جامعة قطر
QATAR UNIVERSITY

هيئة الأشغال العامة
Public Works Authority

وزارة البلدية
Ministry of Municipality
State of Qatar

وزارة البيئة والتغير المناخي
Ministry of Environment and Climate Change
State of Qatar

# المؤتمر الدولي الثاني
# للبنية التحتية والتعمير

# The 2nd International Conference on Civil Infrastructure and Construction

5 - 8 February 2023

Doha, Qatar

# CONFERENCE PROGRAM

CIC 2023



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## ABOUT

Welcome to the International Conference on Civil Infrastructure and Construction (CIC2023). The aim of the conference is to provide a platform to report and discuss the recent advances and developments in infrastructure and construction besides urban planning and design for society's wellbeing. Furthermore, the conference will provide a forum to discuss challenges and developments associated with the Environment and Climate Change.

## ORGANIZATION

The conference is organized by Qatar University, the Public Works Authority (Ashghal), the Ministry of Municipality, and the Ministry of Environment and Climate Change. The conference will have a number of professional partners fromengineering societies inside and outside Qatar. The conference will have world - class keynote speakers from top international engineering organizations and societies. The invitation will also be made to the policymakers and key figures in Qatar in the field of infrastructure and construction to present at the conference.

## HIGHLIGHTS

- Research and technological advancements in civil infrastructure and construction
- Case studies – lessons learned
- Best practices in infrastructure development and construction
- Bringing experiences of practitioners, policymakers, and research scholars together

## Contact us

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## Organizing Committee

**Prof. Mohammed Hussein (Chair)**, Qatar University

**Eng. Salem Mohd S A Al-Marri**, Public Works Authority (Ashghal)

**Dr. Wael Alnahhal**, Qatar University

**Dr. Raffaello Furlan**, Qatar University

**Ms. Fatima Al-Kubaisi**, Public Works Authority (Ashghal)

**Mr. Jabir Ali Alshawi**, Ministry of Municipality

**Ms. Jawaher Albader**, Ministry of Municipality

**Mr. Farhood Al-Hajri**, Ministry of Environment and Climate Change

## Technical Committee

**Dr. Wael Alnahhal (Chair)**, Qatar University

**Prof. Mohammed Hussein**, Qatar University

**Eng. Ahmad Ali Al-Ansari**, Public Works Authority (Ashghal)

**Dr. Mohammed bin Saif Al-Kuwari**, Ministry of Environment and Climate Change

**Eng. Elalim Ahmed**, Ministry of Municipality

**Prof. Murat Gunduz**, Qatar University

**Dr. Vagelis Plevris**, Qatar University

**Dr. M Faris Khamidi**, Qatar University

**Dr. Mohamed Arselene Ayari**, Qatar University

# Keynote Speakers



**Maria Lehman**

ASCE 2023
President



**Anil Sawhney**

Director of the Infrastructure Sector, Royal Institution of Chartered Surveyors (RICS)



**Lauri Koskela**

Professor of Construction and Project Management at Huddersfield University



**Rafat Siddique**

Dean of Research and Sponsored Projects & Senior Professor of Civil Engineering at Thapar Institute of Engineering and Technology



**Robert Cervero**

Professor emeritus of City and Regional Planning, Berkeley University. Director of the University of California Transportation Center and the Institute of Urban and Regional Development



**Armistead Russel**

Howard T. Tellepsen Chair, Regents Professor of Civil and Environmental Engineering, Georgia Tech

# Executive Speakers



**Dr. Khalid Naji**
Dean of College of Engineering,
Qatar University



**Eng. Salem Mohd Al-Marri**
Manager of Technical Office,
Public Works Authority (Ashghal)



**Eng. Ibrahim Abbas**
Director of Infrastructure
Planning Department, Ministry
of Municipality



**Eng. Jassim Al-Ansari**
Chief of Program Delivery,
Qatar Rail



**Eng. Bodour Almeer**
Sustainability Executive Director
at the Supreme Committee for
Delivery & Legacy



**Dr. Eng. Mohammed Saif Al-Kuwari**
Assistant Undersecretary,
Environmental Expert and
Engineering Consultant, Ministry of
Environment and Climate Change

# Themes

## Theme 1

Contemporary Issues in Construction Engineering and Management

- Digital Construction
- Design management
- Facilities management
- Lean construction
- Applications of Industrial Revolution 4 (IR4) Technologies in Architecture, Engineering, and
- Construction (AEC)
- Modularization and standardization strategies in the construction Industry
- Construction Contracts, legal affairs, and dispute resolution
- Construction productivity and performance measurement
- Workforce welfare, occupational health, and safety in construction
- Professional issues in education and practice
- Sustainable Construction Technologies

# Themes

## Theme 2

Advances in Infrastructure Sustainability, Renovation, and Monitoring

- Use of recycled and innovative materials in infrastructure projects
- Sustainable materials and solutions
- Sinkholes in Karst Environment as Transportation, Infrastructure and Urban Planning Geohazard
- Infrastructure maintenance and rehabilitation
- Resilient civil infrastructure systems
- Structural control and health monitoring
- Computational methods and soft computing in Civil Engineering applcations

# Themes

## Theme 3

Sustainable Architecture and Urban Planning for Society Wellbeing

- Architectural design challenges and solutions for Hot and Arid Climate
- Healthy Building, Indoor Environmental Quality and post Covid19 building design
- Heritage Building Conservation, Adaptive Reuse and Circular Design
- Urban Mobility and Transit-Oriented Development for Sustainable Transport
- Disaster Risk Reduction and Resilient Cities
- Urban farming, vertical gardening, green roof, and bio-wall
- Contributing to cities that subscribe to equitability rather than simply equality
- Improving access to education, health, affordable housing, and neighborhoods of quality and which provide its users with economic opportunities

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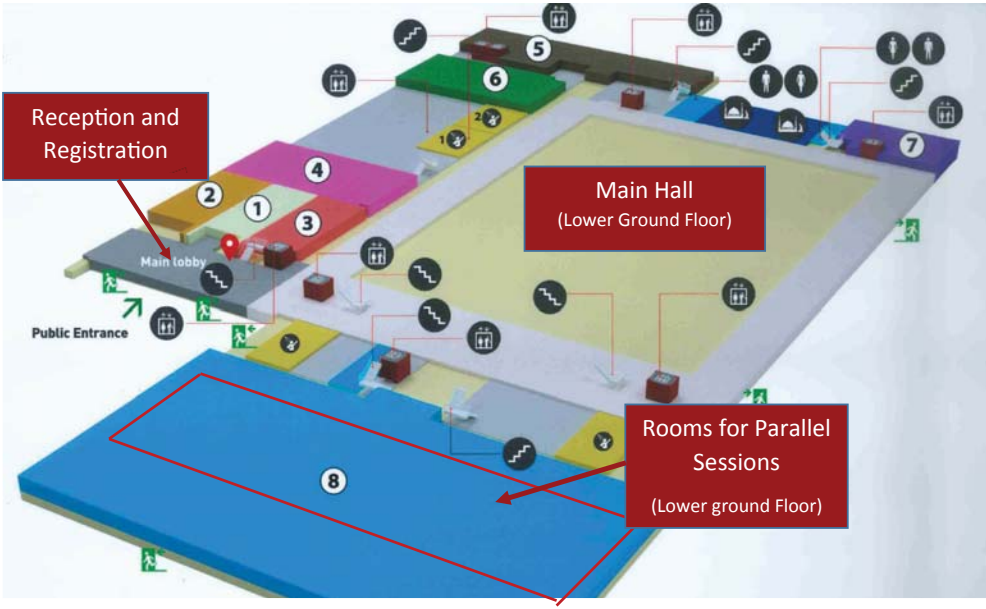
# Themes

## Theme 4

### Water, Environment, and Climate Change

- Environmental effect of recycling and use of recycled materials
- Waste management and circular economy
- Water sustainability for food security
- Advanced water and wastewater treatment processes
- Integrated water resources management
- Managed aquifer recharge
- Fate and transport of contaminants in subsurface systems
- Carbon management through geological carbon sequestration
- Air pollution and climate change
- Green Buildings

## CONFERENCE MAP




**CIC 2023**

**Location: Building (A07): Sports and Events Complex, Qatar University**

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The 2nd International Conference
on Civil Infrastructure and Construction

# PROGRAM OVERVIEW

Early Registration: Registration Desk will be open on **Saturday** (**February 04, 2023**) from 2:00 to 4:00 pm at Sports and Events Complex (A07) at Qatar University, Doha, Qatar.

City Tour Trip: Buses will leave from Sports and Events Complex (A07) at Qatar University at on **Saturday** (**February 04, 2023**) at 4:00 pm and return back at 9:00 pm.

| Time | Day 1: February 5, 2023 (Sunday) | Venue |
|---|---|---|
| 08:00 – 09:00 | **REGISTRATION** | **Main Hall** |
| 09:00 – 10:00 | **Opening Ceremony & Welcoming Speeches** | **Main Hall** |
| 10:00 – 10:15 | **Coffee/Networking Break** | **Main Hall** |
| 10:15 – 10:45 | **Introduction: Conference Chair** | **Main Hall** |
| 10:45 – 11:15 | **Executive Speaker: Dr. Khalid Kamal Naji**<br>Dean of College of Engineering, Qatar University | **Main Hall** |
| 11:15 – 12:15 | **Keynote Speaker: Dr. Armistead Russel**<br>Professor of Civil and Environmental Engineering, Georgia Tech., USA | **Main Hall** |
| 12:15 – 13:15 | **Lunch Break** | **Main Hall** |
| 13:15 – 14:15 | **Keynote Speaker: Dr. Rafat Siddique**<br>Dean of Research & Projects, Thapar Institute of Engineering & Technology, India | **Main Hall** |
| 14:15 – 14:30 | **Coffee/Networking Break** | **Main Hall** |
| 14:30– 14:55 | **Executive Speaker: Eng. Salem Mohd Al-Marri**<br>Manager of Technical Office, Public Works Authority (Ashghal) | **Main Hall** |
| 14:55 – 15:20 | **Executive Speaker: Eng. Ibrahim Abbas**<br>Director of Infrastructure Planning Department, Ministry of Municipality | **Main Hall** |
| 15:20 – 17:40 | Parallel Sessions<br>**Sessions #: 1A, 1B, 1C, 1D, and 1E** | **Allocated Rooms** |
| 18:30 – 22:00 | **Welcoming Reception** | **Ibn Khaldoon Hall** |

