News

Registration Still Open for the ACI Concrete Convention – Spring 2024

Known as the world's gathering place for advancing concrete, the ACI Concrete Convention – Spring 2024 will take place March 24-28, 2024, in New Orleans, LA, USA. Concrete professionals will convene to collaborate on concrete codes, specifications, and practices. Technical and educational sessions will provide attendees with the latest research, case studies, best practices, and the opportunity to earn professional development hours (PDHs). Select programming will also be available on demand to virtual attendees.

The convention features a robust schedule that includes more than 300 committee meetings, 60+ technical sessions, an industry trade exhibition, and networking events. Committee meetings are open to all attendees.

ACI Concrete Convention highlights include:

- **13th International Workshop on Structural Concrete:** Held every 18 to 24 months in conjunction with the ACI Convention, this workshop will gather and share information on the development and application of concrete design standards throughout the Americas and beyond. The workshop and an evening reception will be held March 23 (pre-registration is required);
- **FRPRCS-16 Symposium:** The ACI Concrete Convention is the venue for this year's symposium, a continuation of a workshop that focuses on designing with glass fiber-reinforced polymer (GFRP) reinforced concrete using ACI CODE-440.11-22. The symposium, sponsored by NEx, is open to all convention attendees and is a great opportunity to become familiar with the experiences from day-to-day projects using FRP reinforcement;
- **Opening Session:** The Opening Session is the official start to the ACI Convention and will begin with a welcome address by ACI President Antonio Nanni, along with recognition of new Honorary Members, Fellows, and 50-Year Members for their contributions to the concrete industry;
- **Concrete Sustainability Day:** March 26 will include a set of sessions devoted to low-carbon concrete, sustainability, and resiliency. The Natural Resources Research Institute (NRRI) is sponsoring the day with a guest lunch speaker from the National Renewal Energy Laboratory (NREL). Pre-registration is required for the lunch; and
- **Student Competition:** In the Mortar Workability Competition, students will mix mortar and place it into a mold made in the shape of the letters "ACI" from the top of the letter "A." Flowability, mixture stability, and carbon neutrality will be evaluated. Results and cash prizes sponsored by NEU: An ACI Center of Excellence for Carbon Neutral Concrete will be announced at the Student Awards Program. For more information on the competition and how to register, visit **www.concrete.org/students**.

Technical and educational sessions will be presented live with on-demand viewing available afterward through the convention platform, providing substantial opportunity to advance concrete knowledge.

Registration is currently open online. Discounted rates are offered until March 22, 2024. To learn more about the ACI Concrete Convention and to register, visit **www.aciconvention.org**.

2023 Nondestructive Testing of Concrete Competition Winner

Lee

Sangmin Lee, PhD Candidate, University of Illinois at Urbana-Champaign, received the 2023 ACI-James Instruments Student Award for Research on Nondestructive Testing of Concrete. This competition is sponsored by ACI Committee 228, Nondestructive Testing of Concrete, and James Instruments Inc. His research focused on "Concrete Characterization using Sparse Ultrasonic Sensing and Physics-Informed Neural Networks."

Lee will receive a 1500 USD prize and a complimentary registration to a future ACI Concrete Convention, along with an opportunity to present his research during the committee's meeting.

The James Instruments Student Award Competition is open to graduate-level students. Research papers are accepted between August 1 and December 1 on an annual basis.

For more information, visit **www.concrete.org/students/studentcompetitions.aspx**.

SCA Announces Next Board President and 2024 Slag Cement School

The Slag Cement Association (SCA) announced **Jan Prusinski**, FACI, as its next President. Before becoming President, he served as SCA's Vice Chair and was SCA's first Executive Director when the association was established in 2001.

In his current role, he works as the Vice President of Marketing at the Skyway Cement Company, a subsidiary of Eagle Materials.

As an industry leader in cement, concrete, soil and by-product stabilization, and pavements, Prusinski has led the United States and state organizations in a wide range of programs to promote and advocate for the use of slag cement

and other supplementary cementitious materials in concrete construction.

Lori Tiefenthaler, Heidelberg Materials, concluded her 2-year term as SCA President at the end of December 2023. As President, Tiefenthaler hosted SCA's inaugural and second annual Slag Cement Schools, oversaw the development of Slag Cement University, and awarded more than 30 concrete projects for their exceptional use of slag cement during the Slag Cement in Sustainable Concrete Awards.

