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Ion Adsorption at Mineral-Water Interfaces

Guest Editor:

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Message from the Guest Editor

Ion adsorption at mineral-water interfaces has a major influence on ion mobility in porous systems, the charging of mineral surfaces in electrolyte solutions, and the colloidal behavior of mineral particles. Thus, it plays a major role in a multitude of settings. These range from environmental issues to industrial applications and may include mobility or bioavailability of toxic substances or nutrients in natural systems as well as filtration, the rheologic behavior of mineral suspensions, or the wetting behavior of mineral surfaces, just to name a few examples for prominent effects, controlled by ion adsorption at mineral-water interfaces.

For this Special Issue, we encourage submissions of studies investigating ion adsorption phenomena on a wide range of scales and using a wide range of theoretical and experimental methods, from atomistic simulations to continuum scale thermodynamic and kinetic models, and from spectroscopic and microscopic experimental investigations on the molecular scale processes to investigations on large-scale natural or technical systems.



Specialsue





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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.

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