

Sustainable Cement Production with More Industrial Wastes

Dear Readers,

Welcome to 6th issue of 2026, which gathers global industry updates, original research papers and comprehensive review centred on low-carbon innovation and sustainable advancement within the cement sector.

The Spotlight section delivers global industry news covering conferences, plant upgrades, corporate partnerships and decarbonisation projects across multiple regions. Highlights include the TUM/ACI 2026 Conference in Munich, new kiln investment by Heidelberg Materials France, Cemex's water stewardship achievement, and multiple cross-border collaborations targeting cement decarbonisation. You can also track business moves ranging from Vicat's French decarbonisation push, Siemens-backed next-generation cement development, Leilac-Ambuja Cements partnership, to the ambition of building the first CO₂-neutral cement plant in the Baltics.

The Market Trends article presents CCUS prospects, a critical technical pathway for cutting cement-related emissions. Meanwhile, the Associations piece addresses raw material security for gypsum supply, and the Products & Technology feature discusses CO₂ reduction potential through PCE application in sand-cement mortars, as what is Sika doing.

This issue publishes a set of high-quality academic contributions. Original research investigates supplementary cementitious materials derived from co-calcined red mud and kaolin clay. Several experimental articles dig into practical material performances: how Fe-Al ratios shape calcination, hydration and sulfate resistance when utilising iron-rich copper slag for high-iron Portland cement, how in-situ copolymerization with sodium styrene sulfonate enhances cement paste properties, and how hydrated lime influences low-clinker cement's microstructure and performance, and the use of low-temperature sintering of low-grade magnesite for magnesium phosphate cement clinker. Complementing these experimental works is a review introducing complex hydration mechanism of limestone calcined clay cement (LC³), offering systematic insights for this type of low-clinker material development.

Hope these articles bring you valuable inspiration for your research and work.



A stylized, handwritten signature in black ink, appearing to read 'Zuhua Zhang'.

Zuhua Zhang
Editor-in-chief

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EDITORIAL