Special Issue

Fate of Metals Released from Wastewater Effluents

Message from the Guest Editor

Wastewaters, including municipal and mining effluents, represent large sources of metals released to the aquatic environment. Metals are significantly present in municipal effluents, and a number of relatively small industrial plants release metals directly into municipal sewer systems. Predicting the environmental impact of the metals contained in those effluent discharges requires an understanding of how their physical and chemical characteristics, and those of the effluent receiving waters, affect metal uptake by aquatic organisms and metal toxicity. As the biological availability of metals is influenced by their speciation, chemical associations of metals are key to assessing the mobility and equilibrium of metal forms. Methods to predict metal bioavailability and toxicity are either by direct measurement such as in electrochemistry and chromatography or using models such as MINEQL or WHAM. These models are based on chemical equilibrium constants to predict how water chemistry modifies forms of the metal and how its toxicity changes, and their results are often validated by controlled exposure experiments using testing animals.

Guest Editor

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Message from the Editor-in-Chief

Toxics (ISSN 2305-6304) is an international, peer-reviewed, open access journal which provides an advanced forum for studies related to all aspects of toxic chemicals and materials. We aim to publish high quality work that furthers our understanding of the exposure, effects, and risks of chemicals and materials in humans and the natural environment as well as approaches to assess and/or manage the toxicological and ecotoxicological risks of chemicals and materials. Please consider publishing in *Toxics* when preparing your next paper.

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