# **Special Issue**

# Novel Antimicrobial Polymers: Preparation, Characterization and Applications

## Message from the Guest Editors

Bacterial resistance has been considered an important public health issue worldwide. The use of antimicrobial nanomaterials as functional additives in polymers represents a novel strategy to prevent pathogen propagation. Key factors for the successful formulation of nanostructured antimicrobials include high nanoparticle dispersion into the polymer matrix and their compatibilization, aiming to transfer the intrinsic features of nanostructures to the material, with potential applications in healthcare, biomedicine, sensors, and water potabilization. This Special Issue considers the synthesis, characterization, and validation of antimicrobial nanomaterials, their impact on incorporating a polymer matrix as support, and their antimicrobial response with potential biological applications.

## **Guest Editors**

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### Deadline for manuscript submissions

closed (31 July 2025)



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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

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