

# UniSysCat Colloquium

Dr. Annika Eisenschmidt

University of Cambridge

Start Time: Wednesday, July 10, 2019 05:15 pm

End Time: Wednesday, July 10, 2019 06:45 pm

Chemistry Building, C264

Technische Universität Berlin, Straße des 17. Juni 115, 10623 Berlin

## Enzymes and enzyme-inspired catalysts

Dr. Annika Eisenschmidt

University of Cambridge (Department of Chemistry)

The impressive efficiency and activity of enzymes has inspired a wide variety of research including but not limited to the elucidation of mechanisms, development of biomimetic molecular catalysts and application of enzyme-based systems. In this talk, three selected research projects from various areas of enzyme-inspired catalysis are presented:

- solar-driven enzymatic carbon dioxide fixation with a bio-hybrid setup as an example for a biomimetic system
- cobaloxime-driven water reduction for hydrogen production, demonstrating the path to understanding the mechanistic action of model complexes in water splitting and
- dinuclear copper(II) patellamide complexes as an example for the search for the metabolic relevance of a ribosomally expressed cyclic peptide

The talk aims at giving an insight in current research topics in the field of enzyme-inspired catalysis and will highlight the prospects and challenges of their future development.

Prof. Dr. Matthias Drieß

Organizer