| Time | Day 2: February 6, 2023 (Monday) | Venue |
|---|---|---|
| 08:00 – 09:00 | **REGISTRATION** | **Main Hall** |
| 09:00 – 10:00 | **Keynote Speaker: Prof. Lauri Koskela**<br>Professor of Construction and Project Management at Huddersfield University, UK | **Main Hall** |
| 10:00 - 10:15 | **Coffee/Networking Break** | **Main Hall** |
| 10:15 - 12:15 | Parallel Sessions<br>**Sessions #: 2A, 2B, 2C, 2D, and 2E** | **Allocated Rooms** |
| 12:15 - 13:15 | **Lunch Break** | **Main Hall** |
| 13:15 -14:15 | **Keynote Speaker: Dr. Anil Sawhney**<br>Director of the Infrastructure Sector, Royal Institution of Chartered Surveyors (RICS), USA | **Main Hall** |
| 14:15 - 14:30 | **Coffee/Networking Break** | **Main Hall** |
| 14:30-14:55 | **Executive Speaker: Eng. Jassim Al-Ansari**<br>Chief of Program Delivery, Qatar Rail | **Main Hall** |
| 14:55-15:20 | **Executive Speaker: Dr. Eng. Mohammed Saif Al-Kuwari**<br>Assistant Undersecretary, Ministry of Environment and Climate Change | **Main Hall** |
| 15:20- 17:40 | Parallel Sessions<br>**Sessions #: 3A, 3B, 3C,3D, and 3E** | **Allocated Rooms** |
| 18:00-22:00 | Social Activity:Visit to Souq Waqif (The bus will depart from Sports and Events Complex "A07" at QU at 18:00) | **Souq Waqif** |
| **Time** | **Day 3: February 7, 2023 (Tuesday)** | **Venue** |
| 08:00 - 09:00 | **REGISTRATION** | **Main Hall** |
| 09:00 – 10:00 | **Keynote Speaker: Eng. Maria Lehman**<br>ASCE President, 2023, USA | **Main Hall** |
| 10:00 - 10:15 | **Coffee/Networking Break** | **Main Hall** |
| 10:15 - 12:15 | Parallel Sessions<br>**Sessions #: 4A, 4B, 4C, 4D, and 4E** | **Allocated Rooms** |
| 12:15 - 13:15 | **Lunch Break** | **Main Hall** |
| 13:15 -14:15 | **Keynote Speaker: Prof. Robert Cervero**<br>Director of the University of California Transportation Cente, USA | **Main Hall** |

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|---|---|---|
| 14:15 - 14:30 | **Coffee/Networking break** | **Main Hall** |
| 14:30 -15:20 | **Special Session:** Discussion forum on Digital Construction and Management | **Main Hall** |
| 15:20 - 17:20 | Parallel Sessions<br>**Sessions #: 5A, 5B, 5C, 5D, and 5E** | **Allocated Rooms** |
| 18:30 - 22:00 | **Gala Dinner** | **TBA** |
| **Time** | **Day 4: February 8, 2023 (Wednesday)** | **Venue** |
| 8:30 - 9:00 | **Special Session:** Research development in Qatar by Dr. Omar Boukhris, RDI Senior Scientific Expert at QNRF, QRDI | **Main Hall** |
| 9:00 - 9:30 | **Eng. Bodour Almeer**<br>Sustainability Executive Director at the Supreme Committee for Delivery & Legacy | **Main Hall** |
| 9:30 - 10:00 | **Special Session:** Presentation by QU Office of Strategic Innovation, Entrepreneurship, and Economic Development (SIEED) | **Main Hall** |
| 10:00 - 10:15 | **Coffee/Networking Break** | **Main Hall** |
| 10:15 - 12:15 | Parallel Sessions<br>**Sessions #: 6A, 6B, 6C, 6D, and 6E** | **Allocated Rooms** |
| 12:15-13:15 | **Lunch Break** | **Main Hall** |
| 13:15-18:00 | **Field Trip** | **TBA** |

# KEYNOTE SPEAKERS PRESENTATIONS

| | Day 1: February 5, 2023 (Sunday) | Venue: Main Hall |
|---|---|---|
| **11:15-12:15** | **Dr. Armistead Russel**, Professor of Civil and Environmental Engineering, Georgia Tech, USA<br>**Presentation Title:** Integrating Satellites and Models for Air Quality and Health Analyses | |
| **13:15-14:15** | **Dr. Rafat Siddique,** Dean of Research & Projects, Thapar Institute of Engineering & Technology, India<br>**Presentation Title:** Utilization of Waste Materials and Industrial By-Products in the Development of Sustainable Greener Concrete | |
| | **Day 2: February 6, 2023 (Monday)** | **Venue: Main Hall** |
| **9:00-10:00** | **Prof. Lauri Koskela**, Professor of Construction and Project Management at Huddersfield University, UK<br>**Presentation Title**: The continuous evolution of Lean Construction – what next? | |
| **13:15-14:15** | **Dr. Anil Sawhney**, Director of the Infrastructure Sector, Royal Institution of Chartered Surveyors (RICS), USA<br>**Presentation Title:** Industrialized Construction: Megatrends shaping the future of construction | |
| | **Day 3: February 7, 2023 (Tuesday)** | **Venue: Main Hall** |
| **9:00-10:00** | **Maria Lehman**, ASCE President, 2023, USA<br>**Presentation Title**: Engineering the Future | |
| **13:15-14:15** | **Prof. Robert Cervero**, Director of the University of California Transportation Cente, USA<br>**Presentation Title:** Transit Oriented Development in Disruptive Times | |

# EXECUTIVE SPEAKERS PRESENTATIONS

| | Day 1: February 5, 2023 (Sunday) | Venue: Main Hall |
|---|---|---|
| 10:45-11:15 | **Dr. Khalid Kamal Naji**,<br>Dean of College of Engineering, Qatar University | |
| 14:30-14:55 | **Eng. Salem Mohd Al-Marri**,<br>Manager of Technical Office, Public Works Authority (Ashghal) | |
| 14:55-15:20 | **Eng. Ibrahim Abbas**,<br>Director of Infrastructure Planning Department, Ministry of Municipality | |
| | **Day 2: February 6, 2023 (Monday)** | **Venue: Main Hall** |
| 14:30-14:55 | **Eng. Jassim Al-Ansari**,<br>Chief of Program Delivery, Qatar Rail | |
| 14:55-15:20 | **Dr. Eng. Mohammed Saif Al-Kuwari**,<br>Assistant Undersecretary, Ministry of Environment and Climate Change | |
| | **Day 4: February 8, 2023 (Wednesday)** | **Venue: Main Hall** |
| 9:00-9:30 | **Eng. Bodour Almeer,**<br>Sustainability Executive Director at the Supreme Committee for Delivery & Legacy | |

# PARALLEL SESSIONS

| Day 1: February 5, 2023 (Sunday) | | |
|---|---|---|
| **Session 1A, Theme: Contemporary issues in Construction Engineering and Management** | | |
| **Time** | **Session Chair: Dr. Ahmed Senouci, University of Houston** | **Venue: Room Al Bayt** |
| 15:20-15:40 | Marketing Strategies for Smart Buildings. ***Ahmed Mahfouz, Ahmad Mohammad Ahmad, Shimaa Abdelkarim, Nada Nabil Hammam, Maryam Adel Almulla, Yongcheol Lee and Khalid Naji.***<br>***PRESENTER:*** **Dr. Ahmed Mahfouz, Qatar University** | |
| 15:40-16:00 | An Integrated Workflow for Transforming Infrastructure Projects Data into The Metaverse. ***Mohammed Al-Shaheen, Raj Mukta Sundaram and Thirunavukkarsu Ramalingam.***<br>***PRESENTER:*** **Eng. Raj Mukta Sundaram, Public Works Authority-Ashghal** | |
| 16:00-16:20 | Use of Immersive Augmented Reality Technology in Public Works. Myth or Reality? – A Case Study on Implementation Challenges. ***Balamohan Narayanasamy and Suresh Manickam.***<br>***PRESENTER:*** **Eng. Balamohan Narayanasamy, Public Works Authority-Ashghal** | |
| 16:20-16:40 | GIS-Based Solutions for Monitoring and Controlling COVID-19 in ASHGHAL Construction Projects. ***Improving Construction Sector Resilience. Mohammed Al-Shaheen, Amna Mohammed Al-Sayed and Ahmad Yacoub Hasan.***<br>***PRESENTER:*** **Eng. Amna Mohammed Al-Sayed, Public Works Authority-Ashghal** | |
| 16:40-17:00 | Digital Transformation Readiness in Infrastructure Project. ***Nada Wadi, Zied Dahmani and Juhaina Al-Sulaiti.***<br>***PRESENTER:*** **Eng. Nada Wadi, Al jaber and partner** | |
| 17:00-17:20 | Environmental, Social and Governance in the Construction Industry (CIC 2023). ***Khalil Roukoz and Dila Ersenkal.***<br>***PRESENTER:*** **Dr. Dila Ersenkal, MOTT MACDONALD** | |
| 17:20-17:40 | Medical Facility Management under BIM Paradigm for Hospital Operations Performance in China During COVID-19. ***Georgios Kapogiannis, Tianlun Yang, Jiequn Guo and Michael Gerges.***<br>***PRESENTER:*** **Dr. Georgios Kapogiannis, Oryx Universal College in partnership with Liverpool John Moores University** | |
| **Session 1B, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring** | | |
| **Time** | **Session Chair: Dr. Ala Abutaqa, Aqaba University of Technology** | **Venue: Room Lusail** |
| 15:20-15:40 | Significance of GOs, GNPs and CNTs nanomaterials on the mechanical properties of Cement. ***Malak Al-Diseet, Mervat Abu Rumman, Ramzi Taha, Mohamed Al Ansari, Ala Abutaqa, Mohamed Mohsen and MuTasim Abdel-Jaber.***<br>***PRESENTER:*** **Dr. Mohamed Mohsen, Qatar University** | |

