Special Issue

Application of Adsorption and Separation Technologies in Water Treatment

Message from the Guest Editors

Environmental pollution, particularly in water, has significantly disrupted the fragile equilibrium of ecosystems, posing a threat to both biodiversity and human health. Various remediation technologies have been investigated to mitigate water pollution and protect the environment, with adsorption emerging as one of the most common and effective techniques owing to its low cost, simple operation, strong practicality, and environmental-friendliness, as well as the simple regeneration of adsorbents.

This Special Issue is dedicated to the development of smart and responsive adsorbents, both natural and synthetic, that exhibit enhanced efficacy in the removal of a wide range of organic and inorganic pollutants from water. The topics of interest include, but are not limited to, the following areas: strategies for the preparation of adsorbents, the examination of various operational and environmental conditions affecting adsorption performance, adsorption mechanisms, thermodynamics, equilibrium and kinetic studies of adsorption, aspects of adsorbent regeneration, and integrating adsorption with other separation processes.

Guest Editors

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Separations offers the scientific community a high-quality, open-access journal option with rapid time-to-publication without any sacrifice of a rigorous peer-review process. We invite contributions ranging from fundamental characterization and instrumentation development through application of techniques to shed light on a broad spectrum of separation science needs. Since inception, *Separations*, has become unique in its combination of rapid publication and thorough scientific content. We invite you to consider us for your next contribution.

Editor-in-Chief

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