



an Open Access Journal by MDPI

Nano Geochemistry: Risk Assessment and Green Environmental Applications

Guest Editors:

Prof. Dr. Thorsten Schäfer

Friedrich Schiller University Jena,
Institute of Geosciences, Applied
Geology, 07749 Jena, Germany

Prof. Dr. Woojin Lee

Civil and Environmental
Engineering, Nazarbayev
University, Nur-Sultan 010000,
Kazakhstan

Dr. Gopala Krishna Darbha

Indian Institute of Science
Education and Research Kolkata,
Mohanpur, India

Deadline for manuscript
submissions:

closed (31 October 2023)

Message from the Guest Editors

Dear Colleagues,

The geophysical and chemical dynamics at the solid–water interface ultimately control the transport properties of geomaterials via dissolution/precipitation reactions and are of paramount importance for the fate of organic and inorganic contaminants in such systems. Understanding the mechanistic process used on the nanoscale is a prerequisite for the reliable prediction of the long-term behavior of chemical compounds in the natural and anthropogenic-influenced environment. We encourage papers on research in the interdisciplinary field of earth and material science with the additional aspect of biogeochemical processes. Nucleation and nanoparticle formation are the key aspects of the strategic formation of metal ores, biogeochemical cycling, and industrial processes, such as early cement hydration and advanced remediation strategies. Contributions on theoretical approaches, including molecular dynamic simulations and geochemical/surface complexation modeling, are also encouraged.

Prof. Dr. Thorsten Schäfer

Prof. Dr. Woojin Lee

Dr. Gopala Krishna Darbha

Guest Editors



mdpi.com/si/158075

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University
of California Davis, One Shields
Avenue, Davis, CA 95616-5270,
USA

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Author Benefits

Open Access:— free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[@nano_mdpi](https://twitter.com/nano_mdpi)