



Hosted by the American Concrete Institute • July 13-14, 2021

Tuesday, July 13

3:00-3:10 pm Detroit Time

Welcome from ACI Global Moderators Charles Nmai and Tony Nanni

3:10-4:00 pm Quebec Time / 3:10-4:00 pm Detroit Time

Co-Host: ACI Quebec and Eastern Ontario Chapter

Local Moderator

Pierre-Luc Fecteau, Eng., MSc, President of the ACI Quebec and Eastern Ontario Chapter

1st Speaker

Eric Samson, Eng., PhD, VP Engineering (co-authored by Richard Cantin, Project Director)

Optimizing the value of field data for concrete structure durability analyses

2nd Speaker

Benoit Fournier, Eng., PhD, Professor - Department of Geology and Engineering Geology, Laval University

Standardization efforts for testing procedures to evaluate potential reactivity in sulphide bearing aggregates

3:00-4:00 pm Colombia Time / 4:00-5:00 pm Detroit Time

Co-Host: ACI Colombia Chapter

Local Moderator

Gonzalo E Gallo, PhD, Director de la División de Estructuras Hidráulicas y Líneas de Transmisión, INGETEC, Colombia

1st Speaker

Carlos Arteta, Associate Professor, Universidad del Norte, ACI 318 Committee Member

Compressive strain capacity model for reinforced concrete boundary elements

2nd Speaker

German Hermida, PhD, Director Tecnico - Cemex, Colombia

Shrinkage Concrete, a Multivariable Analysis

4:00-5:00 pm Ecuador Time / 5:00-6:00 pm Detroit Time

Co-Host: ACI Ecuador Chapter

Local Moderator

Guillermo Loayza

1st Speaker

Pablo Andrade, UNICON, Ecuador CEO

Problems and solutions with high-strength concrete in Quito at 2800 meters above sea level

2nd Speaker

Mr. Diego Paredes, Civil Engineer, MBA, Independent Structural Expert and Project Consulting

Change of Structures Use – A Specific Case

Tuesday, July 13

5:00-6:00 pm Mexico City Time / 6:00-7:00 pm Detroit Time

Co-Host: ACI Central & Southern Mexico Chapter

Local Moderator

José Alfredo Rodríguez Campos, ME

1st Speaker

Alma Luisa Reyes Zamorano, MSc

Durable concrete in Mexico

2nd Speaker

Sergio Manuel Alcocer Martínez de Castro, PhD

ACI in Mexico and Latinamerica – possible futures

5:00-6:00 pm Guatemala City Time / 7:00-8:00 pm Detroit Time

Co-Host: Instituto del Cemento y del Concreto de Guatemala (ICCG)

Local Moderator

Xiomara Sapón-Roldán

1st Speaker

Luis Velásquez, Investigation and Development Center Manager of Cementos Progreso

LC3 Concrete experience in Guatemala

2nd Speaker

Plinio Estuardo Herrera Rodas, Concrete Research and Development Manager at Cementos Progreso

Opportunities for Technological Innovation in the Concrete Industry, Due to the Covid 19 Pandemic. The Guatemalan Experience

5:00-6:00 pm Hermosillo Time / 8:00-9:00 pm Detroit Time

Co-Host: ACI Northwest Mexico Chapter

Local Moderator

Arturo Gaytan Covarrubias, Sustainability and Innovation Manager

1st Speaker

Genaro Salinas, Independent Concrete Construction Consultant

Large Dimension Industrial Floor Slabs

2nd Speaker

Roberto Stark, President of Stark+Ortiz

The Influence of ACI in projects in Mexico and Latinoamerica

Wednesday, July 14

1:00-2:00 pm Auckland Time / 9:00-10:00 pm Detroit Time

Co-Host: Concrete NZ Learned Society (New Zealand)

Local Moderator

Nicholas Brooke, President - Compusoft Engineering Limited

1st Speaker

Ken Elwood, Professor of Structural Engineering - The University of Auckland

Hollow-core floors in earthquakes – assessment and retrofit

2nd Speaker

Tim Shannon, Technical Director - Lewis Bradford Consulting Engineers

Tūranga Library Christchurch – Concrete Innovations to Achieve Low Damage Seismic Design

Wednesday, July 14

Noon-1:00 pm Sydney Time / 10:00-11:00 pm Detroit Time

Co-Host: Concrete Institute of Australia (CIA)

Local Moderator

David Millar, Chief Executive Officer, Concrete Institute of Australia

1st Speaker

Shan Kumar, National President, Concrete Institute of Australia

Innovation in Prefab Concrete Construction

2nd Speaker

Rodney Paull, Technical Director & Durability Consultant–Materials Technology, GHD

International Update on Formal Durability Planning in Design, Construction and Operational Maintenance

