



GESELLSCHAFT DEUTSCHER CHEMIKER  
ORTSVERBAND HANNOVER

## Einladung zum GDCh-Colloquium des Ortsverbandes Hannover

Das Colloquium findet um 17h c.t. im Dr.-Oetker-HS (Raum 007, Gebäude 2504) der Leibniz Universität Hannover, Institut für Physikalische Chemie und Elektrochemie, Callinstraße 3a, D-30167 Hannover statt.

11.04.2024 **Dr. Lars-Erik Meyer,**  
Institut für Technische Chemie, LUH

### *Integration of unit operations into biocatalysis for process intensification and downstream processing*

Enzymes are catalysts found in nature that have played a crucial role in chemical synthesis for decades. They are now widely used in various fields, from research laboratories to the production of detergents. The discovery of new enzymes, their optimization through diverse mutation techniques, and their investigation in the laboratory constantly open new biocatalytic synthesis routes for the chiral introduction of functional groups or C-C couplings. Unfortunately, engineering optimization of such reactions is rarely a primary focus of research.

In this lecture, I will shed light on technical chemistry and its integration of unit operations in biocatalytic applications, supported by case studies. Specifically, I will discuss the challenges posed by the enzymatic Kolbe-Schmitt reaction. The presentation will also cover reaction engineering aspects, specifically enzymatic oxyfunctionalization under continuous conditions. The main focus will be on in situ extraction using thermomorphic solvent systems based on deep eutectic solvents.

Prof. Dr. Jens-Uwe Grabow  
Vorsitz OV Hannover

Vor dem Colloquium findet ab ca. 16h c.t. eine ‚Kaffeerunde‘ mit dem Vortragenden in der Bibliothek des PCI statt.

**ACHTUNG: Heute Wahl des Ortsverbandvorsitzenden während der Kaffeerunde!**