



Ph.D. position (m/f/d) – 420-03/2025

In the area of: Heterogeneous Catalysis for Biomass Conversion

The Leibniz Institute for Catalysis (LIKAT Rostock) with approx. 300 employees and guests is one of the leading European research institutions in the field of catalysis. LIKAT is a competent partner for the research and development of homogeneous and heterogeneous catalysts as well as catalytic processes and technologies. LIKATs focus is on application-oriented basic research and applied research. Therefore, it cooperates with industrial companies and research institutes worldwide.

The department of Prof. Dr. Eszter Baráth (*Department of Synergies in Catalysis*) has an opening for a position in this area.

Your task:

You will develop and characterize supported heterogeneous noble metals as catalysts that can be used in the conversion of lignin dimers to monomers. The project will include in-depth characterisation of the newly synthesised catalysts, their systematic testing in the catalytic conversion of lignin dimers as model compounds, mechanistic, kinetic and spectroscopic studies to understand the elementary steps of the reactions. Spectroscopic studies will be carried out within the group and with internal collaborators. The results will be disseminated by the PIs and the PhD student, mainly through publications and conferences.

Your competence:

We are looking for a person with a Master's degree in chemistry, proven very good experience in handling moisture and air sensitive chemicals. Ideally, the candidate should also have experience in heterogeneous catalysis, physical chemistry and kinetics. Experience in synthetic organic chemistry is an advantage. A good command of written and spoken English is also required. The applicant must be willing to work in an international research team, have a high level of self-motivation and work independently at a high scientific level.

Our offer:

We offer a challenging Ph.D. position in an excellent, international environment at the LIKAT Rostock. Mentoring and support for the doctoral student is provided through a comprehensive training phase and regular exchanges with the supervisors. The supervision will be carried out by Prof. Dr. Eszter Baráth (LIKAT) and Dr. Christopher Rüger (University of Rostock). The position is available from **1st of June 2025** and limited to 3 years. Place of work is Rostock, a university city with direct access to the Baltic Sea. The salary is based on public service rates of the German states (E13 TV-L, 65%).

LIKAT supports professional equality of women and men and so applications from women are most welcome. In areas where women are underrepresented at LIKAT preference will be given to women with equal qualification. Disabled applicants with equal qualification and aptitude will be given preferential consideration.

Please, send your application (including C.V., list of publications, copies of relevant examination certificates and names with contact information of two referees as one pdf file with a max. size of 25 MB) by e-mail, quoting the reference number **420-03/2025** to bewerbungen@catalysis.de until **21st of April 2025**. For topic related questions, please contact with Prof. Dr. Eszter Baráth directly (eszter.barath@catalysis.de).

Please note that application and travel costs cannot be reimbursed.