

Special Issue

Recent Achievements in Biopolymer Adsorption in Waste and Water Treatment

Message from the Guest Editors

Industrial activities generate large amounts of wastewater annually, containing heavy metals, antibiotics, dyes, and other pollutants. Improper treatment of these contaminants poses significant threats to human health and ecosystems. Therefore, the development of high-performance purification strategies has become urgent. Adsorption technology, as one of the commonly used water treatment approaches, is widely employed due to its simplicity and high efficiency. In recent years, biopolymer-based adsorbent materials have garnered increasing attention owing to their cost-effectiveness and environmental friendliness.

This Special Issue on “Recent Achievements in Biopolymer Adsorption in Waste and Water Treatment” seeks high-quality works focusing on the design of adsorption materials and optimisation of adsorption processes. Topics include, but are not limited to, the following:

- (1) Use of AI and machine learning in the design of biopolymer adsorbents;
- (2) Innovative modification strategies of biopolymer adsorbents;
- (3) Development and characterization of biopolymer and nanocomposites;
- (4) Design of adsorbents morphology including gels, microspheres, fibres, capsules, etc.

Guest Editors

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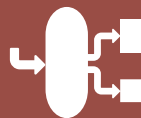
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Deadline for manuscript submissions

30 December 2025



Processes

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