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Concrete Conference
From Gray to Green

Dubai, UAE

12-13 February 2025

PROGRAM BOOK



UAE CHAPTER



American Concrete Institute

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GULF ORGANISATION FOR RESEARCH & DEVELOPMENT





ABOUT AMERICAN CONCRETE INSTITUTE (ACI)

Always advancing—ACI is a leading global authority for the development, dissemination, and adoption of its consensus-based standards; technical resources; and educational, training, and certification programs. Founded in 1904, ACI is headquartered in Farmington Hills, MI, USA, with a regional office in Dubai, UAE, and Resource Centers in Southern California, Chicago/Midwest, and Mid-Atlantic. ACI has over 94 Chapters, 244 Student Chapters, and 35,000 members spanning over 120 countries.

ACI MEMBERSHIP

ACI membership means knowledge! Through annual subscriptions, ACI members now have free access to all ACI University webinars and on-demand courses, plus unlimited access to the Institute's 200+ practices (including all ACI guides and reports) and symposium volumes. With 35,000 members in more than 100 countries, ACI is the premier global community dedicated to the best use of concrete. With enhanced benefits, ACI membership provides information on engineering and construction practices worldwide and allows you chance to save time and money while increasing your productivity and competitiveness.

ABOUT CONCRETE INTERNATIONAL (CI)

CI is the magazine of the concrete community, published monthly by ACI.

CI's circulation is concentrated among professionals in the concrete field—the engineers, architects, contractors, manufacturers, researchers, and technicians largely responsible for the advancement of concrete technology and practice. These professionals collaborate in preparing ACI codes, standards, and guides that define the essential requirements for all types of concrete structures.

ACI CONCRETE CONVENTION

The ACI Concrete Convention, held twice a year, is dedicated to improving the design, construction, maintenance, and repair of concrete structures. The Convention provides a forum for networking and education and the opportunity to provide input on concrete industry codes, specifications, and guides.

ABOUT THE CONFERENCE

ACI-MEC 2025 will bring together industry leaders, local and international experts, and government officials to explore the cutting-edge practices and innovations driving the concrete and cement industry toward a carbon-neutral future.

Over two days, attendees will gain insights into the latest research and best practices in low-carbon development: Design and Construction, Eco-innovation, and ACI CODE-323-24: Low-Carbon Concrete—Code Requirements and Commentary. The conference will feature high-level technical presentations and a thought-provoking panel discussion on the pivotal role of low-carbon concrete in building a sustainable future. Embodying the spirit of the American Concrete Institute, the ACI-MEC 2025 represents a unique opportunity for professionals to advance their knowledge and contribute to the evolution of the concrete industry. The Institute, renowned for its dedication to developing, distributing, and adopting consensus-based standards and technical expertise, invites you to participate in a robust exchange of knowledge, ideas, and innovative practices. Don't miss this chance to connect with industry leaders and play a part in shaping the eco-resilient infrastructure of tomorrow. Join us for the ACI-MEC 2025 on February 12 and 13, 2025, at Kempinski Central Avenue, Dubai, UAE.

A special thank you to our Organizers, Strategic Partners, Partners, and Gold Sponsors,

CONFERENCE OBJECTIVES

- Provide a forum for the development and advancement of ACI codes and standards.
- Introduce the latest codes and standards issued by ACI.
- Provide a place where students can meet industry professionals and discuss the latest technological advancements.
- Discuss international implementations of concrete best practices to deliver high-quality projects.
- Highlight efforts behind ACI consensus-based resources.
- Support local research initiatives on sustainability advancement.

SPEAKERS AND GUESTS

Please visit www.aci-mec.com to view the complete list of speakers and guests.

