

Special Issue

Modifications and Applications of Natural Polymer Materials

Message from the Guest Editor

Natural polymer materials are abundant, inexpensive, bio-based, renewable, extremely strong, durable, lightweight, biodegradable, recyclable, carbon binding and safe for people and the environment and less expensive than other advanced materials and nanomaterials. Used as a type of materials additive and in composites, natural polymer materials will help to drive the global move away from oil-based plastics and products to sustainable, bio-based alternatives. Natural polymer materials can be derived from a multitude of abundant biomass sources such as straw, wood pulp, agricultural crops, organic waste, leather, as well as from bacteria. Properties including high tensile strength, biocompatibility, biodegradability, and high aspect ratio make them attractive to a wide range of markets, from medical to construction to aerospace. As natural polymer materials originate from renewable matter, their potential to replace petroleum-derived materials in films, coatings, composites, and packaging is particularly interesting in the wake of the current political and societal movements towards the reduction in plastic consumption.

Guest Editor

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Message from the Editor-in-Chief

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 4.9.

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

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