

Das **Institut für Biochemie** lädt gemeinsam mit dem Ortsverband der **Gesellschaft Deutscher Chemiker** zu einem

K o l l o q u i u m d e r G D C h

Großer Hörsaal des Instituts für Biochemie

Felix-Hausdorff-Str. 4, Greifswald

Montag, 29. Januar 2018, 16 Uhr c.t.

Prof. Dr. Frank Hollmann

TU Delft / Department of Biotechnology, Biocatalysis Group, Niederlande

spricht zum Thema:

Are peroxygenases the new P450s? Scope and current challenges of peroxygenases for selective oxyfunctionalisation chemistry

Abstract:

Peroxygenases are experiencing a renewed interest as catalysts for selective oxyfunctionalisation chemistry. They are promising alternatives to the well-known P450 monooxygenases due to a significantly simpler regeneration scheme. Newly identified peroxygenases enable selective hydroxylation of non-activated C-H bonds in alkanes and aromatics, epoxidation and heteroatom oxygenation. Yet, to assess the full scope of this exciting enzyme class a range of challenges need to be met: (1) more enzyme (variants) with tailored properties need to be identified/evolved; (2) new in situ H₂O₂-generation systems to minimise oxidative enzyme inactivation need to be established; (3) peroxygenase-reactions in non-aqueous media need to be established. These issues together with some promising solutions will be presented.

Einladender

Prof. Dr. Uwe Bornscheuer

PD Dr. Heike Kahlert

Vorsitzende des Ortsverbandes der GDCh