

## Special Issue

# Block Copolymers: Synthesis, Self-Assembly, and Biomedical Applications

### Message from the Guest Editors

Block copolymers are a particularly interesting class of polymers that can be synthesized by various synthetic strategies and point towards new, emerging applications. The development of controlled polymerization methods enables scientists to polymerize a wide range of functional monomers with precise control over the macromolecular architecture.

The incorporation of both hydrophilic and hydrophobic blocks, or blocks that have the ability to respond to various external stimuli (temperature, pH, light, enzyme/protein concentration etc.), can lead to novel polymeric materials with tailored properties.

Amphiphilic block copolymers have the ability to self-assemble into different morphologies, such as micelles, rods, worms, or vesicles, when dispersed into aqueous media. Stimuli-responsive copolymers can also change their properties upon alteration of certain physicochemical parameters. These morphologies can be further utilized in several biomedical applications.

The aim of this Special Issue is to highlight the recent progress in block copolymers synthesis, as well as to investigate their self-assembly properties along with their biomedical applications.

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### Guest Editors

Dr. Athanasios Skandalis  
Dr. Theodore Sentoukas  
Dr. Ian Wyman

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### Deadline for manuscript submissions

closed (31 July 2024)



## 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 4.9.

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.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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