

Towards greener binders and sustainable construction industry

Dear Readers,

Welcome to the second issue of 2026, a collection that embodies the spirit of innovation and sustainability shaping the future of construction technology and materials engineering. This edition brings together 19 insightful contributions spanning cutting-edge research, industry trends, and global developments—all designed to empower professionals at the forefront of our field.

Our research articles delve into critical technical challenges, from studying basalt fiber-reinforced materials for highway infrastructure to exploring electrophoretic deposition as a repair solution for corrosion-damaged concrete. We also examine geopolymers' durability in marine environments and innovative approaches to enhance artificial aggregate properties, addressing pressing needs for resource efficiency and performance.

For industry leaders, our review on clinker milling energy efficiency and features on large-scale vertical roller mill technology offer actionable insights for operational optimization. Meanwhile, our global news section highlights transformative initiatives: Brazil's pioneering role in 3D printing construction, Australia's green cement projects, and breakthroughs like CO₂-capturing binders that turn buildings into carbon sinks.

As the industry navigates decarbonization, we shine a light on success stories—from China West Construction's 6-star zero-carbon factory to Heidelberg Materials' record performance—proving sustainability and profitability can go hand in hand.

Thank you for joining us on this journey of progress. May these pages inspire your next innovation.



A handwritten signature in blue ink, appearing to be 'Zuhua Zhang', written in a cursive style.

Zuhua Zhang
Editor-in-chief