



Nanomaterials and Nanotechnology in Wastewater Treatment

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Message from the Guest Editors

The careful management of water and wastewater is a big challenge and “hot” trend of recent research. The latest technology involving Nanotechnology is highly potent in advancing wastewater treatment via Nanomaterials (nanoadsorbents, nanocomposites, (photo)catalysts, nanofiltration, nanomembranes, nanoparticles, etc.). These nanomaterials have been established in the development of separation membranes, catalysts, and adsorbent materials to enhance the removal of specific components of wastewater and improve productivity. Zero-valent metal nanoparticles (Ag, Fe, and Zn), metal oxide nanoparticles (TiO₂, ZnO, and iron oxides), carbon nanotubes (CNTs), nanocomposites, and many other types of nanomaterials are already used in wastewater treatment. All of the above can be achieved by using Nanotechnology. This Special Issue on “Nanomaterials and Nanotechnology in Wastewater Treatment” seeks high-quality works and topics (not only those) focusing on the latest approaches based on Nanotechnology to efficiently treat wastewater.





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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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