

## Special Issue

# New Trends in Geopolymer Concrete

### Message from the Guest Editor

Driven by the goal of carbon neutrality, the building materials industry has discovered great challenges and opportunities. Geopolymer concrete has been recognized as a green and low-carbon cementitious material, because it can employ recyclable raw materials to replace cement as the cementing material, and possesses acceptable and even better properties. The aim of this Special Issue is to gather research regarding the recent scientific progress in geopolymer concrete, to promote the depth and range of this study, so as to develop its popularization and applications. The scope of this Special Issue includes, but is not limited to, the formation mechanism, mixture design method, mechanical properties, durability, microstructure, dynamic properties, structural behaviors, waste utilization, sustainability, and its life cycle environmental evaluation. Furthermore, this Special Issue aims to compile comprehensive knowledge, other potential studies on engineered geopolymer composites, CO<sub>2</sub> capture and utilization, energy storage, 3D printing, bio-materials, numerical study, monitoring methods and artificial intelligence, etc.

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### Guest Editor

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### Deadline for manuscript submissions

20 May 2025



## Materials

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### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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### Editor-in-Chief

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