

Special Issue

Application of Biomodified Mineral Amendments in Industrial, Environmental and Agricultural Engineering

Message from the Guest Editors

Clay minerals have been widely employed as soil amendments in various industrial, agricultural and environmental applications. The modification of clay minerals with organic and inorganic compounds has been applied to alter the physicochemical and structural properties of clays to enhance their sorption capacity and, therefore, their effectiveness as amendments. However, many of these modifications are not eco-friendly as they require high-temperature treatments or use chemical compounds that are further released into the environment. Bio-modification refers to the interaction of clays with microorganisms, (such as bacteria and fungi) and is a promising technique for enhancing the properties of primary minerals in an eco-friendly way, simulating a process that already occurs in natural systems. Microorganisms can alter the clay structure and change their physicochemical properties... Based on this scope, this Special Issue of *Minerals* will focus on the application of bio-modified mineral amendments for industrial, environmental and agricultural purposes.

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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.

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