



# INTERNATIONAL CONFERENCE ON SUSTAINABLE DEVELOPMENT IN CIVIL ENGINEERING ICSDC-2023

16<sup>TH</sup> – 18<sup>TH</sup> FEBRUARY 2023

MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY JAMSHORO



**DAY 01 – THURSDAY, FEBRUARY 16, 2023**

**OPENING CEREMONY, MAIN AUDITORIUM, MUET, JAMSHORO**

<b>FROM</b>	<b>TO</b>	
<b>8:30</b>	<b>9:30</b>	Entry of Participants On Desk Registration and Confirmation of Participants & Seating
<b>9:30</b>	<b>9:35</b>	Recitation from the Holy Quran
<b>9:35</b>	<b>9:40</b>	National Anthem
<b>9:40</b>	<b>9:45</b>	Recognition of Keynote Speakers
<b>9:45</b>	<b>9:50</b>	Recognition of Sponsors
<b>9:50</b>	<b>10:00</b>	Welcome By Conference Chair
<b>10:00</b>	<b>10:10</b>	Conference Overview by Conference Secretary
<b>10:10</b>	<b>10:25</b>	Speech by Chief Guest/Vice- Chancellor, MUET, Jamshoro

**HI-TEA (10:30 TO 11:15)**



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## PLENARY SESSION-I (MAIN AUDITORIUM)

Time		Chair: Prof. Dr. Rasool Bux Mahar			Co-Chair: Prof. Dr. Agha Faisal Habib	
FROM	TO	PLENARY TALK	NAME	AFFILIATION	TITLE	
11:15	11:35	Plenary Talk 1	PROF. DR. DOUGLAS BARRETO	FEDERAL UNIVERSITY OF SAO CARLO, BRAZIL	Efficiency of cities and buildings – Mains aspects for achieving the UN Sustainable Development Goals (SDGs)	
11:35	11:55	Plenary Talk 2	DR. JAMAL THAEEM	DEAKIN UNIVERSITY, AUSTRALIA	Circular Built Environment – A New Paradigm For Sustainable Construction	
11:55	12:15	Plenary Talk 3	DR. NUR IZZI	UNIVERSITI KEBANGSAAN MALAYSIA	Recent Development of Sustainable Asphalt Technology	

## PLENARY SESSION-II (MAIN AUDITORIUM)

Time		Chair: Prof. Dr. Kamran Ansari			Co-Chair: Prof. Dr. Naeem Aziz Memon	
FROM	TO	PLENARY TALK	NAME	AFFILIATION	TITLE	
12:15	12:30	Platinum Sponsor Talk	ENGR. AHMED WAHEED BHATTI	M/S D-Baluch	Overview of Various Projects- A Sustainable way	
12:30	12:50	Plenary Talk 4	DR. KHAN SHAHZADA	Department of Civil Engineering University of Engineering and Technology, Peshawar	Sustainability-based Innovations in Construction Materials and Structures	
12:50	13:10	Plenary Talk 5	DR. KHAN ZAIB JADOON	International Islamic University Islamabad	Implementation of smart groundwater monitoring system for sustainable groundwater management	
13:10	13:30	Plenary Talk 6	Dr. SHAMSHER SADIQ	Mirpur University of Science and Technology (MUST), Mirpur, Azad Kashmir	Evaluation of Seismic Site Amplification Characteristics of Shallow Bed Rock Sites Considering local Pakistan's Profile Data	
13:30	13:35	<b>Shield Distribution</b>				
13:35	15:00	<b>Prayer &amp; Lunch Break</b>				



# INTERNATIONAL CONFERENCE ON SUSTAINABLE DEVELOPMENT IN CIVIL ENGINEERING

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#### DAY 01 – THURSDAY, FEBRUARY 16, 2023

