

Special Issue on
Emerging Technologies for Soil and Water Conservation and Management

CALL FOR PAPERS

The rapid increase in industrialization and urbanization pose major threats to soil and water resource management. Over the past two decades, millions of people have faced serious health issues and the potential risk of emerging contaminants in the soil and water ecosystem are ever present. In the current environment, soil and water ecosystems contain a mixture of chemical and toxic substances that can have major impacts on the human body. Research on the health impact of emerging pollutants and pollution-control strategies are significant for protecting the environment, preventing pollution-related illness, and cultivating sustainable practices.

The current challenges in soil and water conservation are to reduce contamination within the soil ecosystem, within water bodies and to protect environmental ecosystems for future generations. Over the past decade, disposal of waste from industry and the municipal sector pose a greater risk with the increase in population density. It is particularly challenging for researchers determine environmental contamination in real time in densely populated cities. Furthermore, disposal of waste without proper treatment and usage of chemical and synthetic fertilizers in agricultural industries are major threats to the water ecosystem. Additionally, community awareness for waste segregation and disposal methods are limited. To date, limited research can be found focusing on nano and microplastic contamination in the aquatic and soil environment.

The aim of this Special Issue is to collate research that harnesses novel approaches in various emerging fields such as surface and sub-surface water management, solid waste management, water, and wastewater treatment. This Special Issue focuses on novel technologies for the reuse of wastewater generated in industries, reduction of surface water body contamination and, to monitor groundwater quality for domestic and agriculture uses.

Potential topics include but are not limited to the following:

- ▶ Impact of emerging contaminants in water and soil ecosystems
- ▶ Exposure assessments of the impact of emerging pollutants on human health
- ▶ Modern technologies involved in solid waste management
- ▶ Cleaner technology with reduced production of hazardous pollutants
- ▶ Novel methods for the quantification of toxic pollutants from water and wastewater
- ▶ Source identification and contaminant transport mechanisms
- ▶ Toxicity assessments in soil and aquatic environments
- ▶ Soil contamination measures from anthropogenic activities
- ▶ Soil and sediment chemistry and soil microbiology
- ▶ Soil, water, and sediment pollution from industrial effluents and solid wastes
- ▶ Prediction of soil, water, and sediment contamination transport
- ▶ Soil pollution control and mitigation in extreme environments
- ▶ Scale-up of wastewater treatment units
- ▶ Mitigation techniques and strategies to reduce contamination
- ▶ Sustainable development goals focused on water and soil conservation and management
- ▶ Policies and regulation for new sustainable development goals for soil and water conservation and management

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=157194>.

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

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