



Recent Advances in Biosorbents: Enhanced Strategies for Contaminant Adsorption

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Message from the Guest Editors

In this Special Issue, topics of interest include, but are not limited to, the following:

1. The removal of emerging pollutants, such as pharmaceuticals, microplastics, and heavy metals, using biosorbents;
2. Advances in the development of new biosorbents from natural sources and synthetic materials;
3. Strategies to enhance adsorption capacities and selectivity through surface modification and functionalization;
4. Understanding the underlying mechanisms governing adsorption processes at molecular and macroscopic levels;
5. The development and application of hybrid materials, combining biosorbents with other adsorptive or catalytic materials to enhance their performance;
6. Techniques for regenerating spent biosorbents and evaluating their reusability in adsorption processes;
7. The use of computational tools and simulation techniques to predict adsorption behavior and optimize biosorbent design;
8. Scaling up biosorbent production and integrating biosorbents into large-scale environmental and industrial applications;
9. The assessment of the environmental footprint and sustainability aspects of biosorbent-based technologies compared to traditional adsorbents;



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Message from the Editor-in-Chief

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