# Calls for Papers

#### 79th RILEM Annual Week & ICONS 2025

Meeting: The 79th RILEM Week will be held in conjunction with the International Conference on Advances in Engineering and Technology for Sustainable Development (ICONS 2025) in Hanoi, Vietnam, from August 24-29, 2025. The conference requires physical attendance (virtual is not applied).

Solicited: The conference aims to present and discuss the recent advances in materials and structures research to meet the great challenges of the twenty-first century and beyond to enable sustainable, safe, and durable construction (new and existing buildings and strategic infrastructures); promote the circular construction/economy; improve the energy efficiency of construction; and favor the quality and comfort of buildings (indoor air quality and comfort). All these topics will be considered from the material's perspective, as well as from the structure's perspective. A special focus will be put on worldwide practices and rationale to meet these goals.

The conference will cover all the topics in the scope of ICONS 2025 scientific activities and will include the following:

For sustainable performance of eco-materials and structures: cementitious materials—development and characterization of binders, early age, rheology and processing, and durability and long-term performance; eco-friendly and sustainable building materials—low-carbon dioxide (CO<sub>2</sub>), low-energy, low-resources processes, and recycling; innovative building materials—three-dimensional (3-D)-printed concrete, geopolymer, self-healing, and self-sensing; bituminous materials—properties, sustainability, and resilience; deterioration in tropical and marine conditions, maintenance, and repair; performance of structures under extreme conditions and climate changes; repair, retrofitting, and restoration; and destructive and nondestructive inspection and monitoring.

For digitalization of eco-materials and structures: data analytics and artificial intelligence (AI) approaches, modeling of materials and structures, and AI and big data.

For sound resource management of eco-materials and structures: building information modeling (BIM), applied to circular construction management; circular economy, life cycle assessment of construction materials, systems, and

### **Calls for Papers: Submission Guidelines**

Calls for papers should be submitted no later than 3 months prior to the deadline for abstracts. Please send meeting information, papers/presentations being solicited, abstract requirements, and deadline, along with full contact information, to: Lacey Stachel, Managing Editor, *Concrete International*, 38800 Country Club Drive, Farmington Hills, MI 48331; email: lacey.stachel@concrete.org. Visit www.callforpapers.concrete.org for more information.

structures; and building codes and standards for sustainable construction.

**Requirements:** For more information, visit https://rilemweek2025.sciencesconf.org.

**Deadline:** Abstracts are due by December 16, 2024.

## Are Low Clinker, Low Global Warming Potential (GWP) Mixtures Compatible with Long-Term Durability and Long-Service Lives?

Meeting: The technical session "Are Low Clinker, Low Global Warming Potential (GWP) Mixtures Compatible with Long-Term Durability and Long-Service Lives?" will be held at the ACI Concrete Convention – Fall 2025 in Baltimore, MD, USA; sponsored by ACI Committees 201, Durability of Concrete, and 236, Material Science of Concrete.

Solicited: Presentations are solicited for this session that provide state-of-the-art information on mixtures with a low GWP and long-term durability. It is anticipated that this will consist of low-clinker mixtures and mixtures made using alternative binders and that the pros and cons of these mixtures will be presented as they relate to service life. This session will highlight beneficial outcomes associated with high clinker replacements with reactive supplementary cementitious materials. The talks will also feature concerns related to premature deterioration that may occur due to corrosion, freezing and thawing, or other aspects of environmental exposure. The audience would be researchers, material suppliers, and design professionals.

Requirements: 1) potential title; 2) presenter name; 3) author(s) name, affiliation, and email; and 4) abstract outlining the primary conclusions of the presentation. This information should be submitted to either Jason Weiss, Oregon State University, jason.weiss@oregonstate.edu, or Franco Zunino, University of California, Berkeley, zunino@berkeley.edu.

**Deadline:** Abstracts are due by December 30, 2024.

# Toward Concrete with Lower Global Warming Potential

**Special Issue:** "Toward Concrete with Lower Global Warming Potential" will be published in a future edition of the *ACI Materials Journal*. Guest editors will include Jason Weiss, Oregon State University; Farshad Rajabipour, The Pennsylvania State University; and Raissa Douglas Ferron, The University of Texas at Austin.

