

Special Issue

Geopolymer Composites

Message from the Guest Editors

Geopolymers consist of silico-aluminates in a semi-crystalline three-dimensional structure. The geopolymer binder is synthesized by mixing materials rich in silica and amorphous alumina with a strong alkaline solution. Geopolymer composites are a very interesting concrete alternative, with an improved performance compared to traditional concretes, while utilizing a high proportion of industrial waste and by-products such as fly ash (FA), coal ash, and blast furnace slag. Geopolymers are therefore more environmentally friendly and cheaper than Portland cement and can significantly reduce the amount of CO₂ emission from the cement industry—the primary driver of global warming. The aim of this Special Issue is to invite researchers to publish their new and novel findings about physical, mechanical, thermal, and microstructural properties of geopolymer composites and inorganic building materials, the life cycle assessment of geopolymers, geopolymers for 3D printing, the durability and sustainability of geopolymer composites, and any other topics relevant to geopolymers.

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About the Journal

Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

Editor-in-Chief

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