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| 15:40-16:00 | Eco-friendly Concrete Using Waste Plastic Bottles as Aggregate. ***A Case Study from Oman. Abdul Rahim Al Umairi, Nawf Al Mahrouqi, Maryam Al Wahaibi, Maryam Al Hooti, Fatma Alnabhani and Hiba Al Mamri.*** ***PRESENTER:*** **Dr. Abdul Rahim Al Umairi, University of Technology and Applied Sciences** |
| 16:00-16:20 | A Comparison between Natural Pozzolana and Fly Ash Replacements on the Mechanical Properties of Concrete. ***Mervat Abu Rumman, Malak Al-Diseet, MuTasim Abdel-Jaber, Ala Abutaqa, Khaled Naji and Mohamed Mohsen.*** ***PRESENTER:*** **Dr. Mohamed Mohsen, Qatar University** |
| 16:20-16:40 | Synthesis of Calcium Nitrate Self-Healing Microcapsules Using Aerosol OT- Hexane Solution for Cementitious Materials. ***Ala Abutaqa, Ghassan Suleiman, Ahmed Senouci and Mohamed Mohsen.*** ***PRESENTER:*** **Dr. Ala Abutaqa, Aqaba University of Technology** |
| 16:40-17:00 | Recycled polypropylene fibres for reinforcing cement mortar under arid conditions. ***Khadra Bendjillali and Mohamed Chemrouk.*** ***PRESENTER:*** **Dr. Khadra Bendjillali, University Amar Telidji** |
| 17:00-17:20 | Numerical Study on the Pull-out Behavior of Steel Fibers in Cement-Based Composites. ***Ammar Babiker and Ebtihaj Abu-Elgasim.*** ***PRESENTER:*** **Dr. Ebtihaj Abu-Elgasim, Sudan University of Science and Technology** |
| 17:20-17:40 | Parametric Optimization of Reinforced Concrete Beams Strengthened with Fabric Reinforced Cementitious Mortar Using Finite Element Modelling and Response Surface Methodology. ***Qusai Aborahmeh, Mohamed Rabie and Usama Ebead.*** ***PRESENTER:*** **Eng. Mohamed Rabie, Qatar University** |

**Session 1C, Theme: Sustainable Architecture and Urban Planning for Society Wellbeing**

| **Time** | **Session Chair: Dr. Mark David Major, Qatar University** | **Venue: Room Al Junoub** |
|---|---|---|
| 15:20-15:40 | The Urban Morphology of Mshereib, the Heart of Downtown Doha. ***Rozan A.A Amleh, Mark David Major, Heba O. Tannous, Almaha M. Alyafei, Ghada H. Fetais, Mohammad A. Najjar and Reem Y. Awwaad.*** ***PRESENTER:*** **Rozan Amleh, Qatar University** | |
| 15:40-16:00 | Assessment of aesthetic control in Qatar's urban design. ***Nur Alah Abdelzayed Valdeolmillos, Almaha Ahmad E R Al-Malki, Shaligram Pokharel and Mohamed Arselene Ayari.*** ***PRESENTER*:** **Almaha Ahmad E R Al-Malki, Qatar University** | |
| 16:00-16:20 | A Quantitative Evaluation of Urban Green Spaces in Rajshahi, Bangladesh. ***Md. Asaduzzaman and Nafis Sadat.*** ***PRESENTER:*** **Dr. Md. Asaduzzaman, Rajshahi University of Engineering & Technology** | |
| 16:20-16:40 | Resilience Urban Planning from Climate Change Point of View. A case study for Qatar. ***Husam Samman and Ruzanna Zahir.*** ***PRESENTER*:** **Eng. Husam Samman, Ministry of Municipality** | |
| 16:40-17:00 | Building Information Modeling (BIM) for Energy Efficiency Awareness in Gulf Countries. ***Ali Alhamami, Mohammed Awad Abuhussain and Yakubu Aminu Dodo.*** ***PRESENTER:*** **Dr. Ali Alhamami, Najran University** | |

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| 17:00-17:20 | Criteria and Challenges of Inclusive Design in the Built Environment. ***Shimaa Abdelkarim, Ahmad Mohammad Ahmad, Janet Zahrah, Nancy Makhoul, Maryam Al-Nuaimi and Khalid Naji.***<br>***PRESENTER:*** **Shimaa Abdelkarim, Qatar University** | |
| 17:20-17:40 | A dapated Tabu Search Optimisation for Solving E-Scooters Battery Swapping Problem. ***Mahmoud Masoud.***<br>***PRESENTER:*** **Dr. Mahmoud Masoud, Queensland University of Technology** | |
| **Session 1D, Water, Environment, and Climate Change** | | |
| **Time** | **Session Chair: Dr. Ahmad Sana, Sultan Qaboos University** | **Venue: Room Al Thumama** |
| 15:20-15:40 | Study of Turbulence in Open Channels Using Two-Equation Models. ***Ahmad Sana, Ghazi Al-Rawas, Talal Etri and Abdullah Al-Mamun.***<br>***PRESENTER:*** **Ahmad Sana, Sultan Qaboos University** | |
| 15:40-16:00 | Efficient Reservoir Operation in an Arid Region with Extreme Hydrologic Flows. A Case Study, Largest Oman's Dam. ***Akbar Karimi, Banafsheh Nematollahi and Mohammad Reza Nikoo.***<br>***PRESENTER:*** **Dr. Akbar Karimi, National University of Science and Technology** | |
| 16:00-16:20 | The Dependent Clogging Dynamics and Its Impact on Porous Media Permeability Reduction. ***Ahmed Elrahmani and Riyadh Al-Raoush.***<br>***PRESENTER:*** **Eng. Ahmed Elrahmani, Qatar University** | |
| 16:20-16:40 | Improvement in Environmental Management Performance in Ashghal Projects. ***Abdel Rahman Tariq A. Abdel Rahman, Maitha Al-Naimi, Dr. Hany Mohamed A. Hussein and Aysegul Korur.***<br>***PRESENTER:*** **Eng. Abdel Rahman Tariq A. Abdel Rahman, Ashghal** | |
| 16:40-17:00 | Characteristics Of Sewage Sludge In Wad Dafiaa Wastewater Treatment Plant To Uses In Agricultural. ***Fatma Khalifa Ahmed Khalifa and Ahmed Abdelhakam.***<br>***PRESENTER:*** **Dr. Fatma Khalifa Ahmed Khalifa, Sudan University of Science and Technology** | |
| 17:00-17:20 | Statistical Analysis of the effect of water table fluctuation and soil layering on the distribution of BTEX on soil and groundwater under anaerobic condition. ***Reem Ismail and Riyadh Al Raoush.***<br>***PRESENTER:*** **Eng. Reem Ismail, Qatar university** | |
| 17:20-17:40 | Efficient Turbidity Removal Using a New Gel Filtration Process. ***Mohammed Talhami, Wardan Khatib, Obadah Dahdal, Mohamed Hassan and Alaa Al Hawari.***<br>***PRESENTER:*** **Eng. Mohammed Talhami, Qatar University** | |
| **Session 1E, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring** | | |
| **Time** | **Session Chair: Prof. Farid Abed, American University of Sharjah** | **Venue: Room 974** |
| 15:20-15:40 | The Use of Demolished Concrete Lumps in Rectangular CFST Beams Under Flexure. ***Salem Khalaf and Farid Abed.***<br>***PRESENTER:*** **Prof. Farid Abed, American University of Sharjah** | |

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|---|---|
| 15:40-16:00 | Theoretical Simulation of Thermal Deformations in Concrete Beams Reinforced with Two Overlapped FRP Bars in Cold Regions. ***Ali Zaidi, Hizia Bellakehal, Radhouane Masmoudi, Oumelkhir Terbagou and Naima Nia.*** ***PRESENTER:*** **Dr. Ali Zaidi, University of Laghouat** |
| 16:00-16:20 | Sustainable Alternatives for Concrete by Adding Different Types of Natural and Industrial Waste Materials. ***Rana Ezzdine Lakys, Mohammad Hany Yassin and Adel Jumaah.*** ***PRESENTER:*** **Dr. Rana Ezzdine Lakys, Australian University of Kuwait** |
| 16:20-16:40 | Bamboo and Palm Leaves as sustainable Alternative to Steel Reinforcement in Concrete Beams. ***Abdul Majeed Omer, Mustafa Mustafa and Amel Mohammed.*** ***PRESENTER:*** **Dr. Amel Mohammed, Sudan University Of Science And Technology** |
| 16:40-17:00 | Galvanized steel as a sustainable material-technology and failure analysis. ***Abdulwahab Ibrahim and Scott MacIntyre.*** ***PRESENTER:*** **Dr. Abdulwahab Ibrahim, College of the North Atlantic** |
| 17:00-17:20 | A Comparative Study On Punching Shear Strength Statistics For Ferrocement Slabs. ***Mohammed Ihtesham Hussain, Ahmed Majid Salim Al Aamri, Manjunath Shantharam Amalkar And Chimdi Gadafa Benti.*** ***PRESENTER:*** **Dr. Mohammed Ihtesham Hussain, University Of Technology And Applied Sciences** |
| 17:20-17:40 | Flexural behavior of reinforced concrete beams containing recycled concrete aggregates. ***Hizia Bellakehal, Ben Harzallah Krobba, Abderrahmane Sidi Hayballa and Sidi Cherif Ahmedou Mohamedou.*** ***PRESENTER:*** **Dr. Hizia Bellakehal, university of Laghouat** |

## 2: February 6, 2023 (Monday)

### Session 2A, Theme: Contemporary issues in Construction Engineering and Management

| Time | Session Chair: Dr. Bader Almutairi, King Saud University | Venue: Room Al Bayt |
|---|---|---|
| 10:15-10:35 | The Impact of the COVID-19 on Contracts and claims for Infrastructure projects. ***Mona Gumma and Amani Abdallah.*** ***PRESENTER:*** **Dr. Mona Gumma, Sudan University** | |
| 10:35-10:55 | Why Construction Projects are Delayed in PWA. Problems and Solutions. ***Dana Ahmad Al Marri and Noof Al Kaabi.*** ***PRESENTER:*** **Eng. Noof Al Kaabi, Public Works Authority** | |
| 10:55-11:15 | An Exploration into Delay-Influencing Factors on Healthcare Construction. ***Bader Almutairi and Abdurahman Bin Mahmoud.*** ***PRESENTER:*** **Dr. Bader Almutairi, King Saud University** | |
| 11:15-11:35 | ASSESSMENT OF CONTRACTOR EXTENTION OF TIME CLAIM (EOT). ***Neveen Ahmed.*** ***PRESENTER:*** **Eng. Neveen Ahmed, WS ATKINS** | |

