Special Issue

Predicting the Fate and Transport of Contaminants in Soil and Groundwater with Machine Learning

Message from the Guest Editors

Soil and groundwater pollution issues are escalating, presenting a significant threat to both the ecological environment and human health. We should note that soil erosion is also a critical factor that severely impacts the quality of soil and groundwater. This Special Issue aims to collect original research as well as review articles exploring contaminant fate and transport in soil and groundwater, alongside different aspects of machine learning technology application. Topics for this call for papers include, but are not restricted to, the following:

- Transportation and transformation mechanisms of contaminants in complex environments, and complex environmental system modeling;
- Quantitative assessment of the impact of soil erosion on the fate and transport of soil and groundwater pollutants, modeling, and validation;
- Behavior of new pollutants (such as nanomaterials, emerging pollutants, etc.) in eroded soil and groundwater;
- Machine learning applications in pollutant concentration prediction, pollution source identification, and tracking;
- High-precision monitoring technology, and establishment of intelligent monitoring and warning systems.

Guest Editors

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Deadline for manuscript submissions

closed (21 February 2025)

Toxics

About the Journal

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.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.1 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).

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