Registration open for Slag Cement School

SCA announced that registration is open for the third annual Slag Cement School in Alsip, IL, USA, on April 29-30, 2024. The school will include educational presentations on slag cement use in concrete construction, sustainable resources available, and other presentations on the benefits of slag cement use. On day two, attendees will also get a behind-the-scenes look at Holcim's South Chicago plant.

Slag Cement School will include the following sessions:

- Slag Cement Basics, Production, and Cementitious Properties, by Mark Van Kleunen, Skyway Cement;
- Slag Cement in High-Performance Concrete, by Nick Beristain, Prairie Material;
- Slag Cement's Role in Sustainable Concrete, by Jay Whitt, Heidelberg Materials;
- Proportioning Concrete with Slag Cement, by Scott Kelly, Ozinga; and
- Slag Cement in Pavements and Structures, presented by the Illinois State Toll Highway Authority.

Registration also includes refreshments, lunch, a networking reception, and shuttle transportation for the cement plant tour. To learn more and to register by April 26, 2024, visit **slagcement.org/school**.

Update to Post-Tensioned Slab-on-Ground Design and Construction Requirements

The Post-Tensioning Institute (PTI) announced the launch of its Stronger Standards, Exceptional Structures campaign in preparation for the release of the new 2024 International Residential Code (IRC).

The International Code Council (ICC) is set to release the new IRC, which includes a significant update related to post-tensioned slab-on-ground design and construction. The newly added Section R506.2—Post-tensioned slab-on-ground floors—requires that post-tensioned concrete slab-on-ground floors on expansive or stable soils be designed in accordance with PTI DC10.5.

"This code change will benefit stakeholders across the residential design and construction spectrum by improving the quality of materials and workmanship for post-tensioned slab-on-ground floors," said Tim Christle, PTI Executive Vice President.

The Stronger Standards, Exceptional Structures campaign showcases the IRC code change and how it will improve quality, for both materials and labor, of post-tensioned concrete, slab-on-ground floors. Post-tensioning materials used in this construction will need to be supplied by PTI-certified (or equal) plants, and the installation and stressing of these materials will need to be performed by PTI-certified field personnel. This campaign promotes the positive benefits of the code change, including the quality improvement gained through the superior materials used and better trained and educated personnel involved in the construction process.

The goal of this campaign is to educate a wide range of individuals from licensed design professionals and building inspectors to homebuilders, contractors, and homeowners on the importance of this code change and how it will affect (and benefit) them.

For more information, visit **www.post-tensioning.org**.

ACI Member Gets Married at World of Concrete

Patricia and James Estrada officially tied the knot on January 24, 2024, outside the grand entrance of the Las Vegas Convention Center, Las Vegas, NV, USA, at World of Concrete (WOC). James is an ACI member and a long-time visitor of WOC. He attends the event each year to learn the latest techniques and advancements in the trade and meet like-minded professionals. The couple was married by celebrity MobileMinister Roland August, who officiated the ceremony, joined by their family and enthusiastic WOC bystanders. Estrada was gifted a lifetime membership on behalf of WOC to commemorate his legacy with the show.

Patricia and James Estrada were married at the grand entrance of World of Concrete *(photo courtesy of World of Concrete)*

ACPA Announces Expanded Role Supporting Sustainability and Resilience in Infrastructure

During a press conference at the World of Concrete, the American Concrete Pavement Association (ACPA) outlined its expanding role in helping Departments of Transportation (DOTs), owners, and other decision makers meet challenges such as rising inflation and new federal funding structures. In 2024, the association will build on its 2023 white paper, "Concrete Pavement's Role in a Sustainable, Resilient Future," with the addition of tools and resources that help decision-makers meet global challenges while making dollars go further in a high inflation market.

ACPA's focus in 2024 will be strategies that help owners and agencies meet funding criteria while achieving sustainable, resilient, and long-lasting infrastructure. One aspect of their support will be assistance in understanding how pavement materials decisions affect funding opportunities. Another pillar will be helping agencies move beyond first cost considerations to achieve long-lasting, sustainable pavements, again keeping in mind the objectives of federal funding.

