

**Welcome to Monthly Webinar on
Innovative Bridge Technologies / Accelerated Bridge Construction**

**Steel Bridge Rehabilitation Using UHPC to Repair
Corroded Steel Beam Ends**

Sponsored by

*Innovative Bridge Technologies / Accelerated Bridge Construction - University Transportation Center
(IBT/ABC-UTC) at Florida International University*



Website: abc-utc.fiu.edu

Email: abc@fiu.edu

December 13, 2023 – 1:00 p.m. to 2:15 p.m. Eastern



Today's Monthly Webinar



IBT/ABC Announcements

(10 minutes)

Featured Presentation

(35-40 minutes)

Steel Bridge Rehabilitation Using UHPC to Repair Corroded Steel Beam Ends

by

Michael P. Culmo, P.E., Chief Bridge Engineer, CHA Consulting Inc

Alexandra Hain, Ph.D., P.E., Assistant Professor, Department of Civil & Environmental, University of Connecticut

Question and Answer Session

(15+ minutes)

Please post your questions in the question box



2024 IBT/ABC-UTC Reception at the 103rd Transportation Research Board Annual Meeting

Florida International University and our national partners invite you to learn about how the IBT/ABC-UTC is advancing technologies to make our national transportation infrastructure more smart, durable and resilient.

Tuesday, January 9, 2024

5:30 PM – 7:30 PM

Walter E. Washington Convention Center

801 Mt Vernon Pl NW, Washington, DC 20001

Room: West Overlook

While RSVPs are not required, let us know you are coming here:

<https://forms.gle/8tac3J4N6k4ccMpEA>

For more information, please email aloyola@fiu.edu or call (978) 987-8697



CALL FOR ABSTRACTS

MARK YOUR CALENDAR

*Don't miss one of the most important
bridge engineering events of the year!*

2024 WORLD BRIDGE ENGINEERING CONFERENCE

December 11-13, 2024 • Miami, Florida • Hilton Miami Downtown Hotel

ABOUT THE CONFERENCE

Conference provides an opportunity to share and learn about case studies, latest development, technologies, and innovations in bridge engineering, design and construction, worldwide. Past conferences held in 2014, 2015, 2017, 2019 and 2022 were each attended by more than 700 bridge professionals, including over 150 state DOT bridge engineers. For past ABC Conference highlights visit: <https://abc-utc.fiu.edu/conference/archives/>.

CALL FOR ABSTRACTS

If you are interested in presenting at the conference, please submit a one-page abstract by April 12, 2024, 11:59 p.m. EDT. Abstracts must be submitted online to <https://abc-utc.fiu.edu/conference/abstract-submission/>.

EXHIBIT OPPORTUNITIES

Please send an email to Ms. Saremi at msaremi@fiu.edu if you are interested in reserving a booth.



CONFERENCE TOPICS

- 3D printing in bridge engineering
- Accelerated Bridge Construction
- Advances in sensor technologies
- Advanced construction materials
- Advances in bridge design
- Advances in construction equipment
- Advanced non-destructive testing and equipment
- Advances in bridge seismic design
- Advances in connections for prefabricated elements
- Alternative contracting methods
- AI in bridge engineering
- Automation in design and construction
- Automation in bridge inspection
- Best practices in bridge preservation
- Best practices in bridge bundling
- Best practices in preventing bridge scour
- Best practices in service life design
- Bridge asset management systems of bridges
- Bridge deck overlays using advanced materials
- Case studies: Short-, medium- and long-span bridges + bridges in seismic regions
- Contractor's perspective on future needs of bridge engineering
- DOT organizational structures to accommodate innovative technologies
- Designing and constructing bridges for extreme events/hurricanes
- Digital twins in bridge engineering
- Emergency bridge project cases
- Forensic bridge engineering
- Health monitoring of bridges
- Innovative bridge concepts
- Innovation in bridge foundation and substructure
- Lessons learned from bridge failures
- Movable bridges
- Pedestrian bridges
- Policy, planning and procurement
- Public outreach and marketing
- Prefabricated bridge elements
- Railroad bridges
- Rail transit bridges
- Robotics in fabrication and construction
- Ultra High-Performance concrete: Mix design and material characteristics
- Ultra High-Performance concrete for bridge repair, strengthening and rehabilitation
- Unique bridge fabrication, erection and construction case studies
- Use of drones in bridge engineering
- Use of blockchain in bridge engineering
- Upgrade and rehabilitation of existing bridges

To make your **hotel reservations** at the special conference rate, please visit <https://abc-utc.fiu.edu/.conference/>



Conference co-sponsored by U.S. Federal Highway Administration and many state Departments of Transportation.



For more information about the conference, please contact Conference Chair Dr. Atorod Azizinamini at aazizina@fiu.edu.

Upcoming Events

PCI – Precast / Prestressed Concrete Institute

2024 PCI Convention

February 6-9

Denver, Colorado

For more information and registration: www.pci.org/convention

Or contact William Nickas at; wnickas@pci.org

Upcoming Events

AISC / NSBA

American Segmental Bridge Institute / National Steel Bridge Alliance

NASCC: The Steel Conference

including the World Steel Bridge Symposium

March 20-22

San Antonio, Texas

For more information and registration: www.nascc.aisc.org

Or contact Vin Bartuca at; bartucca@steelbridges.org

Upcoming Events

**ACMA –
American Composites Manufacturers Association**

**CAMX –
Composites and Advanced Materials Expo**

**September 9, 2024 – September 12, 2024
San Diego, California**

For more information and registration: <https://www.thecamx.org/>

Or contact John Busel at: jbusel@acmanet.org

Upcoming Events

ASBI - American Segmental Bridge Institute

36th Annual Convention and Committee Mtgs

October 20-23, 2024

Atlanta, GA

For more information and registration: www.asbi-assoc.org/events/

Or contact ASBI at; info@asbi-assoc.org

Upcoming Events

IBT / ABC – UTC

**Innovative Bridge Technologies / Accelerated Bridge Construction –
University Transportation Center**

2024 World Bridge Engineering Conference

December 11-12, 2024

Miami, Florida

For more information: <https://abc-utc.fiu.edu/conference/>

Or contact the IBT / ABC - UTC at; abc@fiu.edu



Next Monthly Webinar

Thursday, January 18, 2024 – 1:00-2:15 p.m. Eastern
(Certificate of Attendance provided)

Featured Presentation:

Building Bridges at the Speed of Segmental

Matthew Adams, P.E.

Senior Lead Bridge Engineer with Corven Engineering, and H&H Company

Mark your Calendars!



Quarterly Research Seminar

Friday, January 26, 2024 – 1:00-2:15 p.m. Eastern
(Certificate of Attendance provided)

Featured Project:

Exploring Fiber Reinforced Concrete for Accelerated Bridge Construction Applications

by

Travis Thonstad, Ph.D., Principle Investigator; and
Carolyn Donohoe, MSCE, EIT, Structural Associate, Moffatt & Nichol
ABC-UTC at University of Washington

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