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|---|---|---|
| 11:35-11:55 | Mitigating Legal Risks in Construction Project Contracts. ***The Importance and the Applicability of Force Majeure Clauses. Dana Ahmad Al Marri.***<br>***PRESENTER:*** **Eng. Dana Ahmad Al Marri, Public Works Authority** | |
| 11:55-12:15 | ***Blockchain Technology Adoption in the State of Qatar. Qualitative Risk Analysis. Awad Alomari and Noora Fetais.***<br>***PRESENTER:*** **Eng. Awad Alomari, Ashghal/AECOM** | |
| **Session 2B, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring** | | |
| **Time** | **Session Chair: Dr. Muazzam Ghous Sohail, Capital University of Science and Technology** | **Venue: Room Lusail** |
| 10:15-10:35 | Backfilling Manhole Surround Using Recycled Concrete Waste Material. ***John Brown, Suvish Valsan, Nand K. Vashisht, Anna Olliver and Eisa Abdulla S A Al-Mohannadi.***<br>***PRESENTER:*** **Eng. Nand K. Vashisht, Parsons** | |
| 10:35-10:55 | The Effect of Surface Treatment of Basalt FRP Bars on the Shear Capacity of One way High-Strength Concrete Slabs. ***Abathar Al-Hamrani and Wael Alnahhal.***<br>***PRESENTER:*** **Eng. Abathar Al-Hamrani, Qatar University** | |
| 10:55-11:15 | Performance of mild steel and corrosion-resistant steel rebars in chloride-contaminated concrete. ***Muazzam Ghous Sohail, Nasser Al Nuaimi, Wael Al-Nahhal and Ramazan Kahraman.***<br>***PRESENTER:*** **Dr. Muazzam Ghous Sohail, Capital University of Science and Technology** | |
| 11:15-11:35 | Bio-based Self-healing concrete for sustainable and durable concrete infrastructure. **Muazzam Ghous Sohail, Nasser Al Nuaimi, Ramazan Kahraman, Zulfa Aldisi, Nabil Zouari, Bora Gencturk, Debora Rodrigues and Yucel Yildirim.**<br>***PRESENTER:*** **Dr. Muazzam Ghous Sohail, Capital University of Science and Technology** | |
| 11:35-11:55 | Enhancing the bond Durability of BFRP Bars Using Basalt-Macro Fiber Reinforced Concrete.. ***Alaa Taha, Wael Alnahhal and Nasser Alnuami.***<br>***PRESENTER*****: Eng. Alaa Taha, Qatar University** | |
| 11:55-12:15 | Physico –mechanical properties of sustainable building material based gypsum and recycled polyethylene waste. ***Djoudi Amina.***<br>***PRESENTER:*** **Dr. Djoudi Amina, Laghouat University** | |
| **Session 2C, Theme: Sustainable Architecture and Urban Planning for Society Wellbeing** | | |
| **Time** | **Session Chair: Dr. Fodil Fadli, Qatar University** | **Venue: Room Al Junoub** |
| 10:15-10:35 | Multicriteria approach in developing pedestrian network data for sustainable urban mobility. ***Sagar Sonone and Balamohan Narayanasamy.***<br>***PRESENTER:*** **Eng. Sagar Sonone, Public Works Authority - Ashghal** | |
| 10:35-10:55 | Conceptual Framework for Planning Urban Roadside Vegetation to Enhance Air Quality for Roadside Users. ***Soujanya Mogra, Mohd Faris Khamidi and Fodil Fadli.***<br>***PRESENTER:*** **Eng. Soujanya Mogra, Qatar University** | |
| 10:55-11:15 | Transit Oriented Developments from the View of the Traditional City Model. ***Sara Nafi and Djamel Ouahrani.***<br>***PRESENTER:*** **Eng. Sara Nafi, Qatar university** | |

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| 11:15-11:35 | TRANSIT-ORIENTED DEVELOPMENT. THE CASE OF WEST BAY, DOHA. ***Khalida Lifam Marthya, Raffaello Furlan, Madhavi Indraganti and Rashid Al-Matwi.***<br>***PRESENTER:*** **Eng. Khalida Lifam Marthya, Qatar University** | |
| 11:35-11:55 | MULTIMODAL TRANSPORT FOR SMART MOBILITY IN EMERGING CITIES - CASE OF DOHA, QATAR. ***Mahnoor Hasan and Fodil Fadli.***<br>***PRESENTER:*** **Eng. Mahnoor Hasan, Qatar University** | |
| 11:55-12:15 | Nairobi MRTS Conceptualization. Transit-Oriented Development for Sustainable Transport. ***B C Roy and S Bhattacharyya.***<br>***PRESENTER:*** **Prof. *B C Roy, RUICPL*** | |
| **Session 2D, Water, Environment, and Climate Change** | | |
| **Time** | **Session Chair: Dr. Waleed Zeiada, University of Sharjah** | **Venue: Room Al Thumama** |
| 10:15-10:35 | Development of Climate Data Inputs Towards the Implementation of Mechanistic-Empirical Pavement Design in the UAE. ***Waleed Zeiada, Sham Mirou, Ayat Ashour, Reem Hassan and Muamer Abuzwidah.***<br>***PRESENTER:*** **Dr. Waleed Zeiada, University of Sharjah** | |
| 10:35-10:55 | Adsorption of Congo red dye Using Activated Carbon-Fe3O4 Composite. ***Nafis Mahmud, Ludan Yasser, Rahaf Mahmoud and Abdelbaki Benamor.***<br>***PRESENTER:*** **Dr. Ludan Yasser, Qatar University** | |
| 10:55-11:15 | Improving desalination performance of microbial desalination cell, a green water technology - using PANI-rGO composite as efficient cathode electro-catalyst. ***Sadik Rahman, Tahiya Al Shuaili, Md. Abdullah Al-Mamun and Ahmad Sana.***<br>***PRESENTER:*** **Eng. Sadik Rahman, Sultan Qaboos University** | |
| 11:15-11:35 | Biogas Production from Cow Manure Using an Anaerobic Digestion Technique. ***Abdul Rahim Al Umairi, Hatem Al Amri, Abdullah Al Kalbani, Al Hussain Al Hadidi and Marwan Al Hashami.***<br>***PRESENTER:*** **Dr. Abdul Rahim Al Umairi, University of Technology and Applied Sciences** | |
| 11:35-11:55 | Numerical Simulation of Climate Changes Impacts on The Coast of Oman Sea. ***Talal Etri, Ghazi Al-Rawas, Ahmad Sana and Mohammad Reza Nikoo.***<br>***PRESENTER:*** **Dr. Talal Etri, Sultan Qaboos University** | |
| 11:55-12:15 | National Governance of Climate Change in Qatar. A Proposal to Streamline the UNFCCC Paris Agreement Implementation & Reporting Requirements. ***Dr. Azhari F. M. Ahmed and Muneera Abdulla.***<br>***PRESENTER:*** **Dr. Azhari F. M. Ahmed, Ministry of Environment and Climate Change** | |
| **Session 2E, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring** | | |
| **Time** | **Session Chair: Dr. Mohammed Elshafie, Qatar University** | **Venue: Room 974** |
| 10:15-10:35 | Comparison of Geotechnical investigation results with Encountered ground conditions during subsea tunnelling in Qatar. ***Furqan Hameed, Gary Peach and Saad Zayed Al-Marri.***<br>***PRESENTER:*** **Eng. Gary Peach, Mott Macdonald Limited** | |

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| 10:35-10:55 | A Review on the Performance of Bored Pile Foundations through Instrumented Pile Load Tests in Qatar. ***Muhammad Humza, Mannan Ali and Majid Naeem.*** ***PRESENTER:*** **Eng. Muhammad Humza, Parsons International Limited** |
| 10:55-11:15 | Corrected rock fracture parameters applied to Qatari rock masses. ***Hrvoje Vučemilović.*** ***PRESENTER:*** **Dr. Hrvoje Vučemilović, University of Osijek, Croatia** |
| 11:15-11:35 | Robust Geotechnical Hazard Identification and Assessment for Major Underground Projects in Qatar. Case Study. South of Wakrah Pumping Station and Outfall (SWPSO) Project. ***Mohamed Khalil, Fathelrahman Dafalla, Andres Pinto and Atif Galal Ahmed.*** ***PRESENTER:*** **Eng. Mohamed Khalil, Stantec** |
| 11:35-11:55 | Tunnel Surveying Works. A Challenge of 10km long tunnel under the Arabian Gulf - Qatar. ***Gary Peach, Saad Zayed Al-Marri, Hernan Vigil Fernandez, Simbarashe Kazingizi and Pavel Chumakou.*** ***PRESENTER:*** **Eng. Gary Peach, Mott MacDonald** |
| 11:55-12:15 | Identification of karstic features with extensive geophysical investigation for underground infrastructure - South of Wakrah Pumping Station and Outfall (SWPSO) Project. ***Ali Akbar, Fathelrahman Dafalla, Ilayaraja Kumba Krishnamurthi and Andres Pinto.*** ***PRESENTER:*** **Eng. Fathelrahman Dafalla, Stantec** |

**Session 3A, Theme: Contemporary issues in Construction Engineering and Management**

| **Time** | **Session Chair: Dr. Murat Gunduz, Qatar University** | **Venue: Room Al bayt** |
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| 15:20-15:40 | Sustainability Driven Strategy for Achieving Sustainable Infrastructure. Musaimeer Pumping Station and Outfall Project. ***Dila Ersenkal, Gary Peach and Biliana Paskova.*** ***PRESENTER:*** **Dr. Dila Ersenkal, MOTT MACDONALD** | |
| 15:40-16:00 | Study on Business Value of Building Information Modelling – Applied in Developing Countries. ***Amr Sadek.*** ***PRESENTER:*** **Dr. Amr Sadek, King Abdul Aziz University** | |
| 16:00-16:20 | Investigation and Comparative study between research methods used in the five categories of BIM-based Built Environment Sustainability Studies. ***Hanane Bouhmoud, Dalila Loudyi, Andrea Giordano, Salman Azhar and Mounia Farah.*** ***PRESENTER:*** **Dr. Hanane Bouhmoud, University of Padua (Università degli Studi di Padova)** | |
| 16:20-16:40 | Implementation of Building Information Modelling (BIM) on Public Infrastructure and Building Projects in Qatar. ***Robert Grys.*** ***PRESENTER:*** **Eng. Robert Grys, Public Works Authority - Ashghal** | |
| 16:40-17:00 | Challenges and Perspectives on Resilient Collaboration for Building Information Modelling (BIM) Education in the GCC Context. ***Raya Atour and Ahmad Mohammad Ahmad.*** ***PRESENTER:*** **Eng. Raya Atour, Qatar University** | |
| 17:00-17:20 | Investigating the Barriers Involved in the Sustainable Implementation of LC and BIM Approaches in Qatars Construction Industry. ***Faheem Memon.*** ***PRESENTER:*** **Eng. Faheem Memon, WSP** | |

