oxides and metal nitrides thin-films via ALD technique. Candidates are welcome to propose additional projects within and beyond the scope of the current research framework.

YOUR TASKS

- » synthesis of molecular precursors for Atomic Layer Deposition (ALD) of metal oxides, nitrides, etc.
- » coordination of a research project with international partners
- » publication of research results in peer-reviewed journals, conferences, workshops
- » supervision of undergraduate and graduate students
- » developing new research topics, research collaborations, networks, etc.
- » promote a culture of respect, collaboration and mutual support in the lab

YOUR PROFILE

- » you hold a doctoral degree in Chemistry, Materials Science, Physics or similar field
- » you have a proven track of outstanding research results i.e. you are the (co-)first author of publications in peer reviewed journals
- » you are a team player who thrives in an international collaborative working environment
- » you have excellent English language skills
- » you have a background in molecular synthesis under inert conditions
- » you have previous experience in materials synthesis using gas phase deposition techniques (i.e. CVD, ALD, etc.)

WE OFFER

- » a large, international and interdisciplinary research group with state-of-the-art facilities
- » 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

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 1 March 2025 on a full-time basis (39,83 hours per week). The position is to be filled for a fixed term until 28 February 2028. 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 Wiss2412-08. The application deadline is 6 January 2025.

For further inquiries, please contact Professor Dr Sanjay Mathur (personal-mathur@uni-koeln.de) and take a look at our [FAQs](#).



hr EXCELLENCE IN RESEARCH