





Collaborative Research Center 1333 Molecular Heterogeneous Catalysis in Confined Geometries

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PhD or postdoctoral positions for catalysis in porous crystalline materials (f/m/d)

Are you interested in the development of future materials, the chemistry of crystalline molecular assemblies, or chemical reactions catalyzed by unique atomic arrangements? Do you prefer research and supervision in an interactive and flexible setting? The research group of Jun.-Prof. Dr. Endo, just launched in May 2025, is looking for highly motivated candidates for PhD or postdoctoral positions as its first members, with a **starting date as soon as possible**.

The positions are funded by the Collaborative Research Center (CRC) 1333 "Molecular Heterogeneous Catalysis in Confined Geometries" at the Institute of Polymer Chemistry, University of Stuttgart, Campus Stuttgart-Vaihingen. It offers a German standard pay grade of 50% or 67% E13 TV-L for PhD candidates and 100% E14 TV-L for postdocs, continuing until December 2026. Further funding, including the pursuit of a doctorate, is being requested, and applications for fellowships will receive strong support.

Your tasks

- Synthesis of MOF–COF hybrid frameworks (Figure 1) with embedded catalytic centers
- Investigation of catalytic conversion of organic molecules within the frameworks.

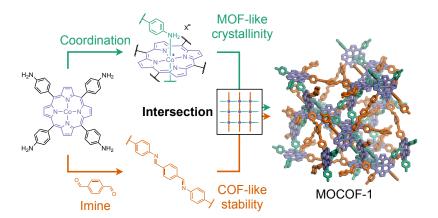


Figure 1. MOF–COF hybrid frameworks developed in our previous work.^[1]

Your profile

- Master's degree in Chemistry or Materials Science.
- Experiences in (metal-)organic synthesis, catalysis of organic reactions, and/or molecular porous materials.
- Excellent oral and written English communication skills.
- Willingness to engage in the CRC and other academic events.
- Optional skills: Schlenk techniques, glovebox, PXRD, NMR, SEM, gas sorption, IR, UV-vis, electrochemistry, ESI-MS, SCXRD, Materials Studio, Python.

This position may be subject to export control regulations and/or sanctions law. The employment is therefore conditional upon the candidate's eligibility for access to export-controlled information and, if necessary, the granting of any required permits or licenses by the relevant authorities.

At the University of Stuttgart, we actively promote diversity among our employees. We have set a goal of recruiting more female scientists and individuals with disabilities. We are therefore particularly pleased to receive applications from such candidates and will prioritize them over others with equal qualifications.

Your benefits

We offer supervision in emerging porous crystalline materials technology, supported by the Faculty of Chemistry's infrastructure. You will develop problem-solving and critical thinking skills through original research in a motivating environment. The CRC provides opportunities for scientific exchange about catalysis and porous materials, along with social interactions through regular events. The doctorate will be pursued within the CRC's structured graduate program integrated into the Graduate Academy of the University of Stuttgart (GRADUS).

The University of Stuttgart represents exceptional, internationally recognized research in one of Europe's most dynamic industrial regions. It prides itself on its employees from over 100 countries and emphasizes multidisciplinarity as a partner in knowledge and technology transfer. As a certified family-friendly university, we promote balance between work and family as well as professional and personal life through various flexible modules. We offer an award-winning employee health management system and sports possibilities. We continually enhance our accessibility, and our Welcome Center supports international scientists in starting their careers in Stuttgart.

Application

The closing date is **June 27, 2025**. Please send your application, which should include a cover letter, CV, academic transcripts, and contact information for two potential references, by email to kenichi.endo.2@ipoc.uni-stuttgart.de or by post to the Institute of Polymer Chemistry, University of Stuttgart, Jun.-Prof. Dr. Kenichi Endo, Pfaffenwaldring 55, 70569 Stuttgart. If you submit your application in paper form, please ensure that you send only copies of essential documents. After the selection process, we will dispose of your documents as required by data protection laws.

References

[1] <u>K. Endo</u>,* S. Canossa, F. Heck, D. M. Proserpio, M. S. Istek, F. Stemmler, J. van Slageren, S. Hartmann, A. Hartschuh, B. V. Lotsch,* *Nat. Synth.* **2025**, *4*, 603–613, <u>DOI</u>: 10.1038/s44160-024-00719-x.

Group website: https://www.ipoc.uni-stuttgart.de/pcmc/

Data Protection Information

When you apply for a position with the University of Stuttgart, you are submitting personal information. With regard to personal information, please take note of the Datenschutzhinweise gemäß Art. 13 Datenschutz-Grundverordnung (DSGVO) zur Erhebung und Verarbeitung von

personenbezogenen Daten im Rahmen Ihrer Bewerbung. (data protection information on collecting and processing personal data contained in your application in accordance with Art. 13 of the General Data Protection Regulation (GDPR)). By submitting your application, you confirm that you have acknowledged the above data protection information of the University of Stuttgart.