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| 17:20-17:40 | Duality of Lean Construction and Building Information Modeling into Digital Collaborative Scheduling in Qatar. A Conceptual Framework. ***Murat Gunduz, Khalid Naji and Ayman Fahmi Naser.***<br>***PRESENTER:*** **Eng. Ayman Fahmi Naser, Qatar University** | |
| **Session 3B, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring** | | |
| **Time** | **Session Chair: Dr. Mohammad Reza Nikoo, Sultan Qaboos University** | **Venue: Room Lusail** |
| 15:20-15:40 | Analysis of factors affecting the performance of Dynamic Compaction technique. A study of coastal area of Eastern province in Saudi Arabia. ***Ahmad Salah, Mahmoud Sodangi, Eyad Dardas, Jawad Alnasser and Ayad Alshehri.***<br>***PRESENTER:*** **Dr. Eyad Dardas, IAU** | |
| 15:40-16:00 | A Markovian-Genetic Algorithm Model for Predicting Pavement Deterioration. ***Ala Sati, Saleh Abu Dabous and Hissam Tawfik.***<br>***PRESENTER:*** **Eng. Ala Sati, University of Sharjah** | |
| 16:00-16:20 | A Multi-Criteria Decision-Making Approach for Selection of Wave Energy Converter Optimal Site. ***Alireza Shadmani, Mohammad Reza Nikoo, Amir H. Gandomi and Ghazi Al-Rawas.***<br>***PRESENTER:*** **Dr. Mohammad Reza Nikoo, Sultan Qaboos University** | |
| 16:20-16:40 | The Effect of Atrium on The Inside Thermal Comfort in Hot Arid Zones Buildings. ***Bencheikh Hamida and Bousebci Khalida.***<br>***PRESENTER:*** **Dr. Bencheikh Hamida, Amar telidji Universioty** | |
| 16:40-17:00 | ABAQUS Modelling and Experimental Tests Comparison For Certain Classes of Composite Isolated Joints. ***Bashir Saleh.***<br>***PRESENTER:*** **Dr. Bashir Saleh, Libyan Academy** | |
| 17:00-17:20 | Site effects Integration in the seismic vulnerability assessment of structures using a Geographic Information System (GIS). ***Hamidatou Mouloud and Hallal Nassim.***<br>***PRESENTER:*** **Dr. Hamidatou Mouloud, CRAAG** | |
| 17:20-17:40 | Blockchain and its Potential in the Digitization of Land and Real Estate Property Records. ***Vagelis Plevris, Hassan Abdallah and Azzam Alnatsheh.***<br>***PRESENTER:*** **Eng. Azzam Alnatsheh, Qatar University** | |
| **Session 3C, Theme: Sustainable Architecture and Urban Planning for Society Wellbeing** | | |
| **Time** | **Session Chair: Dr. Mohd Faris Khamidi, Qatar University** | **Venue: Room Al Junoub** |
| 15:20-15:40 | Climate-cultural Conscious Design Approach to the Post-COVID-19 Built Environment. ***Nur Dalilah Dahlan and Mohd Shahrudin Abd Manan.***<br>***PRESENTER:*** **Dr. Nur Dalilah Dahlan, Universiti Putra Malaysia** | |
| 15:40-16:00 | Post Covid-19 Ventilation Strategies for Shopping Malls in Hot Humid Climate. ***Wardah Fatimah Mohammad Yusoff.***<br>***PRESENTER*****: Dr. Wardah Fatimah Mohammad Yusoff, Universiti Kebangsaan Malaysia** | |
| 16:00-16:20 | Social Outcomes and Needs Study for Housing Development. ***Gozde Calim, Morgan Belsher and George Daoutis.***<br>***PRESENTER:*** **Eng. Gozde Calim, Mott MacDonald** | |

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| 16:20-16:40 | Revisiting the Building Design Attributes and Indoor Radon. A Survey of 36 Homes in the Commonwealth of Kentucky. ***Osama E. Mansour, Shahnaz Aly and Peter Hall.*** ***PRESENTER:*** **Dr. Osama E. Mansour, Western Kentucky University** | |
| 16:40-17:00 | An Inclusive Transportation for Iraya-Mangyan IP in Accessing Social Infrastructure using Scalogram Analysis. ***Samantha Nicole Regala, Junekaycelle Aubrey Grace Carillo, Frances Dale Danielle Dadiz and Geoffrey Cueto.*** ***PRESENTER:*** **Eng. Samantha Nicole Regala, Mapua University** | |
| 17:00-17:20 | An Analytical Review of Attempts to Mitigate Visual Pollution in Urban Settings. ***Diala Al Midani and Fodil Fadli.*** ***PRESENTER:*** **Eng. Diala Al Midani, Qatar university** | |
| 17:20-17:40 | Cultural Heritage Tourism as a Catalyst for Urban Regeneration; Case of the Doha Historic Center in Qatar. ***Djamel Boussaa.*** ***PRESENTER:*** **Dr. Djamel Boussaa, Qatar University** | |
| **Session 3D Water, Environment, and Climate Change** | | |
| **Time** | **Session Chair: Dr. Muamer Abuzwidah, University of Sharjah** | **Venue: Room Al Thumama** |
| 15:20-15:40 | Rainfall Change Projections Under Different Climate Change Scenarios in UAE. ***Muamer Abuzwidah, Ahmed Elawady, Waleed Zeiada, Tala Abushukair, Rafeeah Al Ali, Soughah Al Samahi and Habiba Aflatoon.*** ***PRESENTER:*** **Muamer Abuzwidah, UNIVERSITY OF SHARJAH** | |
| 15:40-16:00 | The Influence of Urbanization on Natural Overland Flow Paths. ***Amna Mohammed Al-Sayed and Mohammed Al-Shaheen.*** ***PRESENTER:*** **Eng. Amna Mohammed Al-Sayed, Public Works Authority - Ashghal** | |
| 16:00-16:20 | ASSESSMENT OF ABLUTION WATER CONSUMPTION IN MOSQUES. ***Aliya Ali Said Al Alawi, Parameswari K, Gopalakrishnan Kumarasamy and Khoula Said Khamis Al Kaabi.*** ***PRESENTER:*** **Dr. Aliya Ali Said Al Alawi, University of Technology and Applied Sciences** | |
| 16:20-16:40 | Review on Decarbonizing the Building Sector in oil and gas countries. The Case of Qatar. ***Reem Al-Mohammed.*** ***PRESENTER:*** **Dr. Reem Al-Mohammed, Qatar University** | |
| 16:40-17:00 | Sustainable Urban Drainage Master Plan for Al Khor Municipality International Conference on Civil Infrastructure and Construction. ***Hassan Qasem and Mohsin Mahmood.*** ***PRESENTER:*** **Eng. Hassan Qasem, Ministry of Municipality** | |
| 17:00-17:20 | Watermain Breaks in Hong Kong. Identifying Causes and Consequences based on Media Reports. ***Tayyab Ahmad, Ibrahim Shaban and Tarek Zayed.*** ***PRESENTER:*** **Dr. Tayyab Ahmad, Qatar University** | |
| 17:20-17:40 | Effect of Double Decker Flyover construction on Urban Fabric of Ashok Rajpath,Patna, India. ***Bijay Kumar Das, Arpita Srivastava and Avi Kush.*** ***PRESENTER:*** **Dr. Bijay Kumar Das, National Institute of Technology Patna** | |
| **Session 3E, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring** | | |
| **Time** | **Session Chair: Dr. Mustafa Mashal, Idaho State University** | **Venue: Room 974** |

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| 15:20-15:40 | Potential Implementation of Warm Mix Asphalt (WMA) in Pavement Construction in The State of Qatar. ***Mohammad Anshasi and Charles Nunoo.*** ***PRESENTER:*** **Eng. Mohammad Anshasi, AECOM** |
| 15:40-16:00 | Effect of Chemicals on Compressive Strength of Plastic-Laterite Interlock Paving Blocks. ***Mubarak L. Liman, Yamusa Bello Yamusa, Bilkisu Danjuma, Abubakar Sani and Yusuf Walliyullah.*** ***PRESENTER:*** **Dr. Mubarak L. Liman, Nuhu Bamalli Polytechnic** |
| 16:00-16:20 | Utilisation of Waste Plastics Admix with Laterite Soil for Production of Road Pavement Interlock Blocks. ***Yamusa Bello Yamusa, Mubarak L. Liman, Bilkisu Danjuma, Abubakar Sani and Yusuf Walliyullah.*** ***PRESENTER:*** **Dr. Yamusa Bello Yamusa, Nuhu Bamalli Polytechnic** |
| 16:20-16:40 | Exploration of carbonate aggregates in road construction using ultrasonic and artificial intelligence approaches. ***Mohamed Abdelhedi, Rateb Jabbar and Chedly Abbes.*** ***PRESENTER:*** **Dr. Mohamed Abdelhedi, University of Sfax** |
| 16:40-17:00 | Influence of Pier Stiffness on Track-Bridge Interaction. ***Ali Mubarack C K and Akhil Upadhyay.*** ***PRESENTER:*** **Dr. Ali Mubarack C K, Indian Institute of Technology Roorkee** |
| 17:00-17:20 | Experimental Validation of Repair Methods for Earthquake-Damaged Bridges Incorporating Pipe-Socket Precast Pier System. ***Kathryn Hogarth, Arya Ebrahimpour and Mustafa Mashal.*** ***PRESENTER:*** **Dr. Mustafa Mashal, Idaho State University** |
| 17:20-17:40 | Assessment of the Current Frequency Calculation Methods Used in the Determination of the Dynamic Modulus Value in Pavement Design and Analysis. ***Mohammed Alfarra, Mohammed Sadeq and Husam Sadek.*** ***PRESENTER:*** **Eng. Mohammed Alfarra, Qatar University** |

## Day 3: February 7, 2023 (Tuesday)

### Session 4A, Theme: Contemporary issues in Construction Engineering and Management

| Time | Session Chair: Dr. Tayyab Ahmad, Qatar University | Venue: Room Al Bayt |
|---|---|---|
| 10:15-10:35 | Focus on Lean Construction at Umm Lekhba (Landmark) Interchange. ***Nader Halimeh.*** ***PRESENTER:*** **Eng. Nader Halimeh, Parsons International Limited** | |
| 10:35-10:55 | Performance and Continuous Improvement Evaluation of an Enhanced Infrastructure Project following the Productive Deployment of a Customized Lean Construction Strategy and its Structured Action Plans. ***Dr. Ramez Alchamaa and Hisham M. S. Abushaqra.*** ***PRESENTER*****: Dr. Ramez Alchamaa, Dorsch Gruppe- Middle East** | |
| 10:55-11:15 | Implementing the Last Planner system in a Design Project. ***Dawlat Elmosalmi.*** ***PRESENTER:*** **Eng. Dawlat Elmosalmi, Engineering Consultants Group** | |