AGENDA

TIME	DAY 1—FEBRUARY 12, 2025
8:30 AM – 9:00 AM	REGISTRATION
9:00 AM – 9:30 AM	Opening Ceremony Conference MC: Fouad Yazbeck , FACI, Managing Partner, 360 Tangent and ACI UAE Chapter President Welcome Address • Frederick Grubbe, MBA, CAE, ACI Executive Vice President • Dr. Yousef Alhorr, Founding Chairman, The Gulf Organisation for Research & Development (GORD) • Amer Bin Ahmed, Vice Chairman of the Board, ASTM International • Fred Aziz, Principal Commercial Officer, U.S. Consulate Dubai
9:30 AM – 10:00 AM	Keynote Speaker ACI INTERNATIONAL UPDATE: NEW INITIATIVES FOR SUSTAINABLE CONCRETE Michael J. Paul , ACI President
10:00 AM – 10:30 AM	COFFEE BREAK AND NETWORKING
LOW-CARBON DEVELOPMENT: DESIGN AND CONSTRUCTION	
10:30 AM – 11:00 AM	SUSTAINABILITY APPENDIX OF ACI 318-25 Khaled Nahlawi , PhD, PE, Distinguished Engineer, ACI
11:00 AM – 11:30 AM	RECENT DEVELOPMENTS AND INTEGRATION OF SUSTAINABILITY IN STRUCTURAL DESIGN Carol Hayek , PhD, MBA, FACI, FPTI, ACI Board of Direction/Director, CTO, Specialized Engineered Solutions for Structures, CCL
11:30 AM – 12:00 PM	CURRENT LANDSCAPE OF LOW-CARBON CONCRETE MATERIALS Dean Frank , Executive Director, NEU – An ACI Center of Excellence for Carbon Neutral Concrete
12:00 PM – 12:30 PM	ACI UAE CHAPTER UPDATES THE LANDSCAPE OF NEUTRAL CARBON TECHNOLOGIES AND PRACTICES, UAE PERSPECTIVE Ahmad Khartabil , MACI, Technical Manager, Transgulf Readymix Concrete
12:30 PM – 1:30 PM	LUNCH AND PRAY
1:30 PM – 2:00 PM	ADVANCING SUSTAINABILITY: LOW CARBON BUILDING WITH STEEL FIBER-REINFORCED CONCRETE Kasem Maryamh , M.Sc, Technical Director, Falconix Engineering GmbH
2:00 PM – 2:30 PM	THE CARBON COST OF COMPLEXITY: A CASE FOR STRUCTURAL SIMPLICITY David Ruggiero , PhD, PEng, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland
2:30 PM – 3:00 PM	COLLABORATIVE CONCRETE CONSTRUCTION: BALANCING CONSTRUCTABILITY, RESILIENCY, AND SUSTAINABILITY Scott M. Anderson , FACI, ACI Vice President, General Manager of Keystone Structural Concrete, Houston, TX



AGENDA

3:00 PM – 3:30 PM	ADVANCES AND STATE-OF-PRACTICE IN THE USE OF CORROSION-RESISTANT REINFORCEMENT TOWARDS A MORE DURABLE AND SUSTAINABLE CIVIL ENGINEERING INFRASTRUCTURE Abdeldjelil Belarbi, PhD, PE, FACI, FSEI, FASCE, Distinguished Professor, University of Houston
3:30 PM – 3:50 PM	BUILDING A CARBON BENCHMARK – ASSESSING EMBODIED CARBON IN UAE STRUCTURES Calum Perey, BE(Hon) BBusMan MIEAust, Principal Engineer, Cundall
3:50 PM – 4:00 PM	ACI COMPLIMENTARY MEMBERSHIP DRAW AND GIVEAWAYS

TIME	DAY 2—FEBRUARY 13, 2025
8:30 AM – 9:00 AM	REGISTRATION
ECO - INNOVATION & REHABILITATION	
9:00 AM – 9:30 AM	EXPLORING THE ROLE OF ACI 562 IN PROMOTING CONCRETE SUSTAINABILITY THROUGH REPAIR ODES Khaled Nahlawi, PhD, PE, Distinguished Engineer, ACI
9:30 AM – 10:00 AM	ARTIFICIAL INTELLIGENCE, MACHINE LEARNING, AND ACI CODE 562: THE FUTURE OF CONCRETE TECHNOLOGY, EVALUATION, AND REPAIR Professor Mufid A. Samarai, Senior Engineering and Education Advisor, Sahara Communications
10:00 AM – 10:30 AM	SUSTAINABILITY ASPECT OF REPAIRING AND STRENGTHENING CONCRETE AND MASONRY STRUCTURES Tarek Alkhrdaji, PhD, PE, PEng, FACI, Senior Vice President, Structural Technologies
10:30 AM – 11:00 AM	GREEN GEOPOLYMER BASED ADHESIVES FOR FRP STRENGTHENING OF CONCRETE STRUCTURES Riadh Saleh Al-Mahaidi, PhD, FACI, FASCE, FIEAust, FIIFC, FICE, FBEI, Professor and Director, Smart Structures Laboratory, Swinburne University of Technology, Melbourne, Australia
11:00 AM – 11:30 AM	COFFEE BREAK AND NETWORKING
11:30 AM – 11:50 AM	BUILDING FOR THE FUTURE: GFRP BARS IN SUSTAINABLE CONCRETE STRUCTURES Muhammad K. Rahman, PhD, Vice President of the ACI Saudi Arabian Eastern Province Chapter
11:50 AM – 12:10 PM	CONCRETE ADMIXTURE: AN OVERLOOKED ASPECT TOWARDS CONCRETE SUSTAINABILITY Moneeb Genedy, PhD, PE, Staff Engineer, ICC Evaluation Service, LLC
12:10 PM – 12:35 PM	DURABLE AND SUSTAINABLE CONCRETE STRUCTURES: CASE STUDIES FEATURING CRYSTALLINE ADMIXTURES Florian Klouda, Director, International Account Coordination, Penetron

