

## **PhD position (m/f/d) – 421-01/2025 in the field of synthetic organic photo- and electrochemistry**

The Leibniz Institute for Catalysis (LIKAT Rostock) with over 300 employees and guests is one of the leading European research institutions in the field of catalysis. LIKAT is a competent partner for 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 department "Electrochemistry & Catalysis" offers a PhD position in the field of organic chemistry with focus on photo- and electrocatalysis.

### **Your task:**

The goal of the PhD project is to develop new catalysts for photo- and electrocatalytic reactions, to study their electrochemical and photophysical properties, and to develop applications for synthesis of value-added compounds. A fundamental understanding of the relationship between performance, catalyst structure, and reaction conditions is aimed for. Furthermore, possible synergistic effects between photo- and electrocatalytic processes shall be explored. The research work will comprise traditional organic synthesis of catalysts and starting materials, photo- and electrochemical synthesis, as well as electroanalytical and photophysical studies (cyclic voltammetry and related methods, spectroscopy). The project is part of an interdisciplinary collaboration between LIKAT Rostock and Rostock University (Institute of Chemistry). The candidate will be co-supervised by Robert Francke (LIKAT Rostock) and Malte Brasholz (Rostock University).

### **Your competence:**

The candidate should have a Master's degree in chemistry with a substantial background in organic chemistry, electrochemistry, and/or photochemistry. Specialized knowledge or practical experience in the fields of photocatalysis, electroanalytical chemistry, or chromatographic methods are advantageous, but can also be acquired on site.

### **Our offer:**

We offer the chance to become a pioneer in electro- and photocatalytic conversion of organic molecules. We provide an exciting and challenging PhD project in an excellent, international research environment at LIKAT and Rostock University. Mentoring and support for the doctoral student is provided through a comprehensive training phase and regular exchanges with the supervisor. The position is available from March 01, 2025 and fully funded for 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, 66%).

LIKAT supports professional equality of women and men and so applications from women are most welcome. Disabled applicants with equal qualification and aptitude will be given preferential consideration.

Please, send your application (including CV, list of publications, copies of relevant examination certificates as well as names and contact information of two references) as an e-mail (in one pdf file with a max. size of 25 MB) quoting the reference number 421-01/2025 to [bewerbungen@catalysis.de](mailto:bewerbungen@catalysis.de) until March 09, 2025.

For topic-related questions, please contact Prof. Robert Francke, head of department "Electrochemistry & Catalysis" ([robert.francke@catalysis.de](mailto:robert.francke@catalysis.de)) directly.

Please note that application and travel costs cannot be reimbursed.