



Advances in Polymer-Based Nanomaterials with Antibacterial Properties

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Message from the Guest Editors

Nanotechnology applications have grown in the past two decades, showing the advantages of using polymeric nanomaterials and polymeric nanocomposites with antibacterial properties specifically in environmental and biomedical areas. Current research is focused on the production of antimicrobial polymer-based non-toxic nanocomposite systems, and it is imperative to find more eco-friendly synthesis approaches.

This Special Issue is dedicated to exploring novel synthesis methods with low toxicity and without adverse impacts on the environment or human health, which will evolve into specific applications such as wastewater and air treatment, pathogen diseases control in agriculture, antibacterial control in foods, and the elimination of microorganisms in medical areas. Original research articles and reviews are welcome.

The main topics include but are not limited to:

- Synthesis and characterization of polymeric nanomaterials and polymeric nanocomposites.
- Synthesis and characterization of polymer-based non-cytotoxic nanocomposites.
- Detailed applications in the environmental and biomedical areas of polymeric nanomaterials and polymeric nanocomposites.



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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 5.0.

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.

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