AGENDA

12:35 PM – 1:00 PM	ADVANCES IN MAGNESIUM-BASED CEMENT PRODUCTION USING DESALINATION BRINE AND SUSTAINABLE CONSTRUCTION MATERIALS Kemal Celik , PhD, MACI, Associate Professor of Civil Engineering at New York University Abu Dhabi
1:00 PM – 2:00 PM	LUNCH AND PRAY
2:00 PM – 2:30 PM	SEAWATER CONCRETE AND INNOVATIVE IDEAS FOR SUSTAINABLE CONCRETE Antonio Nanni , PhD, PE, ACI Past President 2023-2024
2:30 PM – 3:00 PM	INTRODUCING ACI CODE 323 LOW CARBON CONCRETE: OVERVIEW AND IMPLEMENTATION Matthew P. Adams , PhD, FACI, Chair of ACI Committee 323, Low Carbon Concrete Code, Associate Professor, New Jersey Institute of Technology
3:00 PM – 4:00 PM	PANEL DISCUSSION: FROM POLICY TO PLACEMENT Moderator: Dean Frank , Executive Director, NEU – An ACI Center of Excellence for Carbon Neutral Concrete Panelists: • Carol Hayek, PhD, Chief Technical Officer, Specialized Engineered Solutions for Structures (CCL) • Ihab Bassiouni, Principal Building Studies Engineer, Building Permits Department, Dubai Municipality • Ali Said, General Manager, Holcim UAE • Alireza Biparva, Technical Director, Kryton International • Ibrahim Abotaleb, PhD, The American University in Cairo (AUC)
4:00 PM – 4:15 PM	CLOSING REMARKS ACI COMPLIMENTARY MEMBERSHIP DRAW AND GIVEAWAYS





CONFERENCE SPEAKERS AND PANELISTS

Fouad Yazbeck, FACI, Conference MC



Fouad Yazbeck, FACI, is the Founder of 360 TANGENT Engineering Consultancy, based in Abu Dhabi, UAE. The company specializes in concrete technology and sustainability and has designed, produced, and placed over 22,000,000 m³ of high-performance concrete in the Middle East and Africa. Fouad is an ACI Fellow; Chair of ACI Committee 234, Silica Fume in Concrete; a founding member of the ACI Lebanon Chapter; and the founding President of the ACI UAE Chapter. He was recently appointed ASTM International's Global Cooperation Representative for the Middle East and North Africa (MENA) region.

Michael J. Paul, ACI President



Michael J. Paul, FACI, has more than 40 years of construction and engineering experience and is a recognized leader in the concrete industry. He currently serves as Principal Structural Engineer for Larsen & Landis, Inc., based in Philadelphia, PA, USA. In this role, he oversees the engineering, documentation, and management of structural engineering for commercial, institutional, industrial, recreational, and residential projects. Paul's experience includes troubleshooting; repair, restoration, and rehabilitation of existing concrete structures; and new structure design. In addition to his ACI activities, Paul is an active member of ASTM International, a member of the Historic Preservation Commission of the Town of Oro Valley, AZ, USA, and is acting Coordinator in the state Disaster Assistance Program for the Arizona Chapter of the American Institute of Architects (AIA). Paul's contributions to the industry are also evidenced by his 20 years of undergraduate teaching. He was the Coordinator for the Senior Design capstone course in the Department of Civil, Construction, and Environmental Engineering at the University of Delaware, Newark, DE, USA. The course received the National Council of Examiners for Engineering and Surveying (NCEES) Engineering Award Grand Prize in 2010.

Frederick H. Grubbe, MBA, CAE, ACI Executive Vice President



Frederick H. Grubbe, MBA, CAE, is the Executive Vice President of ACI and worked at the U.S. Department of Transportation as a Special Assistant to the Secretary and White House Liaison, prior to serving as Deputy Administrator of the National Highway Traffic Safety Administration. In 1992, President George H.W. Bush appointed Grubbe as Deputy Director of the U.S. Office of Consumer Affairs in the White House. During his tenure at NPCA, Grubbe oversaw the continued growth and success of The Precast Show, the precast concrete industry's largest trade show. He also successfully led the organization's staff, operations, programs, and activities through the COVID-19 pandemic, while achieving the organization's strategic objectives, implementing its tactical plans, and earning member satisfaction. As President and CEO, Grubbe served as an ex-officio Board of Directors and Executive Committee member, as well as NPCA Foundation president and ex-officio Board member. Grubbe received his Master of Business Administration from Loyola University Chicago and is a Certified Association Executive (CAE).

