

**TECHNOLOGY FORUM AGENDA
THE SAINT PAUL HOTEL
AUGUST 30 - SEPTEMBER 1, 2022**

All times listed are local to Saint Paul, MN.

Tuesday - August 30, 2022

5:30 pm – 7:00 pm Welcome Reception

Wednesday – August 31, 2022

7:00 am – 8:00 am **Registration**

7:00 am – 8:00 am **Breakfast Buffet**

8:00 am – 8:15 am **Opening Remarks**

Speaker: **Brian H. Green**, RPG, FACI, Senior Research Geologist & **CIC Chair**
Company: U. S. Army Corps of Engineers - Engineer Research & Development Center

8:15 am – 8:45 am **Presentation: Ultra High-Performance Concrete: Design & Application of Bridge Rehabilitation Project**

Speakers: **Travis Konda**, Senior Technical Advisor & **Mario Ratnaraj**, Bridge Engineer
Company: HNTB

8:45 am – 9:15 am **Presentation: Early Concrete Performance Extremes**

Speaker: **Tim Cost**, PE, FACI
Company: V. T. Cost Consulting, LLC

9:15 am – 9:45 am **Technology Showcase: A Carbon Negative Cost Parity Method for Producing Portland Cement & Regulated SCM**

Speaker: **Cody Finke**, PhD, CEO & Co-Founder
Company: Brimstone

9:45 am – 10:15 am *****Break*****

10:15 am – 10:45am **Presentation: The New FRP Bar Code**

Speaker: **Carol K. Shield**, PhD, ACIF, Professor
Company: University of Minnesota

10:45 am – 11:15am **Presentation: Structural Polymer Concrete for Accelerated Bridge Construction and Other Infrastructure Applications**

Speaker: **Mahmoud Reda Taha**, PhD, PE, F. ASCE, FACI, Distinguished Professor & Chair
Department of Civil, Construction & Environmental Engineering
Company: University of New Mexico

Wednesday - August 31, 2022 continued . . .

- 11:15 am – 11:45am **Presentation: Roadmap to Carbon Neutrality**
Speaker: **Michelle L. Wilson**, Senior Director, Concrete Industry Outreach and Support
Company: Portland Cement Association
- 12:00 pm – 1:00 pm *****Lunch*****
- 1:00 pm – 1:30 pm **Presentation: A Contractor’s Experience with the Evolution of Sustainable Mix Designs**
Speaker: **Eric Stephen Peterson**, FACI, Director
Company: Webcor Concrete
- 1:30 pm – 2:00 pm **Presentation: Legal Issues in Concrete Construction: Responsibility with New Technologies**
Speaker: **Jeffery W. Coleman**, Esq., PE, FACI, CEO
Company: Coleman & Erickson, LLC
- 2:00 pm – 2:30 pm **Presentation: MnROAD Research Facility: A Proving Ground for Materials and Pavement Initiatives**
Speaker: **Bernard I. Izevbekhai**, PhD, PE
Company: Minnesota Department of Transportation
- 2:30 pm – 2:45 pm *****Break*****
- 2:45 pm – 3:15 pm **Technology Showcase: Concrete Sensors for Curing**
Speaker: **Kevin A. MacDonald**, PhD, PE, ACIF, Principal Engineer
Company: Beton Consulting Engineers, LLC
- 3:15 pm – 3:45 pm **Presentation: Lessons Learned: Design & Implementation of Low-Rise Additive Concrete Construction**
Speaker: Gabriel Carrera, PE, Associate Principal, Wiss, Janney, Elstner, Associates, Inc.
Speaker: Robert D. Devine, PhD, Associate III, Wiss, Janney, Elstner, Associates, Inc.
Speaker: Aubrey Smading, PE, M. ASCE, Senior Regulatory Affairs Specialist, ICON
- 3:45 pm – 4:00 pm **Closing Remarks**
- 5:30 pm – 8:30 pm **Cocktail Hour and Dinner at: The Lexington**
1096 Grand Avenue, St Paul, MN 55105
(A shuttle is provided.)

Thursday – September 1, 2022

- 7:00 am – 8:00 am **Registration**
7:00 am – 8:00 am **Breakfast**
- 8:00 am – 8:30 am **Presentation: Integration of Alternative Cements into Building Codes**
Speaker: **Lawrence L. Sutter**, PhD, PE, FACI, FASTM, Associate Dean and Professor
Company: Michigan Technological University
- 8:30 am – 9:00 pm **Presentation: Next Generation 3D-Printed Biopolymer Concrete for Infrastructure Applications**
Speaker: **Siham S. Al Shanti**, Graduate Research Assistant and former ACI Foundation Middle East Fellowship Awardee
Company: University of New Mexico
- 9:00 am – 9:30 am **Technology Showcase: Carbon Dioxide Utilization and Machine Learning Deliver Low-Carbon Concrete**
Speaker: **Gaurav N. Sant**, PhD, Director of the Institute for Carbon Management
Company: Professor at the University of California – Los Angeles
- 9:30 am – 10:00 am **Presentation: Understanding the “What, Why and How” when Specifying Permeability-Reducing Admixtures**
Speaker: **Charles Nmai**, PhD, PE, M. ASCE, FACI & ACI President
Company: Master Builders Solutions Admixtures US, LLC
- 10:00 am – 10:15 am *****Break*****
- 10:15 am – 11:45 am **Debate: Alternatives to Cylinder Breaks for Acceptance Testing**
Moderator: **Rex C. Donahey**, PhD, PE, Director of Innovative Concrete Technology, ACI
Debater: **Oscar R. Antommattei**, PE, FACI, Chief Concrete Engineer & Materials Engineering Manager for Kiewit Engineering Group Inc.
Debater: **Colin L. Lobo**, PhD., PE, FACI, Executive Vice President/Division Head, Engineering for NRMCA
Debater: **Brad W. Malmsten**, Vice President of Thornton Tomasetti
Debater: **Mary E. Vancura**, PhD, PE, Principal Engineer at American Engineering Testing, Inc.
Debater: **Eric S. Peterson**, FACI, Director of Webcor Concrete
Q&A with Attendees
- 11:45 am - 12:00 pm **Wrap-up and Adjourn**
- 12:00 pm – 5:00 pm **Closed Business Meeting: Concrete Innovation Council**