



PhD position (m/f/d) – 403-01/2022 in the area of in situ / operando spectroscopic investigations on heterogeneous catalytic systems

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. LIKAT's focus is on application-oriented basic research and applied research. Therefore, it cooperates with industrial companies and research institutes worldwide.

The research group of Prof. Dr. Angelika Brückner in the department of "Catalytic In situ Studies" offers a PhD position in this area.

Your task:

The major task of the PhD student will be to perform in situ / operando spectroscopic investigations on iron-based catalysts for CO₂ conversion into higher hydrocarbons under dynamic operation conditions to derive structure-reactivity relationships and to obtain mechanistic insights. For this purpose, a variety of spectroscopic methods such as FTIR, DRIFTS, Raman at relevant reaction conditions combined with online product analysis via MS/GC will be used. The project is embedded in the DFG Priority Program SPP2080 DynKat.

Your competence:

The candidate should have a Master's degree in chemistry or chemical engineering with a substantial background in catalysis and preferentially has some relevant experience with spectroscopic or other analytical techniques. Further requirements are good proficiency in written/spoken English and profound computer skills (e.g. MS Office, Origin, Omnic, OPUS).

Our offer: We offer a challenging PhD position in an excellent, international environment at the LIKAT Rostock. The position is available from March 15, 2022 and limited to 3 years. Place of work is Rostock. The salary is based on public service rates of the German states (E13 TV-L, 66%).

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 contact information of two referees) as an e-mail (in one pdf file with a max. size of 25 MB) by e-mail quoting the reference number [403-01/2022](#) to bewerbungen@catalysis.de until **February 6, 2022**.

For topic related questions, please contact Prof. Dr. Angelika Brückner, Head of Research Department "Catalytic In situ Studies" (angelika.brueckner@catalysis.de) directly.

Please note that application and travel costs cannot be reimbursed.