Abdeldjelil Belarbi, PhD, PE, FACI, FSEI, FASCE, FIIFC, Distinguished Professor, University of Houston



Dr. Abdeldjelil Belarbi is a Hugh Roy and Lillie Cranz Cullen Distinguished Professor of Civil Engineering at the University of Houston, Houston, TX, USA. Prior to joining the University of Houston in 2009, he was a Distinguished Professor at Missouri University of Science and Technology, Rolla, MO, USA. Belarbi is a member of ACI, the American Society of Civil Engineers (ASCE), the Structural Engineering Institute (SEI), and the International Institute for FRP in Construction (IIFC); and a member and/or Chair on several national technical committees within the Precast/Prestressed Concrete Institute (PCI), ASCE, the Transportation Research Board (TRB), and American Association of State Highway and Transportation Officials (AASHTO) specifications. Belarbi has served as Principal Investigator or Co-Investigator on numerous research projects, has published over 260 technical papers and reports, and has supervised over 50 MSCE theses and

PhD dissertations. He is the recipient of over 30 national and university awards and honors for his excellence in research, teaching, and professional activities. He is actively engaged in a broad spectrum of structural engineering research areas. His research interests include the constitutive modeling and analytical and experimental investigations of structural concrete. His research has also focused on smart structures and the use of fiber-reinforced polymer (FRP) composites and other advanced materials, such as high-strength stainless steel and shape-memory alloys, which can be applied for the rehabilitation and strengthening of aging and deteriorated civil engineering infrastructure and the design and construction of new structures.

Antonio Nanni, PhD, PE, ACI Past President 2023-24



During the past 35-plus years, Antonio Nanni has studied concrete and advanced composite-based systems as the principal investigator on several research projects sponsored by federal and state agencies and private industry. His research in materials and structures has impacted the development of guides, specifications, and codes in the United States and abroad. Nanni served as the Editor-in-Chief of the American Society of Civil Engineers (ASCE) *Journal of Materials in Civil Engineering* for over 20 years and serves on the editorial boards of other technical journals. He has advised more than 80 graduate students pursuing master's and doctoral degrees and has published extensively (over 315 papers in refereed journals, over 420 papers in conference proceedings, and co-author of two books). His research interests include construction materials and their structural performance and field application, including monitoring and renewal with a focus on sustainability. He is currently Site Director of the National Science Foundation's Industry-University Cooperative Research Center for the Integration of Composites Into Infrastructure (CICI). He is a licensed professional engineer in Italy and the states of Florida, Pennsylvania, Missouri, and Oklahoma.

Dean Frank, PE



Dean Frank currently serves as the Executive Director of NEU: An ACI Center of Excellence for Carbon Neutral Concrete. He previously served as Principal/Consultant for Dean Frank Associates, LLC; Director of Quality & Sustainability Programs at the Precast/Prestressed Concrete Institute (PCI); and Director of Technical Services at the National Precast Concrete Association (NPCA). He has been an active member of related industry committees, including ACI, ASTM International, PCI, and the International Federation for Structural Concrete (*fib*), for over 20 years. He obtained his MS in structural engineering from the University of Colorado Boulder, Boulder, CO, USA. He is a licensed professional engineer in Colorado and Indiana.

Ihab Bassiouni, Principal Building Studies Engineer, Research & Building Systems Section, Building Permits Department, Dubai Municipality



Ihab Bassiouni serves as a Principal Building Studies Engineer at the Building Permits Department of Dubai Municipality. In his role, he is responsible for the review and approval of modern and innovative methods of construction, as well as the development of approval standards and criteria. Additionally, he is engaged with conducting pertinent studies and research in the field of building construction. Having a professional background that spans for over two decades, Bassiouni is a specialist in the sector of building construction, where his expertise reflects in areas of concrete construction processes, encompassing consulting, inspection, and professional training. After he received his civil engineering degree from Beirut Arab University in Lebanon, Ihab further refined his proficiency in concrete with a diploma in Advanced Concrete Technology from the Institute of Concrete Technology in the UK.

Beirut Arab University in Lebanon, Ihab further refined his proficiency in concrete with a diploma in Advanced Concrete Technology from the Institute of Concrete Technology in the UK.

Ali Said, General Manager, Holcim



Ali Said has been General Manager at Holcim UAE Concrete business since June 2023. Previously, he managed Holcim businesses in Jordan, where EcoPact Concrete was first launched and developed—the first Women on Wheels program in the MENA region. His business management experience extends to Iraq, Bahrain, Canada, and the United States. He is a Board member of Lafarge Cement in Jordan and a returning judge with MENA Green Building Awards.



