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Materials for Heavy Metals Removal from Waters (2nd Edition)

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Message from the Guest Editors

The removal of contaminants from wastewater, such as heavy metals, has become a severe problem around the world. Therefore, appropriate steps need to be taken to reduce the heavy metal content in water to acceptable levels. Several methods have been used to remove heavy metals from contaminated water, including chemical precipitation, ion exchange, adsorption, membrane filtration, reverse osmosis, solvent extraction, electrochemical treatment, and biosorption and bioaccumulation as eco-friendly alternatives. Extensive research has also been carried out to introduce materials that can remove and alleviate heavy metal ions from wastewater. However, these methods have several disadvantages, e.g., high reagent requirements, unpredictable metal ion removal, the generation of toxic sludge, etc.

This Special Issue focuses on innovative trends in heavy metal removal using advanced materials, reagents, and technologies that respect the environmental and economic requirements around the world. Additionally, the composition and properties of used materials, experimental conditions, mechanisms of the studied processes, and efficiency of heavy metal removal are of interest.





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Message from the Editor-in-Chief

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