EDITORIAL

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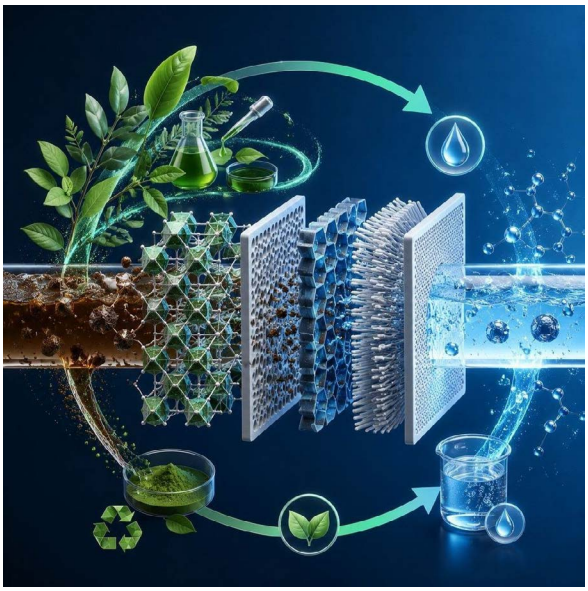
In this Summer issue, aligned with the journal's scope and vision for sustainable development, the research presented reflects a shared concern among specialists in materials science and environmental engineering: the transition from traditional methods toward more environmentally benign and efficient technologies. In this issue, readers will encounter a range of advancements that play a pivotal role in evolving and pushing the boundaries of wastewater treatment and soil remediation.

The central theme of this issue is the redefinition of "green synthesis" and the intelligent application of nanostructures. From utilizing plant extracts in the production of metal oxide nanoparticles and porous biochars to innovations in membrane structures and 3D-printed adsorbent substrates, all these contributions underscore how the convergence of nanoscience with other fields, such as chemical engineering, can provide effective solutions for the removal of recalcitrant pollutants, heavy metals, and pharmaceutical wastes.

This collection represents the efforts of researchers who, relying on the principles of sustainability, seek to identify pathways that not only mitigate pollution but also optimize material recovery cycles. We hope these studies will inspire new ideas for sustainable development in the fields of water and environmental science.

I would like to express my sincere gratitude to all the authors, reviewers, and members of the editorial board whose academic rigor and diligence have ensured the quality of this issue.

Mohsen Jahanshahi
Editor-in-Chief



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