

Special Issue

Recent Advances in Sustainable Concrete Materials Technology

Message from the Guest Editors

To reduce CO₂ emissions, sustainable and energy-efficient materials for infrastructure development are necessary. While over ten billion tons of concrete are being produced worldwide each year, introducing sustainable and energy-efficient concrete has brightened the horizon for sustainable development in the construction industry. There are some potential solutions to prepare sustainable and energy-efficient concrete, such as utilizing a high volume of supplementary cementing materials (SCMs), geopolymer concrete, carbonation, carbon capture, and storage (CCS), and applying phase change materials (PCMs). These types of concrete can reduce energy consumption in buildings and mitigate urban heat islands (UHI). This Special Issue aims to include manuscripts discussing the physical, thermal, mechanical, and/or microstructural properties of fresh/hardened concrete containing any waste or by-products. Furthermore, discussions about incorporating PCMs into the concrete and their effect on sustainability and energy efficiency are highly welcome for submission.

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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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