



## Block Copolymers: Synthesis, Self-Assembly and Application

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### Message from the Guest Editor

Dear Colleagues,

Block copolymers are one of the most attractive classes of polymer in polymer chemistry and polymer physics, and have shown unique properties in both bulk and solution self-assembly due to the microphase separation of different blocks. Despite the rapid development of this field in the last three decades, the emerging technologies of the synthetic methodology, self-assembly strategies and application exploration bring new avenues for the synthesis, self-assembly and application of block copolymers.

In this Special Issue, we aim to give readers an overview of the state-of-the-art research and recent development of block copolymers. This Special Issue will cover the new technologies used to prepare block copolymers with precisely controlled multi-segments, block composition, molecular weight and polydispersity; the preparation of functional materials by bulk and solution self-assembly (e.g., membranes, micelles, vesicles) as well as the controlled manipulation of their microstructures; and the potential applications of block copolymers, including water remediation, energy storage and catalysis, anticancer therapy, antimicrobial therapy, immune therapy, etc.





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