#### TECHNICAL SESSION 1

#### AUTHORS AND PARTICIPANTS SEATING (15:00 - 15:15)

SESSION NUMBER	TECHNICAL SESSION 1A	TECHNICAL SESSION 1B	TECHNICAL SESSION 1C
VENUE	Software Laboratory-II	Seminar Library	Seminar Hall
THEME	Sustainable Construction and Project Management	Sustainable Material and Innovative Structures	Smart Methods of Irrigation, Public Health, and Geotechnical Engineering
SESSION CHAIR	<i>Dr. Mohsin Soomro</i>	<i>Prof. Dr. Khan Shahzada</i>	<i>Prof. Dr. Khan Zaib Jadoon</i>
SESSION CO-CHAIR	<i>Dr. Aftab Hameed</i>	<i>Prof. Dr. Fareed Memon</i>	<i>Prof. Dr. Ashfaq Memon</i>
TIME SLOT	PAPERS TO BE PRESENTED		
15:00-15:15	ID: 10 <b>Sustainability Assessment of Civil Engineering Projects: The Case of Pakistan</b> <i>Asmat Ali, Ameer Haider, Raja Fahad Khalid and Ejaz Ahmed</i>	ID: 19 <b>Effect of industrial waste products on Mechanical and durability performance of concrete</b> <i>Abdul Salam Buller, Fahad Ul Rehman Abro, Tariq Ali and Muhammad Nadeem</i>	<b>Keynote Talk by Prof. Dr. Ing. Saqib Ehsan (online)</b> <b>Detailed Study To Investigate Possible Groundwater Recharge Options For Cities In Pakistan</b>
15:15 - 15:30	ID: 30 <b>Green Retrofitting of an existing building envelope by integrating 6D BIM-based energy optimization model: A case study</b> <i>Shizra Mughal, Tauha Hussain Ali, Ali Raza Khoso, Haris Najeeb and Muhammad Sufyan Noor Khan</i>	ID: 21 <b>Effect of magnetically treated water on workability and Compressive strength of concrete</b> <i>Maroosha Larik and Fareed Ahmed Memon</i>	ID: 15 <b>Water Monitoring System Using Internet of Thing IOT: Critical Review</b> <i>Malaika Shaikh, Azad Ali, Riaz Ahmed and Babar Ali Shaikh</i>
15:30 - 15:45	ID: 56 <b>Construction Waste Management Potentials of Building Information Modelling (BIM): A State-of-the-Art Review</b> <i>Mahweer Kumar, Muhammad Saleem Raza and Asif Shah</i>	ID: 36 <b>Finite Element Analysis: Method, Verification and Validation</b> <i>Darya Memon, Shazia Paras Shaikh and Muneer Anees</i>	ID: 33 <b>Impact of Lime on Compaction Characteristics of Jamshoro Shale</b> <i>shiah, Nouman Ali, Muhammad Behram and Aneel Kumar</i>



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15:45 - 16:00	ID: 34 <b>Adaptive and sustainable design for building construction in the face of climate change</b> <i>Hifza Miss and Hassan Tariq</i>	ID: 37 <b>Properties of concrete incorporating Recycle Concrete Aggregates: a sustainable approach</b> <i>Najia Siddiqui, Darya Memon and Javeria Manzoor Shaikh</i>	ID: 60 <b>Geotechnical properties of expansive soil treated with alkali-activated brick dust</b> <i>Arshad Ullah, Sarfraz Ahmed and Muhammad Saqib</i>
16:00 - 16:15	ID: 57 <b>Building Information Modelling (BIM) based Framework for Construction and Demolition Waste Estimation and Management</b> <i>Abdul Mueed Yousfani, Muhammad Saleem Raza, Muhammad Ali Moriyani and Tauha Hussain Ali</i>	ID: 39 <b>Effect of Coir fiber on Flexural Strength of Concrete maintaining Uniform Workability</b> <i>Muhammad Farhan, Fahad Ali Shaikh, Muhammad Amaan and Sarfaraz Ahmad</i>	ID: 81 <b>Determination of Water Requirements and Irrigation Scheduling for Some Major Crops In Sindh Pakistan Using Cropwat Model</b> <i>Ateeque Rehman Sarki, Dr. Ashfaq Ahmed Memon and Dr. Shafi Muhammad Kori</i>
16:15 - 16:30	-	-	ID: 108 <b>Reservoir Modeling By Using HEC-ResSim - A Case Study Of Tarbela Reservoir</b> <i>Saqib Ehsan, Muhammad Usman, Muhammad Ahmed Munir, Abdullah Akram, Muhammad Taqi</i>
16:30 - 16:45	CERTIFICATE DISTRIBUTION		
16:45 - 17:15	TEA SERVING		
19:00 - 22:00	MUSICAL NIGHT AND GALA DINNER		



