Special Issue

Recent Advances in Chitosan-Based Materials: Characterization and Applications

Message from the Guest Editors

This Special Issue on chitosan-based materials seeks to highlight high-quality original research in this interdisciplinary field. Chitosan, a biodegradable polysaccharide derived from chitin, has garnered significant attention due to its low cost, non-toxicity, high availability, and versatility. Its adaptability allows it to be utilized in various forms, such as gels, sponges, fibers, nanospheres, and films, making it a valuable material for diverse applications in wastewater treatment, pharmaceuticals, agriculture, and the food industry. Topics of interest include, but are not limited to, the following:

- Methods for determining structural, thermal, and mechanical properties of chitosan-based materials.
- Spectroscopic, chromatographic, and microscopic analyses to explore molecular interactions and composite formations.
- Development of nanocomposites and hydrogels for advanced applications.
- Applications in water purification, including the adsorption of metals and pharmaceuticals.
- Use of chitosan as a natural coagulant and flocculant for reducing turbidity, suspended solids, and organic matter in wastewater.
- Innovations in edible films, coatings, and packaging materials.

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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 4.7.

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

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