

AGENDA

2022 Transportation Infrastructure Durability Conference

Theme: Innovation Implementation in Transportation Infrastructure

Tuesday, August 9, 2022

Day 1

3:00 pm: Advanced Structures & Composites Center Tour – invitation only

5:00 pm: Networking Social and Registration

6:00 pm: Opening Ceremonies & Welcome Reception Dinner

- Dr. Habib Dagher, P.E., *Director, Transportation Infrastructure Durability Center; Executive Director, Advanced Structures & Composites Center, University of Maine*
- Dr. Joan Ferrini-Mundy, *President, University of Maine & University of Maine at Machias; Vice Chancellor, Research & Innovation, University of Maine System* – confirmation pending
- Victoria Sheehan, *New Hampshire Department of Transportation*

Wednesday, August 10, 2022

Day 2

8:00 am: Check-in and Breakfast with Student Poster Session 1

9:00 am: Welcome - Dr. Habib Dagher, P.E., *Director, Transportation Infrastructure Durability Center; Executive Director, Advanced Structures & Composites Center*

9:15 am: Keynote Speaker: Exciting Advancements in Transportation Innovation - Allie Kelly, *Executive Director, The Ray*

9:45 am: Innovation Panel Discussion: Implementation of Transformational Transportation Research

Moderator: Dale Peabody, P.E., Director, Research & Innovation, MaineDOT

- Allie Kelly, *Executive Director, The Ray*
- Dr. Habib Dagher, P.E., *Director, TIDC; Executive Director, ASCC, University of Maine*
- Victoria Sheehan, *Commissioner, NHDOT*

10:15 am: Break

10:30 am: Novel Composite Materials in Transportation: Moving Beyond Steel and Concrete

Moderator: Dr. Roberto Lopez-Anido, P.E., Professor, University of Maine

- **Key Attributes of FRP Composites for Infrastructure Applications** – Dr. Joe Fox, *President, FX Consulting, LLC*

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- **Life Cycle Assessment: A Central Element and Tool for Understanding the Many Aspects of Sustainability** – Ed Pilpel, *President, PolyStrand*
- **Looking at the Past to See the Future** - John P. Busel, *Vice President, Composites Growth Initiative at ACMA*
- **Integrating Composite Material Properties** - Joe Stilwell, P.E., *Fabrication Engineer, MaineDOT*

12:00 pm: Lunch

1:00 pm: Structural Composites in Transportation: Design, Manufacturing, Applications, and Installation of Structural Composites

Moderator: Dr. Bill Davids, P.E., Professor, University of Maine

- **The Evolution of the GBeam and its Role for the Future of Transportation Infrastructure** – Ken Sweeney, P.E., *President & Chief Engineer, AIT Bridges*
- **Past, Present, and Future of Structural Composites** - Wayne Frankhauser, Jr., P.E., *Bridge Program Manager, MaineDOT*
- **Smart Fiber Reinforced Polymer Composite Bridge Deck For Rural Tennessee** - Dr. Dayakar Penumadu, *Fred N. Peebles Professor and JIAM Chair, University of Tennessee, Knoxville*

2:30 pm: Break

2:45 pm: Concrete Durability in the Era of Carbon Neutral Economics: State-of-the-Art in Low Carbon Emission Concrete

Moderator: Dr. Eric Landis, P.E., Professor, University of Maine

- **Taking Charge of our Carbon Neutral Concrete Future for the Transportation Industry** – Drew Burns, *Executive Director, NEU Center for Carbon Neutral Concrete, American Concrete Institute*
- **Resilience in Architected Materials-by-Design as a Means to Harness Sustainable Infrastructure** – Dr. Reza Moini, *Assistant Professor, Princeton*
- **Advancements in UHPC Research** - Dr. Kay Wille, *Associate Professor University of Connecticut*

4:15 pm: Closing Remarks – Dr. Habib Dagher, P.E., *Director, Transportation Infrastructure Durability Center; Executive Director, Advanced Structures & Composites Center, University of Maine*

6:00 pm: Advisory Board Dinner – invitation only

Thursday, August 11, 2022
Day 3

8:00 am: Student Poster Session 2

9:00 am: Welcome - Dr. Habib Dagher, P.E., *Director, Transportation Infrastructure Durability Center; Executive Director, Advanced Structures & Composites Center, University of Maine*

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9:15 am: Resiliency in Transportation: Modeling and Designing Effective Infrastructure Resiliency Strategies

Moderator: Peter Slovinsky, Marine Geologist, Maine Dept. of Agriculture, Conservation, & Forestry

- **Prioritizing Coastal Resilience: Modeling Flood Risks in a Changing Climate** – Kirk Bosma, P.E., *Senior Coastal Engineer, Woods Hole Group*
- **Resiliency in Action: Aging Infrastructure, Highway Flooding, and Coastal Marsh Restoration at Back River Creek Marsh in Woolwich, Maine** – Mark Lickus, *Project Hydrologist, MaineDOT*
- **The Realities of Green Stormwater Infrastructure and Flood Reductions at the Watershed Scale** – Dr. Thomas Ballesterio, *Director, Stormwater Center, University of New Hampshire*

10:30 am: Break

10:45 am: Geotechnical Innovation: Crossing the Gap Between Lab and Market

Moderator: Dr. Aaron Bradshaw, P.E., Associate Professor, University of Rhode Island

- **Successful Scaling of an Innovative Subgrade Stabilization Method in the Lab: What's Next?** - Dr. Aaron Gallant, P.E., *Associate Professor, University of Maine*
- **Helical Pile Augmentation with Collar Vane - Research** - Gary Seider, P.E., *Engineering Manager, Hubbell Power Systems*
- **Implementing Geo-Innovation for Transportation Projects** - Dr. Kord Wissmann, *President, GeoPier*
- **Biogeotechnics From Lab to Field** - Leon Van Paassen Ph.D., *Senior Investigator, NSF Centre for Bio-mediated and Bio-inspired Geotechnics*

12:15 pm: Lunch

1:15 pm: Cutting-Edge Advancements in Paving: Material and Assessment Advancements for Durable Pavements

Moderator: Dr. Jo Sias, P.E., Professor, University of New Hampshire

- **Density Measurement of Asphalt Mixtures and Pavements using a Dielectric Measurement System** - Dr. Eshan Dave, *Associate Professor, Civil & Environmental Engineering, University of New Hampshire*
- **Innovations in the Area of Concrete Pavements** - Dr. Julie Vandebossche, *Professor, Civil & Environmental Engineering, University of Pittsburgh*
- **Recent Technologies to Enhance Quality Control in Asphalt Paving - FHWA Efforts** - Dr. Ram Veeragaravan, *Federal Highway Administration*

2:30 pm: Closing Remarks

2:45 pm: Advanced Structures & Composites Center Tours – Optional Add-on