Alireza Biparva B.Sc., M.A.Sc, LEED Green Associate Technical Director & Concrete Specialist



Alireza Biparva currently leads Kryton International Inc.'s R&D team as the Technical Director. His areas of responsibility include project planning and management, leading a staff of engineers and technicians, and liaising on a global level with universities, testing facilities, and engineering firms. For his master's program, Biparva designs a unique permeability apparatus at the University of British Columbia. In 2011, he developed a test method for replicating and analyzing real-life conditions of the self-sealing process. Biparva oversees several leading-edge research projects, focusing primarily on concrete durability studies and the development of innovative products for the concrete waterproofing and construction industries. Biparva has published several research papers in international journals and conferences on concrete permeability, waterproofing, abrasion resistance, ASR, durability, and sustainability. Biparva is an active member in the American Concrete Institute and RILEM, and is the chair of ACI 212 – Chapter 23 (Admixture on Durability).

Carol Hayek, PhD, MBA, FACI, FPTI, ACI Board of Direction - Director, Chief Technical Officer, CCL - Specialized Engineered Solutions for Structures



Carol Hayek, FACI, is the Chief Technical Officer of CCL International and a Lecturer at Johns Hopkins University, Baltimore, MD, USA, where she teaches prestressed concrete design. She specializes in post-tensioned concrete and the use of new technologies. She is Chair of Joint ACI-PTI Committee 320, Post-Tensioned Structural Concrete Code and a member of the ACI Board of Direction and ACI Committee 318, Structural Concrete Building Code and other committees. She is a Fellow of the Post-Tensioning Institute (PTI) a member of the International Federation for Structural Concrete (*fib*) Commission 5, Reinforcements. Her career spans research and development, structural design, sustainability, and repair and strengthening. Hayek received her MSE and PhD in civil engineering from Johns Hopkins University; she is a member of the Advisory Committee of the university's Department of Civil and Systems Engineering and the Co-Chair of the Student & Faculty Engagement Subcommittee. She received her MBA from the ESA Business School, Beirut, Lebanon, in partnership with the ESCP Business School, Paris, France.

Professor Mufid A. Samarai



Mufid A. Samarai is the Senior Engineering and Education Advisor at Sahara Communications, UAE. Samarai earned his PhD from University College London in 1976 and has dedicated his career to teaching, research, and consulting. His expertise includes repairing over 100 structures and bridges across Iraq, Jordan, and the UAE. Internationally, Samarai has served as the Vice President of CIB (Holland), a Bureau Member of RILEM (France), and the President of MEDMA (Germany). He is also a Fellow Research Officer at LNEC (Portugal) and a Board Member of The Arab Institute for Maintenance and Operations (OMAINTEC), Saudi Arabia. His research interests span multiple topics, including quality control, low-cost housing, non-destructive testing, durability, heritage and historic building conservation, damage assessment and repair of structures, and sustainability. He has over 230 published papers, one book, two chapters, and four patents.

Khaled Nahlawi, PhD, PE, Distinguished Engineer, ACI



Khaled Nahlawi is a Distinguished Engineer at the American Concrete Institute (ACI). His role at ACI is to provide technical and administrative support to ACI's technical committees and communicate the work of these committees to other standards developing organizations and regulatory agencies. He joined ACI in 2009 as a Senior Engineer and, among other duties, has supported the reorganization effort of ACI 318. Nahlawi is the author of ACI MNL-17(21), ACI Reinforced Concrete Design Handbook; MNL-3(20), Guide to the Code for Assessment, Repair, and Rehabilitation of Existing Concrete Structures; and MNL-66(20), ACI Detailing Manual. Nahlawi is the Secretary of the ACI Technical Activities Committee Subcommittee TAC Repair and Rehabilitation, and ACI Committee 562, Evaluation, Repair and Rehabilitation of Concrete Structures. He received his PhD from the University of Michigan, Ann Arbor, MI. He has over 25 years of experience in the design and strengthening of structures. He is a licensed professional engineer in California and Michigan.

Kasem Maryamh, PhD, Technical Director- Falconix Engineering GmbH

Kasem Maryamh is a Professional Structural Designer. He began his academic journey at the University of Damascus, Damascus, Syria, where he specialized in structural design, graduating in 2005. From 2005 to 2011, he gained extensive experience in structural design and seismic retrofitting of high-rise buildings. He received his Master of Science in Civil Engineering from the University of Kassel, Kassel, Germany. After completing his master's degree, Maryamh worked as a research assistant at the Technical University of Kaiserslautern, Kaiserslautern, Germany, from 2014 to 2020. His research focused on concrete recycling and the development of flood barriers made from ultra-high-performance steel fiber-reinforced concrete (UHPFRC).

For his ongoing PhD thesis, he investigated the influence of various production parameters, element sizes, and fresh concrete properties on the flexural behavior of UHPFRC using computer tomography.