Noon-1:00 pm Tokyo Time / 11:00 pm-Midnight Detroit Time

Co-Host: Japan Concrete Institute (JCI)

Local Moderator

Prof. Mitsuyoshi Akiyama, Waseda University

1st Speaker

Prof. Ippei Maruyama, Nagoya University

Impact of drying on structural performance of reinforced concrete members

2nd Speaker

Prof. Toshiharu Kishi, Institute of Industrial Science, University of Tokyo

Durability Design Method Considering Reinforcement Corrosion due to Water Penetration

1:00-2:00 pm Seoul Time / Midnight-1:00 am Detroit Time

Co-Host: Korea Concrete Institute (KCI)

Local Moderator

Ki Yong Ann – Hanyang University

1st Speaker

Dong Joo Kim – Sejong University

Review on rate sensitive fiber-matrix interfacial properties

2nd Speaker

Dr. Sukhoon Pyo – Ulsan National Institute of Science and Technology (UNIST)

Rheological properties of cement binder for pervious concrete

1:00-2:00 pm Shanghai Time / 1:00-2:00 am Detroit Time

Co-Host: ACI China Chapter

Local Moderator

Associate Professor Qian-Qian Yu

1st Speaker

Prof. Guang-Ming Chen

Finite Element Analyses of FRP-Strengthened RC Structures

2nd Speaker

Associate Professor Qian-Qian Yu

Durability of Concrete with CFRP wrapping Over Ten Years

Wednesday, July 14

2:00-3:00 pm Singapore Time / 2:00-3:00 am Detroit Time

Co-Host: ACI Singapore Chapter

Local Moderator

Dr. Lu Jin Ping, President, ACI Singapore Chapter

1st Speaker

Dr./Assistant Professor Geng Guoqing

Concrete Research in Singapore Context – Experience from NUS

2nd Speaker

Dr. Hongjian Du, Lecturer, Dept. of Civil+Environmental Eng., Nat. Univ. of Singapore.

Improving Concrete Construction Productivity and University Education by 3D Printing

2:00-3:00 pm Bangkok Time / 3:00-4:00 am Detroit Time

Co-Host: Thailand Concrete Association (TCA)

Local Moderator

Assoc. Prof. Thanakorn Pheeraphan (Pete)

1st Speaker

Prof. Dr. Somnuk Tangtermsirikul

Off-Spec Fly Ashes: Are they really useless?

2nd Speaker

Chalermwut Snguanyat

The First On-Site 3D Construction Printing in Thailand: SCG Co-Working Space

1:30-2:30 pm Mumbai Time / 4:00-5:00 am Detroit Time

Co-Host: ACI India Chapter

Local Moderator

Dr. Surendra Manjrekar Chairman+Managing Dir.-Sunanda Speciality Coatings Pvt. Ltd., Mumbai

1st Speaker

Mr. Venkataramana Heggade, CEO, STUP Consultants

Introspection on recent failures of precast segmental bridges during construction in India

2nd Speaker

Mr. Pramod Ahuja, Director (Works), Metro PIU, Mumbai Metropolitan Region Development Authority

Measures to increase durability on Mumbai Metro Rail project to meet the design life requirement of concrete in severe coastal climate.

1:00-2:00 pm Dubai Time / 5:00-6:00 am Detroit Time

Co-Host: ACI UAE Chapter

Local Moderator

Ihab Bassiouni, Principal Studies Engineer at Dubai Municipality

1st Speaker

Ahmad Khartabil, Technical Manager at Transgulf Readymix

Sustainable Green Concrete in UAE and the Impacts of Incorporating Recycled Aggregate on its Fresh, Rheological, Mechanical & Durability Properties

2nd Speaker

Haider Al Haidary, Project Executive at MEET

MEET 3D Concrete Printing

Wednesday, July 14

1:00-2:00 pm Baghdad Time / 6:00-7:00 am Detroit Time

Co-Host: ACI Iraq Chapter

Local Moderator

Dr. Ali N. Attiyah

1st Speaker

Dr. Maan S. Hassan

Concrete Quality Control and Troubleshooting in Hot Weather

2nd Speaker

Dr. Ahmed Salih Mohammed

Artificial neural network (ANN), M5P-tree, and regression analyses to predict the early age compression strength of concrete modified with DBC-21 and VK-98 polymers

1:00-2:00 pm Alexandria Time / 7:00-8:00 am Detroit Time

Co-Host: ACI Egypt Chapter

Local Moderator

Prof. Nasser Darwish, Concrete Structures & Bridges, Alexandria University

1st Speakers

Dr. M. Nasser Darwish, Prof. of Concrete Structures & Bridges, Alexandria University

Lessons Learned & Challenges—Old & Existing RC Buildings: Averting A Structural Disaster – Faults, Experience & Lessons

