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Advances in Low Carbon Concrete and Structures

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Message from the Guest Editors

The construction industry is undergoing a paradigm shift towards sustainability, with a particular focus on reducing carbon emissions associated with concrete production, construction activities, and structures. To this end, much more research endeavor is needed. We identify **NINE** key aspects benefiting the field: **(1)** low-carbon cement formulations; **(2)** alternative supplementary cementitious materials and aggregates; **(3)** optimization of concrete mixture for more sustainable or better durability; **(4)** innovative construction techniques such as 3D printing and prefabrication to improve construction efficiency; **(5)** carbon capture from industrial emissions and carbon sequestration in concrete; **(6)** innovations in carbon footprint reduction of construction activities such as adoption of green energy; **(7)** carbon footprint and cost estimation over the life cycle of materials and structures; **(8)** embracement of green structures through novel design, low-carbon materials, decarbonation techniques, and artificial intelligence; and **(9)** large-scale deployment and relevant regulations development. We are pleased to invite you to share your cutting-edge findings in this issue.





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Message from the Editor-in-Chief

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