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Nano Geochemistry: Risk Assessment and Green Environmental Applications

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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.

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Prof. Dr. Woojin Lee
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Guest Editors



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Special Issue



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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.

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