Special Issue

Biocatalytic Functionalization and Degradation of Synthetic Polymers

Message from the Guest Editor

It has been demonstrated that synthetic polymers, such as polyethylene terephthalate and polyester polyurethanes, can be effectively modified and even completely degraded by microbial enzymes. The biocatalytic hydrolysis of these polymers is emerging as a new strategy to improve the recycling of post-consumer plastic waste. Enzymes can also be used to modify the surface properties of synthetic polymers for example to enhance the hydrophilicity of synthetic fibers or plastic films. Contributions presenting progress in our understanding of the biocatalytic mechanism, structure-function relationships, and engineering of novel polyester hydrolases are welcome. Topics may also include innovative applications of these enzymes, for example for the functionalization of polymer surfaces. Original work reporting novel enzymes for the degradation of other recalcitrant synthetic polymers, such as polyethylene and polystyrene, will also be of interest. Prof. Dr. Wolfgang Zimmermann

Guest Editor

Prof. Dr. Wolfgang Zimmermann
Department of Microbiology and Bioprocess Technology, Leipzig University, Johannisallee 23, 04103 Leipzig, Germany

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Polymers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
polymers@mdpi.com

mdpi.com/journal/polymers

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Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Alexander Böker
Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

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