

The KCI Presidential Lecture Series

April 13, 2022 (1:00 to 3:00 pm, Wednesday)

www.kci.or.kr

Zoom Link < <https://us02web.zoom.us/j/5685985100?pwd=c2wzdjQ0VGthRzF4MXBRQXF1bkJ4dz09> >

ACI 239 (Ultra-High Performance Concrete): International Perspectives



Courtesy: ceEntek, Rhode Island Turnpike and Bridge Authority, and Steelike

Welcome to the KCI Presidential Lecture Series

The Presidential Lecture Series is a technical event of the Korea Concrete Institute (KCI) to disseminate the state-of-the-art knowledge of concrete materials and structures for the benefit of engineering students, research professionals, and practicing engineers.

Invited Speakers (alphabetical order)



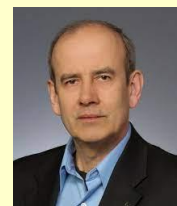
L. Ferrara



C.C. Hung



M. McDonagh



V. Perry



Moderator



Yail Jimmy Kim, Ph.D. P.Eng., F.ACI
University of Colorado Denver, CO, USA



Liberato Ferrara

Department of Civil and Environmental Engineering, Politecnico di Milano, Italy

A holistic approach to Fibre Reinforced Concrete and Ultra High Performance Concrete: from post-cracking toughness towards enhanced tensile strength and ductility

Speaker: Liberato Ferrara is an Associate Professor of Structural Analysis and Design and holds the Italian National qualification to full professor. He has been Fulbright visiting scholar at the Center for Advanced Cement Based Materials, Northwestern University, IL, USA and is visiting professor at Beijing Jiaotong University, PRC. He is currently chair of the American Concrete Institute (ACI) TC 544-Fiber Reinforced Concrete and member of several other technical committees in ACI, Rilem and fib. His research interest span over the material concept, characterization, modelling and structural applications of advanced cement based materials. He is coordinator of the H2020 project ReSHEALience (GA 760824): Rethinking coastal defence and green energy service infrastructures through enhanced durability high-performance fiber reinforced cement based materials, deputy coordinator of the H2020 ITN SMARTINCS (H2020 GA 86006): Self-healing multifunctional advanced repair technologies in cementitious systems and also involved, as WP leader, in the recently funded H2020 project MINRESCUE (H2020 project 899518): From mining waste to valuable resource: new concepts for a circular economy. He is Italian representative in the COST Action 15020 SARCOS- Self healing as preventive repair in concrete structures. Author of more than 60 peer-reviewed journal papers, 3 book chapters and more than 200 conference papers and co-editor of 1 book on sustainable cement based materials (Springer, June 2017), he has given seminar talks in about 50 universities worldwide, has (co)supervised 6 PhD students and has served in more than 10 PhD defense committees in Italy and abroad.



Chung-Chan Hung

Civil Engineering at National Cheng Kung University, Taiwan

Development and Applications of UHPC in Taiwan

Speaker: Chung-Chan Hung is Professor of Civil Engineering at National Cheng Kung University, Taiwan. He serves as Adjunct Research Fellow at the National Center for Research on Earthquake Engineering. He received his M.S. in Mechanical Engineering and Ph.D. in Civil Engineering from the University of Michigan, Ann Arbor in 2010. His recent research activities include high-strength RC structures, high-performance fiber-reinforced cementitious materials and structures, and structural retrofitting. Dr. Hung serves on the editorial boards of several international journals, and is currently an Associate Editor of the Journal of Structural Engineering, ASCE. He was also a member of the International Scientific Advisory Committee for International Interactive Symposium on Ultra-High Performance Concrete

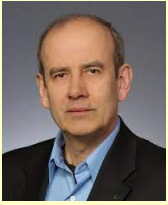


Michael McDonagh

Engineering & Projects, SteeLike, Inc., USA

Innovative UHPC Mixing and Placing Techniques

Speaker: Michael McDonagh is Vice President, Engineering & Projects, of SteeLike, Inc., the commercial producer of SteeLike® Ultra-High Performance Concrete (UHPC). Prior to joining SteeLike in early 2021, Michael worked for 24 years as a bridge design engineer. He is an expert on UHPC, a revolutionary construction material that can dramatically improve the service life of structures and lead to more optimized structures. Michael started designing with UHPC in 2008 with UHPC applications including structural jointing of conventional precast concrete panels, deck rehabilitation and overlays, primary structural members, highly detailed precast deck panels, and thin aesthetic curved concrete shells. He has been assisting the Federal Highway Administration since 2016 to promote UHPC, help write design guidance, and review FHWA-created design guidance. He is also a member of the organizing committee of the International Interactive Symposium on UHPC, previously held in 2016 and 2019. Michael's bridge design experience includes bridges located in Canada, France, the United Arab Emirates, and across the USA, with a wide variety of bridges including multiple signature footbridges. Michael received his BS and MS in Civil Engineering from Penn State University.



Vic Perry

ceEntek North America, Canada

Rehabilitating Side-by-Side Box-Girder Bridges with Ultra-High Performance Concrete

Speaker: Vic Perry, FEIC, FEC, FCSCE, M.A.Sc., P.Eng., received his Bachelor of Civil Engineering with Distinction in 1978 and his Master of Applied Science in Structural Engineering in 1984 from Dalhousie University in Nova Scotia, Canada. Mr. Perry also completed Executive Management Programs and Graduate Studies at the University of Western Ontario, the University of Toronto and Duke University. Over the past 30 years Mr. Perry has gained experience in Industry, Business, Consulting Engineering and Trade Association Affairs throughout Canada, the USA, Europe Australia and Asia. Mr. Perry is a Fellow of the Canadian Society of Civil Engineers, Engineers Canada and the Engineering Institute of Canada. Mr. Perry is a Past-President of the Canadian Society for Civil Engineering, has been a member of the US Department of Homeland Security's Advanced Material Council, is currently a voting member of ACI Committee 239 – UHPC, ACI 239D, ACI 239E , Chair of ACI 239C – Structural Design of UHPC, a voting member of ASTM C01 and C04, Chair of ASTM Task Group on UHPC, Member of Canadian Standards Association(CSA) S6 Annex on FRC/UHPC for Bridges, Chair of CSA A23.1 Annex U Materials & Methods on UHPC and Past-President of APEGA's Education Foundation Board. From 1997 to 2014, Mr. Perry was involved in the development of Ductal®/UHPC, initially as Director Marketing – Ductal® for the Lafarge Group located in Paris France, then 12 years as Vice-President & General Manager Ductal® Lafarge North America, located in Calgary, AB, Canada. Mr Perry was a founding member of the team that launched Lafarge's UHPC product in the North American market from 2001 to 2014. He was the lead North American developer of the UHPC materials, technology, methods and equipment used in the construction of UHPC connections for Precast Bridges and UHPC Overlays for vertical and horizontal applications. From 2014 to 2019, as President, of V.iConsult Inc., he was involved with writing codes and standards for UHPC, developing workshops for the Federal Highway Administration on "How to Implement UHPC into the US Highway Bridge Network" and delivering the training program. He also developed a 1-day UHPC workshop for the Canadians Society of Civil Engineering and delivered to civil engineers in Canada. He also worked with technology start-up companies in the civil construction sector by writing their business plans. He has been an invited "key-note" speaker and several international symposiums on UHPC in countries such as the USA, China and India. Mr Perry is recognized globally as an expert in UHPC. Since the beginning of 2020, Mr Perry is the President/COO of ceEntek North America where he is providing world class services and the Next Generation UHPC 2.0™.