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# Novel Enzyme and Whole-Cell Biocatalysis

Guest Editor:

**Prof. Dr. Thomas Brück**
Werner Siemens Chair of Synthetic Biotechnology, School of Natural Sciences, Department of Chemistry, Technical University of Munich (TUM), D-85748 Garching bei München, Germany

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## Message from the Guest Editor

The role of catalysis in realizing a sustainable, bioeconomy climate change drives the development of sustainable processes in the chemical industry. In this respect, the utilization of biomass feedstocks is key in realizing a sustainable bioeconomy on a global scale. The conversion of complex biomass resources into value adding products is challenging due to the inherent chemical complexity of these feedstocks. To this end the role of biocatalysts (whole cells or enzymes) is currently the dominant approach to achieve efficient conversion with high selectivity in aqueous reaction media. However, the recent advent of novel solvent systems, such as ionic liquids, and advances in chemical catalyst design now open new conversion routes combining both bio- and chemical catalysis towards conversion and refining of complex biomass into target products. This Special Issue of Catalysts will focus on new catalytic cascades that preferentially combine both bio-catalytic and chemical steps to generate renewable products. Contributions that report on new catalysts or bioprocess engineering solutions particularly using novel solvent or product isolation procedures systems are welcome.