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| 11:15-11:35 | Assessment of workflow reliability in two infrastructure projects considering efficient adoption of lean leadership culture and engagement. ***Zied Dahmani, Dr. Ramez Alchamaa and Saoud Ali Al-Tamimi.***<br>***PRESENTER:*** **Eng. Zied Dahmani, Public Work Authority** |
| 11:35-11:55 | Using Value-Stream Mapping to Enhance the Production Performance in Infrastructure Construction Projects in Qatar. A Case Study. ***Ayman Naser, Juhaina Al-Sulaiti and Zied Dahmani.***<br>***PRESENTER:*** **Eng. Ayman Naser, Qatar University** |
| 11:55-12:15 | Choosing By Advantages (CBA) used as a qualitative assessment methodology in lean construction. ***Zied Dahmani, Juhaina Essa Al-Sulaiti and Ayman Naser.***<br>***PRESENTER:*** **Eng. Juhaina Essa Al-Sulaiti, Public Works Authority** |

**Session 4B, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring**

| **Time** | **Session Chair: Dr. Amged Osman Abdelatif, University of Khartoum** | **Venue: Room Lusail** |
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| 10:15-10:35 | Modeling Short-Term Deflection of Reinforced Concrete Slabs using the Layered Approach. ***Abeer Fageer, Shahd Khalid, Anfal Abdelgadir, Amina Elbagir, Mohammed Kabosh and Amged Abdelatif.***<br>***PRESENTER:*** **Dr. Abeer Fageer, University of Khartoum** | |
| 10:35-10:55 | Production of Self-healing Concrete using Gum Arabic for Immobilizing of Bacterial Spores on Sand. ***Amged Osman Abdelatif, Ahmed A. Ibrahim, Khadija E. Elamin, Adil A. El Hussein and Marmar A. El Siddig.***<br>***PRESENTER:*** **Dr. Amged Osman Abdelatif, University of Khartoum** | |
| 10:55-11:15 | Experimental Investigation on the Flexural Capacity of Reinforced Concrete Beams with Treated Wastewater and Recycled Concrete Aggregates. ***Abdelrahman Abushanab and Wael Alnahhal.***<br>***PRESENTER:*** **Eng. Abdelrahman Abushanab, Qatar University** | |
| 11:15-11:35 | Influence of Adding Demolition Wastes on the Mechanical Properties of Concrete in Sultanate of Oman. ***Said Almaawali, Samiya Alhamrashdi and Ameera Alsiyabi.***<br>***PRESENTER:*** **Dr. Said Almaawali, University of Nizwa** | |
| 11:35-11:55 | Hardened properties of self-compacting concrete incorporating recycled granite waste as fine aggregate. ***Aboubakeur Boukhelkhal.***<br>***PRESENTER:*** **Dr. Aboubakeur Boukhelkhal, University of Amar telidji** | |
| 11:55-12:15 | Mitigation of ASR in. Hydropower Concrete Structures – Case Study Merwe Dam and Dam Complex of Upper Atbara Projects. ***Mashair Mohammed and Abdelhannan Ibrahim.***<br>***PRESENTER:*** **Dr. Abdelhannan Ibrahim, SUST** | |

**Session 4C, Theme: Sustainable Architecture and Urban Planning for Society Wellbeing**

| **Time** | **Session Chair: Dr. Hameda Yousef Janahi, Qatar University** | **Venue: Room Al Junoub** |
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| 10:15-10:35 | Application of PERS to evaluate walkability in State of Qatar. ***Mohamed Ibrahim Elsayyad and Deepti Muley.***<br>***PRESENTER:*** **Dr. Mohamed Ibrahim Elsayyad, Qatar University** | |

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| 10:35-10:55 | Exploring Crowd Management and Evacuation Strategies using Microscopic Pedestrian Simulation. A Case Study of Souq Waqif. ***Shabna Sayedmohammed, Charitha Dias, Wael Alhajyaseen and Mohammed Alqaradawi.***<br>***PRESENTER:*** **Eng. Shabna Sayedmohammed, Qatar University** |
| 10:55-11:15 | Built environment attributes and walking patterns. A Case Study of Downtown Abu Dhabi.. ***Jiin Baek.***<br>***PRESENTER:*** **Dr. Jiin Baek, Qatar University** |
| 11:15-11:35 | Megaprojects To Improve Public Transport From The User' Perspective. ***János Varga Ph.D. and Ágnes Csiszárik-Kocsir Ph.D.***<br>***PRESENTER:*** **Dr. János Varga Ph.D., Óbuda University**<br>***PRESENTER:*** **Dr. János Varga Ph.D., Óbuda University** |
| 11:35-11:55 | A bibliometric study of visual quality research in the context of urban open spaces. ***Mohammad Najjar, Madhavi Indraganti and Goze Bayram.***<br>***PRESENTER:*** **Eng. Mohammad Najjar, Qatar University** |
| 11:55-12:15 | The impact of land mix-use on inhabitants social wellbeing in the Qatari neighbourhoods. ***Hameda Yousef A Janahi.***<br>***PRESENTER:*** **Dr. Hameda Yousef A Janahi, Qatar university** |

## Session 4D, Water, Environment, and Climate Change

| Time | Session Chair: Dr. Alaa Hawari, Qatar University | Venue: Room Al Thumama |
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| 10:15-10:35 | Impact of Pore Morphology on Colloid Migration at variable Saturation Levels of Natural Porous Media. ***Mhd. Taisir Albaba, Jamal Hannun and Riyadh Al-Raoush.***<br>***PRESENTER:*** **Eng. Mhd. Taisir Albaba, Qatar University** | |
| 10:35-10:55 | Enhancement of Polysulfone Ultrafiltration Membrane Performance for Produced Water Treatment by Incorporation of Graphene oxide/Chitosan/Silicon dioxide Nanocomposite. ***Ahmed Yasir, Nadeen Alshaibi, Nchwa Ndame, Alaa Hawari and Abdelbaki Benamor.***<br>***PRESENTER:*** **Eng. Nadeen Alshaibi, Qatar University** | |
| 10:55-11:15 | Implementation of Odour Control Systems for Nuisance-free and Public friendly environment in Qatar. ***Spyridon Trikis, Vaibhav Sumant, Arshad Muhammed, Anna Olliver, Meshaal Abushereeda and John Brown.***<br>***PRESENTER:*** **Eng. Vaibhav Sumant, Parsons** | |
| 11:15-11:35 | A strategic design approach for implementing a rainwater management system using an integration of GIS and BIM tool. ***Deshbhushan Patil, Raghavendra Kumar Raya, Abobakr Al-Sakkaf, Ashutosh Bagchi and Rajiv Gupta.***<br>***PRESENTER:*** **Dr. Rajiv Gupta, Birla Institute of Technology and Science** | |
| 11:35-11:55 | Potential application of porous membrane from blends of homopolymer for industrial water treatment. ***Rayane Akoumeh, Tamara Elzein, Juan Rodriguez-Hernandez and Mohammad K. Hassan.***<br>***PRESENTER:*** **Dr. Rayane Akoumeh, Qatar University** | |
| 11:55-12:15 | Generation and calibration for a flood event in seasonal River using SWAT Study Case; Gash River, Sudan. ***Ahmed Abdelhakam, Tasneem I. M. Abdelmagid and Fatima Khalifa.***<br>***PRESENTER:*** **Dr. Ahmed Abdelhakam, Sudan University of Science and Technology** | |

| Session 4E, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring | | |
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| **Time** | **Session Chair: Dr. Osman Elhussien, Ashghal** | **Venue: Room 974** |
| 10:15-10:35 | Development and Implementation of Ashghal Guidelines for the Evaluation and Repair of Sinkholes.. ***Jamal Al-Ansari, Khaled Hassan, Kantha Kumar and Khaled Helali.*** ***PRESENTER:*** **Dr. Khaled Hassan, Ashghal** | |
| 10:35-10:55 | Ashghal Quality Assurance & Quality Control system – QSD role in monitoring & reporting the quality performance in Ashghal Projects. ***Aisha Abdulaziz A M Al-Ibrahim, Shiekha Aisha Abdulla N J Al-Thani, Effrosyni Plexousaki and Mounera Ismail R M Al-Ansari.*** ***PRESENTER:*** **Eng. Aisha Abdulaziz A M Al-Ibrahim, Ashghal** | |
| 10:55-11:15 | Utilization of Recycled Materials in Infrastructure Projects. Ashghal Approach. ***Osman Elhussien and Aljazi Al-Mansoori.*** ***PRESENTER:*** **Eng. Aljazi Al-Mansoori, Ashghal** | |
| 11:15-11:35 | Potential Utilization of Alternative Construction Materials in Qatar, In Lieu of Conventional Washed Sand. ***Subrahmanyam Pilaka Venkata, Aisha Zayed M A Alkhayareen, Noora Ibrahim Q S Al Ansari and Ahmed Ghanim Abdulsalam Abunahia.*** ***PRESENTER:*** **Eng. Subrahmanyam Pilaka Venkata, AECOM/RPD-ASHGHAL** | |
| 11:35-11:55 | Characterisation of Sewage Sludge and Municipal Solid Waste for Use as Cementitious Materials. ***Mohammed Al-Kuwari and Khaled Hassan.*** ***PRESENTER:*** **Dr. Mohammed Al-Kuwari, Ministry of Environment and Climate Change** | |
| 11:55-12:15 | Influence of Fine Dune Sand on the Modulus of Elasticity of Eco-Self-Compacting-Concrete. ***Makani Abdelkadir, Tafraoui Ahmed, Zaoiai Said and Benmerioul Farid*** PRESENTER: **Dr. Makani Abdelkadir, TAHRI Mohamed University of Bechar** | |
| **Session 5A, Theme: Contemporary issues in Construction Engineering and Management** | | |
| **Time** | **Session Chair: Prof. Murat Gunduz, Qatar University** | **Venue: Room Al Bayt** |
| 15:20-15:40 | Practical Implementation of Campus Facility Management Performance Measurement in Qatar. ***Murat Gunduz, Khalid Naji and Omar Maki.*** ***PRESENTER:*** **Eng. Omar Maki, Qatar University** | |
| 15:40-16:00 | STRATEGIES FOR IMPROVING SAFETY PERFORMANCE IN DEVELOPING CONTEXT. ***Wesam Beitelmal, Wael Alruqi and Mohamed Zoubi.*** ***PRESENTER:*** **Dr. Wesam Beitelmal, Dhofar Univeristy** | |
| 16:00-16:20 | Application of Sustainability on Construction Projects in Khartoum State. ***Eltahir Elshaikh and Eman Babiker.*** ***PRESENTER:*** **Dr. Eltahir Elshaikh, Sudan University of Science and Technology** | |
| 16:20-16:40 | The Implementation of Enterprise Resource Planning Systems in Roads and Infrastructure Construction Companies in Developing Countries. ***Dima Jawad, Marie-Belle Boutros and Sophia Ghanimeh.*** ***PRESENTER:*** **Dr. Dima Jawad, Ontario Tech University** | |
| 16:40-17:00 | Flow of Activities. Utilizing Parade of Trade to Develop Visual Management Tool Tailored for Infrastructure Projects. ***Yehia Ibrahim and Saoud Ali Al-Tamimi.*** ***PRESENTER:*** **Eng. Yehia Ibrahim, Dorsch Qatar** | |

