Tuesday, August 27, 2019
1:00p 2:00p  Tour of The Frick Environmental Center - Optional
2017 Concrete Excellence Awardee: Low-Rise Buildings Category

5:00p 7:00p  Welcome Reception

Wednesday, August 28, 2019
7:00a 8:00a  Registration
7:30a 8:00a  Breakfast
8:00a 8:15a  Welcome/Introduction: SDC Forum 46
Charles S. Hanskat, SDC Board Chair
Executive Director
American Shotcrete Association

8:15a 8:45a  Technology Showcase: Integrated Design of Chemical Admixture Systems for Ultradurable, Low CO₂ Alternative Binder Chemistries via Machine Learning
Newell Washburn, Associate Professor at Carnegie Mellon University
Kimberly Kurtis, Co-Pi, and Professor at Georgia Institute of Technology

8:45a 9:15a  Technology Showcase: Integrating Traditional Civil Engineering Practices with Artificial Intelligence: a Hybrid Approach to Enhancing our Understanding of Structural Behavior
Stephanie Paal, PhD
Assistant Professor - Zachry Department of Civil and Environmental Engineering
Texas A&M University

9:15a 9:45a  Technology Showcase: Machine Learning - Prediction of Concrete Performance from Mixture Proportions
Gaurav N. Sant
Associate Professor and Henry Samuei Fellow
UCLA Samueli School of Engineering

9:45a 10:15a  --- Break ---

10:15a 10:45a  Technology Showcase: Strengthening Bridges and Existing Concrete Structures Using Titanium
Jill Adkins
Infrastructure Development Manager
Perryman Company

10:45a 11:15a  Technology Showcase: Fiber-Reinforced Polymer Macrofibers Used in Precast Concrete
Alvin C. Ericson, FACI, FPCI
Technical Consultant
ReforceTech

11:15a 11:45a  Presentation: Engineering Analysis for FRP Composite Solutions Using ACI 440.1R & ACI 544.4R Design Guides
Robert Slade, P.E.
Senior Structural Engineer
Eriksson Technologies, Inc.

12:00p 1:00p  ---Lunch---

1:00p 3:30p  Panel Presentations: Use of Non-Metallic Reinforcement
Moderator: Randall W. Poston, ACI President
Antonio Nanni, Ph.D., P.E., Inaugural Senior Scholar at the University of Miami
Steven Nolan, P.E., Senior Structures Design Engineer with the Florida DOT
Doug Gremel, Director of Engineering for Owens Corning
Steve Sieracke, President of Black Swamp Steel, Inc.
Mohammed Al Meethel, Principal Professional of Saudi Aramco
Q&A with attendees

3:30p 4:00p  --- Break ---
**Wednesday, August 28, 2019 continued . . .**

4:00p 4:30p **Technology Showcase: TyBot - An Autonomous Rebar Tying Robot**  
Stephen M. Muck  
Co-Founder and CEO of Tybot, LLC, Chairman & CEO of Brayman Construction Corp.  
TyBot, LLC; a wholly owned subsidiary of Advanced Construction Robotics, Inc.

6:00p 8:30p **Reception and Dinner**  
UNION STANDARD RESTAURANT  
524 William Penn Place  
Pittsburgh, PA 15219

**Thursday, August 29, 2019**

7:00a 8:00a **Registration**
7:30a 8:00a **Breakfast**

8:00a 8:15a **TMC Update**  
Carl J. (Chuck) Laroscope  
TMC Chair  
WJE

8:15a 8:45a **Presentation: Value Proposition of GFRP Rebar in Bridge Decks**  
Doug Gremel  
Director of Engineering  
Owens Corning | Infrastructure Solutions LLC

8:45a 9:15a **Presentation: Research Update & Code Changes for High Strength Steel Reinforcement**  
Gregory M. Zeisler  
Engineer & Secretary for ACI Committee 318  
American Concrete Institute

9:15a 9:45a **Presentation: Research Update & Dissemenation Efforts for Reduced Cracking**  
David Darwin, Ph.D., P.E., F.SEI, Hon.M.ACI, Dist.M.ASCE  
Deane E. Ackers Distinguished Professor and Chair  
University of Kansas

9:45a 10:15a --- **Break** ----

10:15a 11:45a **Open Breakout Sessions: Strategy and Road Mapping**  
Concurrent Sessions planned for:  
**Reinforcement:** non-metallic & non-ferrous technologies  
**Future Technologies:** computer visioning/artificial intelligence

11:45a 12:00p **Wrap-up and review**
12:00p **Adjourn**