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### DAY 02 – FRIDAY, FEBRUARY 17, 2023

#### TECHNICAL SESSION 2

SESSION NUMBER	TECHNICAL SESSION 2A	TECHNICAL SESSION 2B	TECHNICAL SESSION 2C
VENUE	Software Lab-II	Seminar Library	Seminar Hall
THEME	Sustainable Construction and Project Management	Sustainable Material and Innovative Structures	Sustainable Urban Planning and Architecture
SESSION CHAIR	<i>Dr. Saad Memon</i>	<i>Dr. Shamsher Sadiq</i>	<i>Prof. Dr. Ashfaqe Pathan</i>
SESSION CO-CHAIR	<i>Dr. Jam Shahzaib</i>	<i>Dr. Zaheer Almani</i>	<i>Prof. Dr. Mir Aftab Talpur</i>
TIME SLOT	PAPERS TO BE PRESENTED		
09:00 - 09:15	Keynote Talk by <b>Dr. Norwati Binti Jamaluddin</b> (online)- <b>Universiti Tun Hussein Onn Malaysia</b> Research and design developments in concrete filled steel tube column structures	ID: 46 <b>Structural Performance of GFRP Reinforced Concrete Frames</b> <i>Sana, Rabinder Kumar and Irtaza Anwar Mughal</i>	ID: 25 <b>Measuring the Covid-19 Impact on Urban Development Patterns Considering Spatial Modelling</b> <i>Sana Safdar Arain, Hina Waheed Jokhio, Muhammad Yousif Mangi, Vinesh Soniya Kumar and Ruqia Sangrasi</i>
9:15- 9:30	Keynote Talk by <b>Dr. Rizwan Farooqui</b> (online) <b>Construction 4.0 – Concepts and Emerging Technologies</b>	ID: 47 <b>Determination of Pozzolanic Activity of Buffalo Dung ash to Utilize as Cement Replacement Material in Concrete</b> <i>Mashood Rehman, Fahad Ali Shaikh, Abdul Rehman, Talha Hussain and Abdul Manan</i>	ID: 118 <b>Window Views in Urban Setting: Impact on Apartment Dwellers in Hyderabad</b> <i>Sara Tanveer, Dr. Sabeen Qureshi</i>
9:30 – 9:45		ID: 49 <b>Effect of Various Cement Brands On The Properties Of Concrete</b> <i>Abhishek Kumar, Azizullah Jamali, Faique Ali and Mubashir Sheikh</i>	ID: 52 <b>Analytical Assessment of Urban Stress in Public and Cooperative Housing Schemes with Perspective on Neuro-Urbanism: Case Studies of Johar Town and WAPDA Town, Lahore City, Pakistan</b> <i>Amna Azeem and Moosa Lakhani</i>
9:45-10:00	ID: 62 <b>Cost Analysis and Economical Suitability of Prefabricated Concrete Structures in Building Construction</b>	ID: 51 <b>Effect of Cow Dung Ash and Recycled Coarse Aggregate on Hardened Properties of Concrete</b> <i>Abdul Manan, Azizullah Jamali, Talha Hussain and Mashood Rehman</i>	ID: 75 <b>Measuring the Impact of Urbanization and Land Use Changes on Agricultural Land: A Case Study of Qasimabad Taluka, Hyderabad City</b>