Moneeb Genedy, PhD, PE, Staff Engineer, ICC Evaluation Service, LLC

Moneeb Genedy has more than 15 years of engineering and research experience in construction materials and techniques. He currently serves as a Staff Engineer for ICC Evaluation Service, LLC, based in Birmingham, AL, USA. In this role, he conducts technical evaluations and develops technical criteria for the acceptance of innovative building products, materials, and methods that are alternatives to what may be specified in the building codes, such as the International Building Code (IBC), Dubai Building Code (DBC), and Saudi Building Code (SBC). His experience also includes design of new structures and rehabilitation and strengthening systems for existing structures. In addition, he serves as the Vice Chair of ACI Committee 548,

Polymers and Adhesives for Concrete.

Muhammad K. Rahman, PhD, Vice President of the ACI Saudi Arabian Eastern Province Chapter

ACI member Muhammad K. Rahman, Vice President of the ACI Saudi Arabian Eastern Province Chapter, is a Researcher at Interdisciplinary Research Center for Construction and Building Materials at King Fahd University of Petroleum & Minerals (KFUPM), Dhahran, Saudi Arabia. He received his master's degree from the University of California, Berkeley, CA, USA, and his PhD from KFUPM. His research interests include non-metallic reinforcement in concrete structures, fire tests on FRP bar-reinforced concrete elements, seawater and sea sand concrete, CFRP strengthening of steel and concrete structures, nanomaterials in concrete and finite element analysis and modeling. Rahman has conducted client-funded projects worth more than

SR 20 million and served as Project Manager/Principal Investigator for more than 20 research projects in the recent years. Rahman is actively involved in supervising MS and PhD research and teaches a number of subjects at undergraduate and graduate levels, including advanced concrete design and steel structure analysis, design of tall buildings, and repair and rehabilitation of concrete structures. Rahman has written more than 150 papers in refereed journals and conferences and has been granted 15 patents in various areas.

Ahmad Khartabil, MACI, Technical Manager, Transgulf Readymix Concrete

Ahmad Khartabil is the Technical Manager at Transgulf Readymix Concrete Co. LLC. He is a member of ACI, Chair of the Events Committee of the ACI-UAE Chapter, and a Certified Concrete Professional by the National Ready Mixed Concrete Association (NRMCA). Khartabil received his master's degree in civil engineering from Abu Dhabi University. His research interests include hot weather concreting, concrete durability and service life, sustainable construction materials, and the rheology of cement paste and concrete. Khartabil was awarded the 1st *fib* – UAE Graduate Fellowship Award in 2018, an initiative supported by the UAE Society of Engineers and the FIB UAE Chapter. The award recognized his research proposal titled

“Improving Mechanical, Structural & Durability Properties of Sustainable Recycled Aggregate Concrete by Incorporating Nano-supplementary Cementitious Materials.” He received the best presentation award at the 3rd International Conference on Civil and Building Materials in Singapore for his paper, “Carbonation Resistance of Sustainable Concrete Using Recycled Aggregate and Supplementary Cementitious Materials.”



Calum Perey, BE(Hon) BBusMan MIEAust



Calum Perey is a Principal Structural Engineer at Cundall in Dubai, has been an active member of the Institution of Structural Engineers (IStructE) UAE regional committee since 2018, and was a member of the global IStructE Council in 2020-21. He is passionate about sustainable construction, complex geometry and embodied carbon reduction. In his work designing innovative projects including mixed-used buildings, entertainment facilities and infrastructure, he has conceptualised innovative ways to leverage parametric 3D modelling, form-finding investigations and structural optimisation to achieve award-winning project designs. Perey is also dedicated to the continual progress and evolution of the engineering discipline through research, ongoing professional development, industry thought leadership and teaching, and is a part time lecturer at the Istituto Marangoni Dubai Campus.

Tarek Alkhrdaji, PhD, PE, PEng, FACI Senior Vice President, Structural Technologies



Fellow ACI member Tarek Alkhrdaji is a Senior Vice President with Structural Technologies in Columbia, Maryland. Alkhrdaji has been involved in more than 600 projects involving structural repair and strengthening, many of which have received awards from ACI, PTI, and ICRI. Alkhrdaji is an active member of several professional committees including ACI Committees 216, Fire Resistance and Fire Protection of Structures (Joint ACI-TMS), 440, Fiber-Reinforced Polymer Reinforcement, and 562, Evaluation, Repair and Rehabilitation of Concrete Structures. He has written more than 40 papers and articles on repair and strengthening of structures, and he is the current chair of ACI Subcommittee 562-F (Fire).

