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Materials for Heavy Metals Removal from Waters

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Message from the Guest Editors

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 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 the ecofriendly alternatives. Extensive research has also been carried out to introduce materials which can remove and alleviate heavy metal ions from wastewaters. However, these methods have several disadvantages, such as high reagent requirement, unpredictable metal ion removal, 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 over the world. Additionally, composition and properties of used materials, experimental conditions, mechanisms of the studied processes and efficiency of heavy metals removal are of interest.

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Message from the Editor-in-Chief

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