Special Issue

Modeling and Prediction of Groundwater Contaminant Plumes

Message from the Guest Editors

The detection and monitoring of groundwater contamination plumes is a crucial aspect of water resource management in the context of increasing anthropogenic pressures. Various disciplines have focused on this problem with their own tools. This Special Issue will be devoted to modeling and forecasting pollution plumes in groundwater. The types of pollutant that can generate plumes with which we are concerned include: chemical contamination (synthetic products or not), radioactive contamination, microbiological contamination, thermal contamination, etc., without limitation. Potential topics include, but are not limited to:

- the acquisition of data necessary for the development, calibration, and validation of models;
- reaction aspects (physico-chemical and/or biological) and dispersion aspects of pollutant transport;
- the numerical aspects of modeling two-dimensional (2D) and three-dimensional (3D) plumes (the discretization problem);
- measurements of the location of the contours of pollutant plumes; and
- applications of models of pollution plumes to water resource management (natural attenuation or monitored natural attenuation).

Guest Editors

Prof. Dr. Vincent Vallès

UMR 1114 INRAE EMMAH Avignon Université, 84916 Avignon, France

Dr. Laurent Barbiero

IRD, CNRS, Université de Toulouse, UMR 5563, Géoscience Environnement Toulouse, Observatoire Midi-Pyrénées, 14 Avenue Edouard Belin, 31400 Toulouse, France

Deadline for manuscript submissions

closed (15 February 2021)



Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



mdpi.com/si/43579

Water Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 water@mdpi.com

mdpi.com/journal/ water





Water

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 6.0



About the Journal

Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse. France

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)

