

CALL FOR PAPERS

Widespread contamination has been observed in sediments. Contaminants, such as potentially toxic elements, are accumulated overtime and form secondary reservoirs. Due to the extensive application of synthetic organic chemicals, the resulting environmental contamination with such chemicals is of great concern. Many pharmaceuticals are nonprescription drugs and may be potentially hazardous for humans or ecosystems. The occurrence of environmentally persistent pharmaceutical pollutants has risen alarmingly, which could be the result of economic developments and associated urbanisation. Additionally, the increase in the use of plastic in modern society and the inadequate management of the resulting waste has led to its accumulation in the environment. The challenges to be overcome in the management of contaminated sediments are multifaceted, and there are no easy solutions.

The goal of this special issue is to reveal modern trends in the development of analytical methods for identifying and managing potentially toxic elements and synthetic organic chemicals. In sedimentary and ecological risk assessment studies, the application of rapid sediment characterization technologies provides measurements of chemical, biological, or physical parameters on a real-time or near real-time basis. Examples of rapid sediment characterization analytical techniques include X-ray Fluorescence Spectrometry (XRF) for metals; UV Fluorescence Spectroscopy (UVF) for Polycyclic Aromatic Hydrocarbons (PAHs); and immunoassay for PCBs, pesticides, and PAHs. Recent advances in passive sampling methods (PSMs) offer a promising alternative to support improved risk-based decision making, as they provide a fundamentally sound basis for delineating and quantifying sediment contamination.

Researchers are invited to contribute original, high quality research papers and reviews that give new approaches and analytical techniques for contaminated sediment assessment and management.

Potential topics include but are not limited to the following:

- ▶ New analytical protocols for chemical analysis of contaminants
- ▶ Emerging contaminants in the environment investigations as determined by analytical methods
- ▶ Analytical approaches for measuring plastic debris in environmental samples
- ▶ The identification and management of pharmaceutical substances: emergent contaminants of the aquatic systems
- ▶ Analytical techniques including the estimation of uncertainty and statistical analysis
- ▶ Identifying, assessing, and managing contaminated sediments
- ▶ Analytical techniques in environmental impact assessments
- ▶ Advances in the analytical methods for determination of emerging contaminants in environmental samples
- ▶ Remediation techniques for cleaning up contaminated sites as determined by analytical methods

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jamc/aatcs/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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