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| 17:00-17:20 | A Methodology for Creating Mockups inside Virtual environments using Digital Twin Technologies During Construction Phase. ***Mohab Abotaleb and Motasem Albanna.*** ***PRESENTER:*** **Dr. Mohab Abotaleb, QD-SBG** | |
| 17:20-17:40 | Advancement in Construction Management. ***Ravish Kumar, Arpita Srivastava, Manoj Kumar Rajak, Fulena Rajak and Bijay Kumar Das.*** ***PRESENTER:*** **Dr. Ravish Kumar, National Institute of Technology Patna** | |
| **Session 5B, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring** | | |
| **Time** | **Session Chair: Dr. Hamad Alnuaimi, Qatar University** | **Venue: Room Lusail** |
| 15:20-15:40 | Early Thermal Cracking Control Of Concrete Structures In Qatar. ***Firas Alkadour, Christina Anagnostaki, Theodoros Tzaveas, Anil Kumar Oruganti and Ali Kara.*** ***PRESENTER:*** **Eng. Firas Alkadour, Public Works Authority** | |
| 15:40-16:00 | Box Jacking Method Implementation in Rock for Mesaimeer Pedestrian Underpass Structure in Qatar. ***Firas Alkadour, Anbalagan Chelliah, Ali Kara and Theodoros Tzaveas.*** ***PRESENTER:*** **Eng. Firas Alkadour, Public Works Authority** | |
| 16:00-16:20 | High-Temperature Performance of Bio-modified Asphalt Binder in UAE. ***Sara A. Alattieh, Ghazi G. Al-Khateeb, Waleed Zeiada and Helal Ezzat.*** ***PRESENTER:*** **Eng. Sara A. Alattieh, University of Sharjah** | |
| 16:20-16:40 | Top-Down Construction Method. A Case Study For Underpass Structure in Qatar. ***Ali Kara, Anbalagan Chelliah and Theodoros Tzaveas.*** ***PRESENTER:*** **Eng. Anbalagan Chelliah, Public Works Authority** | |
| 16:40-17:00 | Widening of an existing bridge to accommodate two traffic lanes – Al Bustan South Project in Qatar. ***Georgios Sergakis, Yoji Matsuo, Christina Anagnostaki and Theodoros Tzaveas.*** ***PRESENTER:*** **Eng. Georgios Sergakis, PARSONS INTERNATIONAL LIMITED** | |
| 17:00-17:20 | Upgrading Existing Infrastructures – The Case Study of Industrial IC Bridge. ***Christina Anagnostaki, Theodoros Tzaveas, Georgios Sergakis and Yoji Matsuo.*** ***PRESENTER:*** **Eng. Christina Anagnostaki, Public Works Authority** | |
| 17:20-17:40 | Shrinkage at a young age of UHPCs based on dune sand from the western erg of Algeria containing silica fume or metakaolin. ***Ahmed Tafraoui and Naima Seghouani.*** ***PRESENTER:*** **Dr. Ahmed Tafraoui, TAHRI Mohammed University BECHAR** | |
| **Session 5C, Theme: Sustainable Architecture and Urban Planning for Society Wellbeing** | | |
| **Time** | **Session Chair: Dr. Tarryn Paquet, Qatar University** | **Venue: Room Al Junoub** |
| 15:20-15:40 | The Use of Newly Developed Public Transportation System in Relation to People's Thermal Perception of Outdoor Climate. ***Deema Alattar and Madhavi Indraganti.*** ***PRESENTER:*** **Eng. Deema Alattar, Qatar University** | |
| 15:40-16:00 | Area-Specific Traffic Peak Hour Timing Using Traffic Signal Detectors. A Case Study of Qatar. ***Almodather Mohamed, Ali Al-Saudi and Mohammed Al-Marri.*** ***PRESENTER:*** **Eng. Ali Al-Saudi, Public Works Authority - Ashghal** | |

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| 16:00-16:20 | The Challenges and Future Aspirations of Implementing Global Sustainability Assessment System (GSAS) in the Urban Facilities of Mega Sport Events [MSEs] in Qatar. ***Raya Atour and Fodil Fadli.***<br>***PRESENTER:*** **Eng. Raya Atour, Qatar University** |
| 16:20-16:40 | Environmental Sustainability Comparative Assessment of Low-Rise and High-Rise Neighbourhoods based on People's Lifestyle Preferences. The Case of Doha, Qatar. ***Shikha Patel and Hatem Ibrahim.***<br>***PRESENTER:*** **Eng. Shikha Patel, Qatar University** |
| 16:40-17:00 | Investigation of indoor thermal perceptions and comfort temperature in educational spaces in Qatar. ***Madhavi Indraganti.***<br>***PRESENTER:*** **Dr. Madhavi Indraganti, Qatar University** |
| 17:00-17:20 | Adapting Smart Street Strategy for Post-Covid Built Environment. ***Ahmad Mohammad Ahmad, Shimaa Abdelkarim, Nasir Mohammed, Ahmed Mahfouz, Yongcheol Lee and Khalid Naji.***<br>***PRESENTER:*** **Dr. Ahmad Mohammad Ahmad, Qatar University** |
| 17:20-17:40 | Ganga Riverfront Development at Patna, India: Urban Rejuvenation project. ***Fulena Rajak, Bijay Kumar Das and Sandeep Kumar.***<br>***PRESENTER:*** **Prof. Fulena Rajak , National Institute of Technology Patna** |

## Session 5D, Water, Environment, and Climate Change

| Time | Session Chair: Dr. Ágnes Csiszárik-Kocsir, Óbuda University | Venue: Room Al Thumama |
|---|---|---|
| 15:20-15:40 | How Efficient Would Demand-Based Water Strategies Be for Qatar?. ***Sophia Ghanimeh, Ibrahim Al Khoury, Dima Jawad and Maya Atieh.***<br>***PRESENTER:*** **Dr. Sophia Ghanimeh, Qatar University** | |
| 15:40-16:00 | Emerging Brine Management Approaches For Sustainable Desalination In The Gcc Countries. ***Prof. Syed Javaid Zaidi, Haleema Saleem and Hammadur Rahman Siddiqui.***<br>***PRESENTER:*** **Prof. Syed Javaid Zaidi, Qatar university** | |
| 16:00-16:20 | Recycling of Tetra Pak for Space and Water Heating by Blending with Phase Change Materials. ***Safna Nishad and Igor Krupa.***<br>***PRESENTER:*** **Dr. Safna Nishad, Qatar University** | |
| 16:20-16:40 | Automated calibration of the EPA-SWMM model for an Impact of Land Use and Land Cover Changes on peak discharge for a sub-urban catchment of Delhi. ***Ved Prakash, Dhruba Jyoti Sarmah and Rajib Kumar Bhattacharjya.***<br>***PRESENTER:*** **Dr. Ved Prakash, IIT Guwahati** | |
| 16:40-17:00 | V Induced Photodegradation of Dye Pollutant by Tb-doped La10Si6O27 Catalyst. ***Rajender Boddula, Ramachandra Naik, Ramyakrishna Pothu, Ahmed Bahgat Radwan and Dr. Noora Al-Qahtani.***<br>***PRESENTER:*** **Dr. Rajender Boddula, Qatar University** | |
| 17:00-17:20 | The importance and evaluation of environment-friendly megaprojects - as perceived by users. ***Ágnes Csiszárik-Kocsir Ph.D. and János Varga Ph.D..***<br>***PRESENTER:*** **Dr. Ágnes Csiszárik-Kocsir Ph.D., Óbuda University** | |

| Session 5E, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring | | |
|---|---|---|
| **Time** | **Session Chair: Dr. Vagelis Plevris, Qatar University** | **Venue: Room 974** |
| 15:20-15:40 | Impact of the fiber distribution characteristics on the uniaxial behaviour of Fiber Reinforced Composites- An Experimental Study. ***Prof. C B Kameswara Rao, Dr. S R R Teja Prathipati and Dr. Hanuma Kasagani.***<br>***PRESENTER:*** **Prof. C B Kameswara Rao, National Institute of Technology Warangal** | |
| 15:40-16:00 | A Static and Free Vibration Analysis of Porous Functionally Graded Beams. ***Lazreg Hadji, Vagelis Plevris and Royal Madan.***<br>***PRESENTER:*** **Dr. Lazreg Hadji, University of Tiaret** | |
| 16:00-16:20 | RSM Analysis for Optimum Content of Graphene Nanoplatelets for 3D-Printed Clay Strength. ***Mohamed Mohsen, Malak Al-Diseet, Mervat Abu Rumman, Ramzi Taha and Khalid Naji.***<br>***PRESENTER:*** **Dr. Mohamed Mohsen, Qatar University** | |
| 16:20-16:40 | Site Specific Probabilistic Seismic Hazard Analysis on site 2 of South Pars. ***Milad Mohammadian.***<br>***PRESENTER*****: Dr. Milad Mohammadian, Shahid beheshti university** | |
| 16:40-17:00 | Bond performance of near-surface mounted BFRP bars to concrete. ***Omar Aljidda, Ahmed El Refai and Wael Alnahhal.***<br>PRESENTER: **Eng. Omar Aljidda, Laval University** | |
| 17:00-17:20 | Along-wind aerodynamic forces on a rectangular plan building in vicinity of a gently sloped two-dimensional hill. ***Abdul Haseeb Wani, Rajendra Kumar Varma and Ashok Kumar Ahuja***<br>PRESENTER: **Dr. Abdul Haseeb Wani, Indian Institute of Technology Jammu** | |

