Special Issue

Organic Pollutant Removal from Water and Wastewater Using Clay Minerals

Message from the Guest Editors

Contamination of waters by persistent and emerging organic pollutants (herbicides, pharmaceuticals, hormones, food additives) imposes severe environmental and human health risks. There is a continuous quest for materials that can efficiently remove these pollutants from wastewaters before reaching rivers, lakes, and groundwaters. Natural clay minerals are excellent sorbents for cations but not very efficient for removing anions and hydrophobic compounds. However, more and more studies have demonstrated that clay minerals work as an efficient platform for chemical modification and fine-tuning of surface chemistries to enhance their affinity to a wide variety of anionic and hydrophobic organic pollutants. Organoclays, composite materials, bioreactive organoclays, and clay minerals containing magnetic nanomaterials work as efficient sorbents with potential applicability for wastewaters remediation. They also exhibit a high degree of reusability. This Special Issue aims at presenting the state-of-the-art on preparation, characterization, and application of clay mineral-based materials for the remediation of waters and wastewaters, emphasizing the removal of organic pollutants.

Guest Editors

Dr. Jorge César Masini

Departamento de Química Fundamental, Instituto de Química, Universidade de Sao Paulo, Av. Prof. Lineu Prestes 748, São Paulo 05508-000, SP, Brazil

Prof. Dr. Gilberto Abate

Departamento de Química, Universidade Federal do Paraná, Centro Politécnico, Curitiba 81531-980, Brazil

Deadline for manuscript submissions

closed (15 January 2022)

Minerals

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.4

mdpi.com/si/73231

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

mdpi.com/journal/minerals

Minerals

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.4

mdpi.com/journal/minerals

About the Journal

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

Editor-in-Chief

Prof. Dr. Leonid Dubrovinsky
Bayerisches Geoinstitut, University Bayreuth, D-95440 Bayreuth, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), GEOBASE, GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Mining and Mineral Processing) / CiteScore - Q1 (Geology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.7 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).

MDPI