

## Special Issue

# High-Performance Cementitious Composites: Materials Development, Smart Technologies, and Engineering Applications

### Message from the Guest Editors

High-performance cementitious composites (HPCCs) have emerged as a transformative class of materials for modern construction due to their superior mechanical performance, enhanced durability, crack resistance, and multifunctional capabilities. With the increasing global demand for resilient and sustainable infrastructure, the development of innovative cement-based composites has become essential for addressing challenges related to structural safety, service life, and environmental impact. This Special Issue aims to provide a comprehensive platform for recent advances in the design, characterization, modeling, and structural applications of advanced cementitious materials. Topics of interest include ultra-high-performance concrete, fiber-reinforced composites, geopolymer systems, self-sensing and smart materials, additive manufacturing, durability enhancement, structural strengthening and rehabilitation, life-cycle assessment, and sustainable construction technologies. Both original research articles and review papers addressing experimental, analytical, and numerical approaches are welcome.

### Guest Editors

Assist. Prof. Mohamed Ghalla

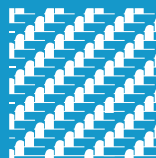
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### Deadline for manuscript submissions

31 December 2026



## Journal of Composites Science

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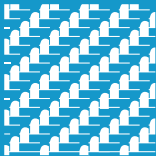
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#### Editor-in-Chief

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