



TU Dortmund University is a dynamic research-oriented university with 17 departments in the natural and engineering sciences as well as social and cultural sciences. On our international campus, around 6,700 employees make a daily contribution to solving pressing questions of the present and the future. Openness and diversity characterize not only the collaboration in research and teaching, but also in technology and administration.

Scientific Employee (PhD student)

This position is to be filled in the Faculty of Chemistry and Chemical Biology as soon as possible for a period of three years. The duration of the contract will be appropriate to the qualification goal. Remuneration is paid in accordance with the collective bargaining regulations according to pay group 13 TV-L. This is a part-time position with 50% of the regular weekly working hours.

Your qualifications:

- Completed university studies in chemistry or chemical biology
- Experience in multistep synthesis, chromatography and product characterization via NMR spectroscopy.
- Knowledge in synthesis of air-sensitive compounds (Schlenk line/Glovebox techniques).
- Teamwork and communication skills
- English skills

Your tasks:

The Hansmann group is working on the synthesis of organic redox systems, their application in photocatalysis and energy storage, as well as fundamental substance classes of organic chemistry. The project "CC-CHARGED" will start soon and is funded by an ERC Starting Grant.

Here, new substance classes of organic chemistry, such as strongly polarized olefins, stable diazoalkenes, as well as reactive vinylidenes will be investigated. A central goal is the correlation of structure and stability, the search for unusually polarized compound classes and their reactivity in organic chemistry, but also within main group, and transition metal chemistry. Reactive and sensitive organic molecules are synthesized and characterized by various spectroscopic methods. Spectroscopy is partially supported by quantum chemical calculations. Further information please also find at: www.ccb.tu-dortmund.de/hansmann

The offered PhD project within the ERC project is in the field of synthesis of new organic compounds and includes the following aspects:

- Multi-step organic synthesis of, among others, air-sensitive substances
- Synthesis of main group and/or transition metal complexes
- Synthesis and systematic investigation of new fundamental substance classes
- Comprehensive instrumental characterization (including NMR, UV-Vis, fluorescence, EPR spectroscopy, ESI-MS, X-ray, cyclic voltammetry)

We promote diversity and equal opportunities. Convince us with your personality and expertise. Applications from women will be given preferential treatment in accordance with the statutory regulations. It is pointed out that the application of suitable severely disabled persons is desired.

If you have any questions, please contact:

JProf. Dr. Max Hansmann

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If you are interested, please apply by 09.03.2023 with cover letter, CV, certificates and letter of motivation quoting reference no. w10-23:

Technische Universität Dortmund

Fakultät für Chemie und Chemische Biologie

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