David Ruggiero, PhD, PEng



David Ruggiero is an Assistant Professor of Structural Design and Engineering at École Polytechnique Fédérale de Lausanne, Switzerland, where he leads the Concrete Behaviour and Structural Design Laboratory (CONSTRUCT). He received his PhD in structural engineering from the University of Toronto, Toronto, ON, Canada, and practiced for 5 years as a structural engineer at RJC Toronto, where he was responsible for the design of high-rise buildings and other complex structures. In his laboratory, Ruggiero aims to advance the sustainable design and assessment of concrete structures through an improved understanding of material behavior. His research interests include large-scale testing and analytical modeling of cracked concrete, form optimization of concrete members, the mechanical behavior of low-carbon concretes, and the overall material efficiency of irregular structures. Ruggiero actively contributes to several industry committees, including Joint ACI-ASCE Subcommittee 445-F, Interface Shear; Canadian Standards Association Technical Committee A23.3, Design of concrete structures; and the International Federation for Structural Concrete (*fib*) Switzerland Group. He also serves as Chair of the Joint Committee on the GLOBE Consensus (Global Consensus on Sustainability in the Built Environment), an international initiative to promote sustainable practices in the construction sector.

Kemal Celik, Associate Professor of Civil Engineering at New York University Abu Dhabi and Global Network Associate Professor of Tandon School of Engineering at New York University



Kemal Celik is an Associate Professor of Civil Engineering at New York University (NYU) in Abu Dhabi and holds an appointment with New York University, Tandon School of Engineering as a Global Network Associate Professor. Celik is the Director of the Advanced Materials and Building Efficiency Research Laboratory (AMBER Lab) at NYU Abu Dhabi (NYUAD). He received his PhD in civil and environmental engineering from the University of California, Berkeley, with a major in structural engineering, mechanics & materials and two minors, geoenvironment and material science & engineering. He received his BS and MS in civil engineering from Istanbul University, Istanbul, Turkey. Celik's work focuses on construction materials and building energy efficiency to develop sustainable and multi-functional structural materials. His research interests include the characterization and development of sustainable and energy-efficient construction materials, low-carbon cements, multi-functional building envelopes, enhancement of urban seawall sustainability, characterization and manufacturing of lunar regolith simulants, and development of an experimentally validated geospatial-computational-thermodynamic model for cities.

Florian Klouda, Director, International Account Coordination



Florian Klouda joined Penetron International Ltd. in 2006 and is currently in charge of managing and developing the company's existing distribution network in regard to technical, sales and marketing support with a main focus on South-East Asia, India, China, Western Europe, Africa, Middle East, Central and South America. Besides his responsibilities at Penetron International Ltd., Klouda has spoken on numerous international seminars and conferences about concrete waterproofing and protection and is actively promoting methods for improving concrete durability and sustainability using permeability reducing admixtures. He is the author of various articles on concrete protection and durability enhancement articles, which have been published in various industry magazines and as white papers. Prior to joining Penetron International Ltd., Klouda worked in various marketing management positions in Germany and China. He holds a post graduate degree in Business Administration from the University of Applied Sciences in Ingolstadt, Germany.

Scott M. Anderson, MS, PE, FACI, ACI Vice President



Scott M. Anderson is Vice President and General Manager of Keystone Structural Concrete, a Houston-based concrete contractor. Since 1999, he has overseen elevated formed concrete construction for the company. Anderson's expertise includes residential towers, parking garages, institutional structures, office towers, and other large, formed concrete structures. Anderson currently serves as Vice President of the American Concrete Institute (ACI) and leads the ACI Financial Advisory Committee. He contributes to various ACI committees, including Concrete Constructability, Tolerances, and Concrete Construction Practices, and led the recent effort to refresh ACI's strategic vision and goals. Anderson has been actively involved with the American Society of Concrete Contractors (ASCC) since 2003, serving as a director since 2007 and as President (2015-2016), and chaired the Education and Training Committee (2011-2014). Currently, he is President of the ASCC Education, Research & Development Foundation. Anderson received his BS in civil engineering from SUNY Buffalo and an MS in engineering from The University of Texas at Austin. He is a licensed professional engineer in Texas. Anderson's dedication to advancing the concrete industry has been recognized through his inclusion in *Concrete Construction* magazine's 2018 list of "Most Influential People."

Riadh Saleh Al-Mahaidi, PhD, FACI, FASCE, FIEAust, FIIFC, FICE, FBEI, Professor and Director, Smart Structures Laboratory, Swinburne University of Technology, Melbourne, Australia



Dr. Riadh Saleh Al-Mahaidi is the Director of the Smart Structures Laboratory and a Professor of Structural Engineering at Swinburne University of Technology in Melbourne, Australia. He received his BSc in civil engineering from the University of Baghdad and MSc and PhD degrees in structural engineering from Cornell University in the United States. Over the past 25 years, he has focused his research and practice on the lifetime integrity of structures, with a particular interest in structural strength assessment and retrofitting using advanced composite materials. His current research projects involve strengthening bridges using fiber-reinforced polymers combined with geopolymer-based bonding agents, improving the fatigue life of metallic structures using advanced composite systems and shape memory alloys, and assessing structure collapse through multi-axis hybrid testing. Al-Mahaidi is a prolific researcher, with over 260 journal and 280 conference papers published to date, as well as 18 authored/edited books and conference proceedings. He has received several awards, most recently the 2023 IIFC Medal for distinguished contributions to the field of FRP composites for construction through research or practical applications, or both.



