catalysts

an Open Access Journal by MDPI

IMPACT FACTOR 3.9

CITESCORE 6.3

Biocatalytic Polymer Synthesis

Guest Editors:

Dr. Ren Wei
Univ Leipzig, Dept Microbiol & Bioproc Technol, Inst Biochem, Johannisallee 21-23, D-04103 Leipzig, Germany

Dr. Ren Wei
Junior Research Group Plastic Biodegradation, Department of Biotechnology and Enzyme Catalysis, Institute for Biochemistry, University of Greifswald, Greifswald, Germany

Deadline for manuscript submissions:
closed (28 February 2019)

Message from the Guest Editors

In recent years, bio-derived polymers have become of increasing interest with the potential to replace the petroleum-based counterparts. In this context, those derived not only from the biological raw materials but also by biocatalytic approaches are even more compelling due to the 'green' advantages of the synthetic methods including the clean processes, the low energy consumption, the mild reaction conditions, the biodegradable nature of product polymers, etc. Hence, selected enzymes have emerged as powerful and versatile catalysts promising the synthesis of novel macromolecules, especially those are hardly accessed by conventional chemical methodologies.

This special issue includes, but is not restricted to, the design and engineering of novel biocatalysts, their applications in the synthesis of various polymers and specified monomers, innovative enzyme immobilization technologies, *in vivo* polymer modifications and polymerizations highlighting the involved biocatalysts.