DESCRIPTION

The *Journal of Contaminant Hydrology* is an international journal publishing scientific articles contributing to a broad understanding of contamination of water resources. Emphasis is placed on investigations of the physical, chemical, and biological processes influencing the behaviour and fate of organic and inorganic contaminants in the aqueous environment including ecological impacts. Water-based science, technology and management approaches that monitor, assess, control and mitigate contamination and its eco-environmental impacts at multiple scales are invited. Broad latitude is allowed in identifying contaminants of interest, and includes legacy and emerging pollutants, nutrients, nanoparticles, microorganisms (e.g., bacteria, viruses, and protozoa), microplastics, and various constituents associated with energy production (e.g., methane, carbon dioxide, and hydrogen sulfide).

The journal's scope embraces a wide range of topics that include: surface and subsurface hydrology as it relates to contamination; experimental and computational investigations of contaminant sorption, diffusion, biological and chemical transformation, volatilization and transport in the surface and subsurface; characterization of soil and sediment properties only as they influence contaminant behaviour; development and testing of mathematical models of contaminant behaviour; innovative techniques for restoration of contaminated sites; development of new tools or techniques for monitoring the extent of soil, sediment, and water contamination; development of mathematical models and system analysis techniques for understanding and managing surface and subsurface water resources systems including hyporheic zone processes; analyses of interactions between water-use activities and the environment; carbon sequestration and turnover; and water contamination issues associated with energy production.

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Methods. We are keen to see new methods of analysis, experimentation, field investigation, or interpretation developed and published. However the journal will not publish papers that present only method development, nor methods that have no major advance over existing approaches. Manuscripts
that demonstrate how new or existing methods lead to new insights, or that extend the scope or demonstrate the practical use of existing methods will be welcome. Normally, measured data or observations will be used to validate the method. The last comments on Methods apply particularly to the development of new analytical and numerical solutions to flow, transport and reaction equations. A new mathematical solution must be a significant and useful advance over present methods. The new solution should also lead to new understanding of contaminant behavior. When possible, new analytical or numerical solutions should be compared with existing methods and/or with real data/observations.

The inverse of these comments on new models applies to papers that focus on experimental and field investigations. *It is not sufficient to present data*, no matter how elegant the experiment or interesting the field site! *Data must be interpreted with a conceptual model of processes so that the results are potentially valuable to other sites and experiments.*

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INTRODUCTION

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The journal's scope embraces a wide range of topics including: experimental investigations of contaminant sorption, diffusion, transformation, volatilization and transport in the subsurface; characterization of soil and aquifer properties only as they influence contaminant behavior; development and testing of mathematical models of contaminant behaviour; innovative techniques for restoration of contaminated sites; development of new tools or techniques for monitoring the extent of soil and groundwater contamination; transformation of contaminants in the hyporheic zone; effects of contaminants traversing the hyporheic zone on surface water and groundwater ecosystems; subsurface carbon sequestration and/or turnover, and migration of fluids associated with energy production into groundwater.

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