**Solicited:** Concrete is the most widely used material in the world. Cement clinker, a main constituent of concrete, accounts for about 5 to 8% of carbon dioxide (CO<sub>2</sub>) emissions. To achieve more sustainable concrete mixtures, concrete is being designed to use less clinker through supplementary

cementitious materials (SCMs) and admixtures. Innovative new alternative cements are being developed. Innovations are occurring in mixture proportioning procedures and with admixtures as well. Opportunities exist to build more efficiently with improved quality control approaches that reduce overdesign. Innovations have also been proposed through carbon capture, improved energy efficiencies, and advancement of environmental product declarations, life cycle assessments, and sustainability assessments.

This issue will discuss advancements in binder innovation, mixture proportioning, and documentation/prediction procedures and outline advancements to reduce the global warming potential of concrete. This will include papers that focus on practical issues in current production as well as potential future formulations.

**Requirements:** Submit abstracts to Jason Weiss, Oregon State University, jason.weiss@oregonstate.edu. For more information, visit www.concrete.org/publications/acistructuraljournal/specialissues.

**Deadline:** Abstracts are due by January 10, 2025.

#### **Carbon Conscious Concrete Symposium**

**Meeting:** Carbon Conscious Concrete Symposium (C3 2025) will be held October 2-5, 2025, at the Westin Chicago River North, Chicago, IL, USA.

**Solicited:** The impact of carbon dioxide (CO<sub>2</sub>) emissions generated during the production and use of concrete materials and structures has become a significant concern in recent years. Over the past several decades, various technologies have been developed to reduce the carbon footprint of concrete. More recently, there has been a surge in research as the cement and concrete sector aims to decarbonize to meet pressing climate goals. This symposium offers a platform for researchers from industry, academia, and national labs, along with students and young professionals, to share cutting-edge developments in low-carbon cementitious materials. Also, join us in celebrating ACI Honorary Member Surendra P. Shah's 90th birthday. For the past 60 years, Shah has made paramount contributions to advancing concrete technology. This conference will honor Shah's achievements in the field of concrete worldwide, including work on fracture mechanisms, high-ductile concrete, nano-engineered concrete, and sustainability.

Papers are invited on the following topics: techniques for reducing CO<sub>2</sub> during cement production; carbon treatment of concrete materials; low-carbon concrete binders; characterization and performance evaluation of low-CO<sub>2</sub> binders; use of supplementary cementitious materials (SCMs) and industrial wastes (construction, agricultural); advanced concrete technologies for sustainability; computational and

data-driven modeling; and environmental impact analysis, life cycle analysis, and techno-economic analysis.

**Requirements:** For more information, visit https://carbonconscconcrete.com/#call-for-abstracts-3628.

**Deadline:** Abstracts are due by January 15, 2025. **Contact:** carbonconsconcrete@gmail.com.

#### Estimating the Deformation Capacity of RC Structures

Meeting: The technical session "Estimating the Deformation Capacity of RC Structures" will be held at the ACI Concrete Convention – Fall 2025 in Baltimore, MD, USA; sponsored by ACI Committee 341, Performance-Based Seismic Design of Concrete Bridges, and Joint ACI-ASCE Subcommittee 445-B. Shear & Torsion-Seismic Shear.

Solicited: Presentations are solicited for a session on estimating the displacement capacity of reinforced concrete (RC) structures. Estimates of the deformation capacity of RC structures have been developed since the late 1990s.

Numerous methods have been proposed within seismic design and assessment guidelines to estimate deformation capacity, which can lead to variations in the assumed capacity of the structure. The objective of this session is to compare the effectiveness of existing methods to estimate the deformation capacity of RC structures as well as propose alternative, novel methods. The implications of these results will be discussed. Presentations on methods and definitions for the prediction of displacement capacity are solicited.

**Requirements:** Abstracts of no more than 300 words should be sent to Mervyn Kowalsky, North Carolina State University, kowalsky@ncsu.edu.

Deadline: Abstracts are due by February 28, 2025.

