



Geopolymer Composites

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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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Message from the Editor-in-Chief

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