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COMPANY PROFILES



The International Code Council (ICC) is the leading global source provider of building safety solutions that are used in the design, build and compliance process to construct safe, sustainable, affordable and resilient structures. Our primary focus is on enhancing value for our business partners and the building safety community. We achieve this by promoting our service lines and delivering tailored solutions that address local needs. Through our strategic partnerships we are able to serve our community better and strengthen our position as a trusted service provider.

struc'tural

STRUCTURAL, a licensee of STRUCTURAL TECHNOLOGIES' engineered products and services, integrates technology-driven solutions into its industry-leading repair and maintenance services. Since 1976, STRUCTURAL has served commercial, public, transportation, water, industrial and power customers, providing a wide range of specialty repair and maintenance services for civil and structural infrastructure. STRUCTURAL has branch offices throughout the United States and the Middle East. In combination with other Structural Group, Inc. companies, STRUCTURAL holds the position as the largest concrete repair and maintenance provider in the United States, and ranked #34 on Engineering News-Record (ENR) magazine's list of the 2018 Top 600 Specialty Contractors.



Bekaert's construction division (part of a global steel wire transformation and coating company) specializes in providing top-notch, sustainable, and cost-effective steel fibre concrete reinforcement, enhancing the structural integrity by creating optimal designs. Dramix® steel fibres designed to provide optimal reinforcement and superior crack control for structural and non-structural concrete elements.



Penetron GCC is the industry leader in providing concrete waterproofing, durability, and concrete repair products. We are leaders by providing value-added services to our customers by creating a successful partnership with them throughout the construction process.



The Concrete Industries Complex (CIC) is composed of three concrete product manufacturers: Hard Block Factory (HBF), Hard Precast Building Systems (HBPS), and Emirates Beton (EB), all subsidiaries of the ASGC Construction Group. Each specializes in producing unique, highly specialized concrete products. Emirates Beton (EB) was established to excel in the niche high-performance concrete sector. With a daily production capacity of 5,000 m³, EB has become one of the largest ready-mix producers in the UAE. EB caters to various applications, including tower, residential, commercial, and industrial construction, focusing on the design, production, and supply of ready-mix concrete using advanced, proven processes. EB is known for its unparalleled precision and consistent quality, offering customers efficient and comprehensive cement-related products.



Asian Paints Berger, a subsidiary of the \$4.5 billion Asian Paints Group—the 7th largest coatings company in the world—is the only company in the MENA region offering comprehensive solutions from foundation to finish. Renowned for its innovative approach, it provides a complete range of construction chemical solutions, including concrete admixtures, waterproofing systems, repair mortars, and protective coatings, ensuring enhanced durability and performance for concrete structures. In addition, Asian Paints Berger offers premium decorative products that deliver superior aesthetics and protection for interiors and exteriors. With cutting-edge technology and customer-focused innovation, the company caters to every stage of construction, making it a trusted partner for modern projects.



Lafarge UAE and Oman is present in the UAE as Lafarge Emirates Cement LLC and Readymix Gulf LLC, and in Oman as Readymix Muscat and Premix LLC, globally part of the Holcim group. With over 700 employees across various sites in UAE & Oman, their mission is to provide construction solutions that work for the people and the planet. Through their cement and concrete solutions, they support the vision of building a world that works for all. The company partners with their customers to offer the broadest range of advanced solutions, from sustainable building materials ECOPact and ECOPlanet, to their circular technology ECOCycle®, all the way to Elevate's advanced roofing and insulation systems.



SMART CONCRETE®

Kryton is on a mission to ensure the longevity and sustainability of concrete structures around the world. Kryton customers build more durable and watertight structures that outlast and outperform the rest. Our proven crystalline technology ensures waterproofing for the life of a concrete structure, and our durability-enhancing technology increases abrasion and erosion resistance—more than doubling the concrete's wear life.



Established in 1937 in Milan, Italy, Mapei is a world leader in producing construction chemicals. The group has 102 subsidiaries, 90 production facilities in 35 countries, and more than 11,000 employees. Mapei is certified to the standards of ISO 9001 (Quality Management), ISO 14001 (Environmental Management), and OHSAS 18001 (OH&SM).





Concrete Conference From Gray to Green

Dubai, UAE
12-13 February 2025

