water

an Open Access Journal by MDPI

IMPACT FACTOR 3.4

CITESCORE 5.5

Sustainable Remediation Using Metallic Iron: Quo Vadis?

Guest Editors:

Dr. Chicgoua Noubactep
Angewandte Geologie, Universität Göttingen, Goldschmidtstraße 3, D-37077 Göttingen, Germany

Dr. Marius Gheju
Faculty of Industrial Chemistry and Environmental Engineering, Politehnica University Timisoara, Bd. V. Parvan Nr. 6, 300223 Timisoara, Romania

Deadline for manuscript submissions:
closed (10 November 2023)

Message from the Guest Editors

Dear Colleagues,

During the past three decades, groundwater remediation using permeable reactive barriers (PRBs) containing metallic iron (Fe^0) has become a well-established technology. However, many uncertainties exist regarding their design, suggesting that Fe^0 PRBs is still an innovative technology.

Research on Fe^0 PRBs started in the early 1990s and has boomed in the past three decades. Sufficient data and observations have been accumulated to establish the science of the Fe^0/H_2O system. To explain the initial observation that there were losses of chlorinated organic contaminants from aqueous solutions in contact with a variety of metals (including Fe^0), it was proposed that reductive dechlorination was the main cause, with electrons coming from the metal body. In the meantime, Fe^0 is described in the literature as “reservoir of electrons” for contaminant transformation. [...]

For further reading, please follow the link to the Special Issue Website at:

https://www.mdpi.com/journal/water/special_issues/Metallic_Iron

water

IMPACT FACTOR 3.4

CITESCORE 5.5

an Open Access Journal by MDPI

Editor-in-Chief

Dr. Jean-Luc PROBST
Laboratory of Functional Ecology and Environment, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, France

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.

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 (*Water Science and Technology*)

Contact Us

Water Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/water
water@mdpi.com
𝕏@Water_MDPI