## Day 4: February 8th 2023 (Wednesday)

| Session 6A, Theme: Contemporary issues in Construction Engineering and Management | | |
|---|---|---|
| **Time** | **Session Chair: Dr. Ahmed Senouci, University of Houston** | **Venue: Room Al Bayt** |
| 10:15-10:35 | Pavement Automated Condition Assessment Model Using Unmanned Aerial Vehicle and Convolutional Neural Network. ***Vinay Chawla, Carol Massarra, Husam Sadek, Mohammed Sadeq and Zhen Zhu.***<br>***PRESENTER:*** **Eng. Mohammed Sadeq, Seero Engineering Consulting LLC** | |
| 10:35-10:55 | TBM Challenges on Musaimeer outfall tunnel. ***Gary Peach, Hernan Vigil Fernandez and Eng. Saad Zayed Al-Marri.***<br>***PRESENTER:*** **Eng. Gary Peach, Mott MacDonald** | |
| 10:55-11:15 | A Side by Side comparison of Shaft Excavation locally in Qatar. ***John Brown, Sunit Saurabh, Ahmed Alslakhi and Eisa Al-Mohannadi.***<br>***PRESENTER:*** **Eng. John Brown, Parsons** | |

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| 11:15-11:35 | Enhancing Micro-Tunnelling activity in infrastructure construction adopting hybrid lean approaches. A Case Study. ***Asghar Kamal, Jamalelden Hakouz, Yehia Zakaria, Maryam Shalabi, Ayman Naser and Saoud Ali Al-Tamimi.***<br>***PRESENTER:*** **Eng. Jamalelden Hakouz, QBEC** |
| 11:35-11:55 | Investigating the Potential for Standardization of Glass Reinforced Polymer (GRP) Shutter Molds Designs in Bridge Projects in the UAE. ***Mhd Amer Alzaim, Mariam Alali and Ghassan Abu-Lebdeh.***<br>***PRESENTER:*** **Dr. Mhd Amer Alzaim, American University of Sharjah** |
| 11:55-12:15 | Offsite Construction in the UK. Economic and Environmental Benefits. ***Mohammad Maleki Sadabad.***<br>***PRESENTER:*** **Dr. Mohammad Maleki Sadabad, The University of Salford** |

**Session 6B, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring**

| **Time** | **Session Chair: Dr. Mohammed Elshafie, Qatar University** | **Venue: Room Lusail** |
|---|---|---|
| 10:15-10:35 | Efficacy in developing a Sustainable, Resilient, and Interdependent Infrastructure System in the Gulf Region. ***Mohamed G. Mohamed.***<br>***PRESENTER:*** **Dr. Mohamed G. Mohamed, University of Washington** | |
| 10:35-10:55 | Digital Twins in AEC Infrastructures and Buildings Management Systems. ***Mohammad Oditallah, Md Morshed Alam and Palaneeswaran Ekambaram.***<br>***PRESENTER:*** **Dr. Mohammad Oditallah, Swinburne university of technology** | |
| 10:55-11:15 | Optimum Design of Plane Trusses Using Mathematical and Metaheuristic Algorithms on a Spreadsheet. ***Vagelis Plevris, Ismail Elias and Aristotelis E. Charalampakis.***<br>***PRESENTER:*** **Dr. Vagelis Plevris, Qatar University** | |
| 11:15-11:35 | Launching A 148m-Long Tunnel Boring Machine From A 15m-Inner Diameter Shaft. ***John Brown, Volkan Salepciler, Jacek Stypulkowski and Sheikh Abdulrahman Al-Thani.***<br>***PRESENTER:*** **Eng. Volkan Salepciler, Parsons** | |
| 11:35-11:55 | Data Interpretation Framework for Pile Thermal Integrity Testing. ***Qianchen Sun, Mohammed Elshafie, Chris Barker, Anthony Fisher and Andrew Bell.***<br>***PRESENTER:*** **Dr. Qianchen Sun, University of Cambridge** | |
| 11:55-12:15 | Planning and implementing of effective enabling works for a successful TBM tunnelling project. ***Gary Peach, Saad Zayed Al-Marri and Hernan Vigil Fernandez.***<br>***PRESENTER:*** **Eng. Hernan Vigil Fernandez, PORR Qatar** | |

**Session 6C, Theme: Sustainable Architecture and Urban Planning for Society Wellbeing**

| **Time** | **Session Chair: Prof. Ezio Santagata, Qatar University** | **Venue: Room Al Junoub** |
|---|---|---|
| 10:15-10:35 | Modeling Asphalt Pavement Frictional Properties using Different Machine Learning Algorithms. ***Mohammad Ali Khasawneh, Mohammad Ahmad Alsheyab and Haneen Issa Al Akhrass.***<br>***PRESENTER:*** **Dr. Mohammad Ali Khasawneh, Prince Mohammad Bin Fahd University** | |
| 10:35-10:55 | Marine dredging sediments valorisation in self-compacting concretes. ***Walid Maherzi, Mahfoud Benzerzour, Ahmed Senouci and Nor-Edine Abriak.***<br>***PRESENTER:*** **Dr. Walid Maherzi, Institut Mines Telecom Nord Europe** | |

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| 10:55-11:15 | Preliminary Study on the Use of Reclaimed Asphalt in Public Works Authority Road Projects in the State of Qatar. ***Ezio Santagata, Sadegh Yeganeh, Haissam Sebaaly, Osman Elhussein and Ali Al Marri.***<br>***PRESENTER:*** **Prof. Ezio Santagata, Qatar University** |
| 11:15-11:35 | Modeling Thermal Conductivity, Thermal Diffusivity and Specific Heat of Asphalt Concrete Using Beta Regression and Mixture Volumetrics. ***Mohammad Ali Khasawneh and Mohammad Ahmad Alsheyab.***<br>***PRESENTER:*** **Dr. Mohammad Ali Khasawneh, Prince Mohammad Bin Fahd University** |
| 11:35-11:55 | Self-compacting Backfills using Fly Ash and Dredged Marine Sediments for Public Work Applications. ***Walid Maherzi, Mahfoud Benzerzour, Ahmed Senouci and Nor-Edine Abriak.***<br>***PRESENTER:*** **Dr. Walid Maherzi, Institut Mines Telecom Nord Europe** |
| 11:55-12:15 | Development of a Comprehensive Pavement Design System for Roads in Wind and Solar Farms. ***Ezio Santagata, Haissam Sebaaly and Vittorio Capozzi.***<br>***PRESENTER:*** **Prof. Ezio Santagata, Qatar University** |

## Session 6D, Water, Environment, and Climate Change

| **Time** | **Session Chair: Dr. Mohamed Arselene Ayari, Qatar University** | **Venue: Room Al Thumama** |
|---|---|---|
| 10:15-10:35 | Retention of Hydrophobic Colloids in Unsaturated Porous Media using Microfluidics. ***Jamal Hannun and Riyadh Al-Raoush.***<br>***PRESENTER:*** **Eng. Jamal Hannun, Qatar University** | |
| 10:35-10:55 | Challenging Hydraulic aspects of MPSO project, Qatar's showcase for storm water outfall. ***Panagiotis Verros, Joao Carlos Henriques Miranda, Nikola Manojlovic and Alexios Kyriakopoulos.***<br>***PRESENTER:*** **Eng. Panagiotis Verros, Mott Mac Donald** | |
| 10:55-11:15 | Design considerations of MPSO Marine outfall and diffuser field. ***Panagiotis Verros, Saad Zayed Al-Marri, Alexios Kyriakopoulos and Lefteris Alvanitopoulos.***<br>***PRESENTER:*** **Eng. Panagiotis Verros, Mott Mac Donald** | |
| 11:15-11:35 | Advanced Block Copolymer Membranes for Oily Industrial Wastewater Treatment. ***Mohammad Hassan, Shifa Shaikh, Moustafa Zagho, Mustafa Nasser, Xiaodan Gu, Sergei Nazarenko and Alamgir Karim.***<br>***PRESENTER:*** **Dr. Mohammad Hassan, Qatar University** | |
| 11:35-11:55 | Diffuser bed construction challenges on the Musaimeer pump station and outfall project. ***Gary Peach, Hernan Vigil Fernandez and Eng. Saad Zayed Al-Marri.***<br>***PRESENTER:*** **Eng. Gary Peach, Mott Macdonald Limited** | |
| 11:55-12:15 | Geotechnical challenges for underground infrastructure in Qatar. Hydrogeological assessment for dewatering and deep excavation works - South of Wakrah Pumping Station and Outfall (SWPSO) Project. ***Enric Vázquez-Suñé, Ignacio Bulboa, Ilayaraja Kumba Krishnamurthi and Andres Pinto.***<br>***PRESENTER:*** **Dr. Enric Vázquez-Suñé, Institute of Environmental Assessment and Water Research (IDAEA/CSIC)** | |

| Session 6E, Theme: Advances in Infrastructure Sustainability, Renovation, and Monitoring | | |
|---|---|---|
| **Time** | **Session Chair: Dr. Tayyab Ahmad, Qatar University** | **Venue: Room 974** |
| 10:15-10:35 | Investigating performance criteria priorities in Green Buildings. ***Tayyab Ahmad.*** ***PRESENTER:*** **Dr. Tayyab Ahmad, Qatar University** | |
| 10:35-10:55 | ENHANCEMENT OF WORKERS OCCUPATIONAL HEALTH AND SAFETY WELFARE IN ASHGHAL PROJECTS. ***Naji Al-Faridi and Yasser Mohamed Berzan.*** ***PRESENTER:*** **Eng. Naji Al-Faridi, Public Works Authority** | |
| 10:55-11:15 | Leading technologies adoption in the construction safety management. ***Yash Kumar Mittal and Pooja Tripathi.*** ***PRESENTER:*** **Dr. Yash Kumar Mittal, Malaviya National Institute of Technology Jaipur** | |
| 11:15-11:35 | New Technique for Flood Risk Assessment of Sub-Networks in Large Networks Using InfoWorks ICM. A Case Study of Qatar's Full Storm Water Network. ***Yahia Alabbasi, Khaled Aboelenen and Mohammed Sadeq.*** ***PRESENTER:*** **Eng. Khaled Aboelenen, Seero Engineering Consulting LLC** | |
| 11:35-11:55 | Digitalization and usage of QR-code system in documents management. ***Loai Abdrabou.*** ***PRESENTER:*** **Eng. Loai Abdrabou, IRIS CONSTRUCTION** | |
| 11:55-12:15 | Challenges Confronting Construction Contracts Administration in Sudan. ***Eltahir Elshaikh.*** ***PRESENTER:*** **Dr. Eltahir Elshaikh, Sudan University of Science and Technology** | |

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