1st Speakers

Dr. Ashraf El-Zanaty, Prof. of Concrete Structures, Cairo University

Lessons Learned & Challenges—Old & Existing RC Buildings: Case Study—Strengthening of a RC Building

2nd Speakers

Dr. Amr Abd El-Rahman, Prof. of Concrete Structures, Ain Shams University

Challenges in New RC Buildings Design: Applications of Post-Tensioned Slabs in Egypt

2nd Speakers

Dr. Tarek K. Hassan, Prof. of Concrete Structures, Ain Shams University; Head of Structural Design Unit, Dar El Handasah Egypt

Challenges in New RC Buildings Design: Challenges Facing Structural Design of Tall Buildings in Egypt – The Iconic Tower

2:00-3:00 pm Rome Time / 8:00-9:00 am Detroit Time

Co-Host: ACI Italy Chapter

Local Moderator

Luigi Coppola, President, ACI Italy Chapter; Professor, University of Bergamo

1st Speaker

Paolo Riva - Professor

HPFRC in Seismic Retrofitting of Existing Concrete Structures

2nd Speaker

Paolo Casadei Eng - Sireg

An Italian perspective of non-metallic reinforcement: strengthening and seismic upgrade with FRP and FRCM composite materials and GFRP rebars

Wednesday, July 14

3:00-4:00 pm Lausanne Time / 9:00-10:00 am Detroit Time

Co-Host: Fédération internationale du béton (fib)

Local Moderator

Dr. ir. Agnieszka Bigaj - van Vliet, Senior Scientist, TNO | Netherlands Organization for Applied Scientific Research

1st Speaker

Luc Taerwe, Emeritus Professor, Ghent University

Resilient Concrete Structures in a Digitalized World

2nd Speaker

Dr. ir. Agnieszka Bigaj - van Vliet & Motohiro Ohno, Assistant Professor, The University of Tokyo

fib Model Code 2020 – shift towards harmonized approach to design and life cycle management of sustainable concrete structures

4:00-5:00 pm Oslo Time / 10:00-11:00 am Detroit Time

Co-Host: Norwegian Concrete Association (NCA)

Local Moderator

Cecilie Hagby

1st Speaker

Kjell Skjeggerud, Head of Development Heidelberg Cement

The World's First Cement Carbon Capture Facility at Norcem Brevik cement plant—making concrete a zero emission building material

2nd Speaker

Erik Stormyr, Project Manager Hywind Tampen

Building Hywind Tampen, the World's largest floating offshore wind farm

5:00-6:00 pm Madrid Time / 11:00 am-Noon Detroit Time

Co-Host: Asociación Española de Ingeniería Estructural (ACHE)

Local Moderator

Dr. Antoni Cladera, Civil Engineer, Vice-president of ACHE and Professor at the University of Balearic Islands

1st Speaker

Belén González-Fonteboa

Sustainable cement-based materials to build the future

2nd Speaker

Héctor Bernardo

Challenges in the construction of singular concrete structures for the 21st century

5:00-6:00 pm London Time / Noon-1:00 pm Detroit Time

Co-Host: Institute of Concrete Technology (ICT)

Local Moderator

Professor P. A. Muhammed Basheer

1st Speaker

Professor Kevin Paine

Autonomic self-healing concrete: A resilient material for life

2nd Speaker

Barry Gilroy

Delivering more sustainable concrete through accelerated carbonation curing

Wednesday, July 14

2:00-3:00 pm Sao Paulo Time / 1:00-2:00 pm Detroit Time

Co-Host: Instituto Brasileiro do Concreto (IBRACON)

Local Moderator

Ing. Prof. Cesar Henrique Sato Daher, M.Sc. - IBRACON International Relationships Director

1st Speaker

Ing. Julio Timerman - IBRACON 1st Vice-President Director

SIRIUS, Accelerating the Future of Brazilian Science

2nd Speaker

Ing. Prof. Enio Pazini Figueiredo - IBRACON 2nd Vice-President Director

Maracana for the 2014 World Cup and Olympics 2016: The largest work of rehabilitation of reinforced concrete structures in the world

2:00-2:50 pm Santiago Time / 2:00-2:50 pm Detroit Time

Co-Host: Instituto Chileno del Cemento y del Hormigón (ICH)

Local Moderator

Augusto Holmberg, General Manager ICH

1st Speaker

Mario Lafontaine, Partner and Director for New Technologies at Rene Lagos Engineers

The quest for resilience: The Chilean practice of seismic design for reinforced concrete buildings

2nd Speaker

Juan Pablo Covarrubias (Jr), General Manager TCPavements

Pavements with Optimized Slab Geometry: Lessons Learned from 15 Years of Performance

2:50-3:00 pm Detroit Time

Closing remarks from ACI Global Moderators Charles Nmai and Tony Nanni