The ACPA announced the following:

- Release of a report titled, "How Agencies Can Reduce Costs by Improving the Competitiveness of Their Bid Environments." The report details industry research, including research performed by the MIT Concrete Sustainability Hub (CSHub) that examines how the split of DOT paving expenditures between industries can impact paving unit costs. Findings include the fact that, as inter-industry competition increases, unit costs of both concrete and asphalt paving materials fall significantly—particularly those of concrete;
- ACPA's participation in the Reduced-Carbon Concrete Consortium (RC3). The RC3 will disseminate funding

information, facilitate application submission, provide technical assistance, and enhance contractor preparedness with critical next steps such as Environmental Product Declarations (EPDs); and
- A growing library of long-life pavement case studies. Building sustainable, resilient infrastructure is fundamental to creating a future that meets the needs of generations to come. ACPA's tools and resources provide valuable guidance for road owners and other decision-makers as they weigh the many considerations involved in delivering this infrastructure.

The press conference also covered the International Grooving & Grinding Association's white paper titled, "Diamond Grinding: A Safe, Sustainable, Quiet and Cost-Effective Solution to Better Roadways." The paper highlights the gains to be made, both in terms of sustainability and cost savings, using proper pavement preservation and maintenance. It assembles research results, case studies, and more demonstrating how agencies and engineers can achieve long-lasting, efficient, comfortable, and safe travel on highways—while also meeting the challenges of sustainability, noise levels, urban heat island effect, and budget—through the use of pavement diamond grinding. The IGGA is affiliated with the ACPA in a partnership known as the IGGA/ACPA Concrete Pavement Preservation Partnership (IGGA/ACPA CP3).

For more information, visit **www.acpa.org**.

Coal Ash Recycling Rate Increased in 2022

The American Coal Ash Association (ACAA) released its annual "Production and Use Survey," which also showed that use of harvested ash continues to play a significant role. Sixty-two percent of the coal ash produced during 2022 was recycled, increasing from 60% in 2021, and marking the eighth consecutive year that more than half of the coal ash produced in the United States was beneficially used rather than disposed of.

Just over 4 million tons (3.6 million tonnes) of previously disposed ash was used in a variety of applications in 2022, including coal ash pond closure activities, concrete products, cement kiln raw feed, and gypsum panel manufacturing.

"Harvested ash utilization volumes now equal 8.7% of the volume of ash recycled from current power plant operations," said Thomas H. Adams, ACAA Executive Director. "The rapidly increasing utilization of harvested coal combustion products (CCP) shows that beneficial use markets are adapting to the decline in coal-fueled electricity generation in the United States. New logistics and technology strategies are being deployed to ensure these valuable resources remain available for safe and productive use. We must continue to support these practices that safely conserve natural resources while dramatically reducing the need for landfills."

According to ACAA's 2022 survey, 46.8 million tons (42.5 million tonnes) of coal combustion products were beneficially used in 2022, an increase of 1% over the previous year. Production of new CCP declined from 77.3 million tons (70.1 million tonnes) in 2021 to 75.2 million tons (68.2 million tonnes) in 2022.

For more information and to see all highlights of CCP production and use in 2022, visit **https://acaa-usa.org/publications/production-use-reports/**.

In Remembrance


Carrasquillo

ACI Honorary Member **Ramón L. Carrasquillo** passed away on February 2, 2024, in San Juan, Puerto Rico.

Carrasquillo was recognized worldwide for his expertise in concrete materials, construction, and structural engineering. He was the Founder and President of Carrasquillo Associates. Carrasquillo completed more than 500 consulting assignments ranging from product developments, materials, and production of concrete to durability, specifications, structural design, construction practices, failure analyses, and repair and rehabilitation of existing structures. He was also the President of Carrasquillo Engineering Services Group, PSC, in Puerto Rico, and Carrasquillo Engineering and Structural Repair Services, LLC, in Panama.

He was named an ACI Honorary Member in 2023 and received the 2017 ACI Education Award, the 2014 ACI Henry C. Turner Medal, and the 2015 ACI Foundation Concrete Research Council Robert E. Philleo Award. Carrasquillo served on numerous ACI committees. He was also a member of ASTM Committee C09, Concrete and Concrete Aggregates, and was a member of the Puerto Rico Academy of Engineering.

Carrasquillo was a Professor and Researcher at The University of Texas at Austin, Austin, TX, USA, for 22 years. From 1980 to 2002, he was the Associate Director of the International Center for Aggregates Research. In addition, he was the Founder and President of Rainbow Materials, Inc., a ready mixed concrete company that operated in the central Texas market from 1994 until 2004. He authored more than 100 academic publications and reports and gave over 400 technical presentations.

Carrasquillo received his BS in civil engineering from the University of Puerto Rico, San Juan, Puerto Rico, in 1975, and his MS and PhD in structural engineering from Cornell University, Ithaca, NY, USA, in 1978 and 1980, respectively.