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	<i>Fatima Naz, Safeer Ahmed, Nafees Ahmed Memon and Noman Ahmed</i>		<i>Rabia Gill, Saima Kalwar and Noman Sahito</i>
<b>10:00-10:15</b>	<p>ID: 64</p> <p><b>Green Retrofitting Of An Existing Building Envelope By Integrating BIM-Based Maximum Thermal Comfort Model: A Case Study</b></p> <p><i>Muhammad Sufyan Noor Khan, Tauha Hussain Ali, Ali Raza Khoso, Muhammad Saleem Raza, Haris Najeeb and Shizra Mughal</i></p>	<p>ID: 72</p> <p><b>To investigate the effect of locally available jute on Properties of concrete.</b></p> <p><i>Muqadas Thebo, Samar Hussain Rizvi and Muhammad Rashid</i></p>	<p>ID: 79</p> <p><b>Urban Renewal of the Commercial Areas: A Case Study of Jhelum Cantonment</b></p> <p><i>Shaharyar Brohi, Muhammad Yousif Mangi, Abdul Latif Mari, Mehtab Abbasi and Muneeba Chhipa</i></p>
<b>10:15 - 10:25</b>	<p>ID: 71</p> <p><b>Framework for Enhancing Adoption of Green Buildings Construction in Pakistan</b></p> <p><i>Raheel Ahmed Shahani, Anees Ahmed Vighio, Naveen Jaisani, Ali Raza Khoso and Dilsher Khan Odho</i></p>	<p>ID: 73</p> <p><b>Effect Of Silica Fume As Partial Replacement Of Cement On Compressive Strength Of Concrete</b></p> <p><i>Shahzad Ali, Muhammad Fahad Ali and Absar Amir, Muhammad Ammar</i></p>	<p>ID: 44</p> <p><b>Bio-Climatic Architecture For Rural Area Of Hyderabad</b></p> <p><i>Asifa Rasool, Sara Tanveer and Raheela Laghari</i></p>
<b>10:25-10:40</b>	<p>ID: 110</p> <p><b>Challenges in Implementing Constructability in Construction Industry – A Systematic Review.</b></p> <p><i>Amir Hamza Rashdi, Dr. Ali Raza Khoso, Dr. Rizwan Ul Haque Farooqi</i></p>	<p>ID: 74</p> <p><b>Exact solution of Timoshenko beam equations subjected to varying loads - a generalization</b></p> <p><i>Hafeezullah Channa, Muhammad Mujtaba Shaikh and Kamran Malik</i></p>	<p>ID: 111</p> <p><b>USPCAS-W Initiative of Bicycle &amp; Its Closure</b></p> <p><i>Rida Zaman, Arabella Bhutto, Adnan Pitafi, Fabiha Khan, Aifaz Ahmad Uqaili</i></p>
<b>10:40 - 10:55</b>	<p>ID: 117</p> <p><b>Limitations in Current Construction Practices of Public Sector Building Projects in Sindh</b></p> <p><i>Jazib Bashir Shaikh, Dr Nafees Ahmed Memon, Anees Ahmed Vighio, Aftab Hameed Memon, Zubair Ahmed</i></p>	<p>ID: 76</p> <p><b>Determination Of Manning’s Roughness Coefficient Of Locally Manufactured Pressed Clay Brick And First-Class Brick</b></p> <p><i>Muhammad Musawir Ali Rajpar, Ashfaque Ahmed Memon, Bilal Ahmed Shaikh and Ashhad Hussain Memon</i></p>	<p>ID: 17</p> <p><b>Sustainable Solution For Uplifting Of Local Markets Of Hyderabad</b></p> <p><i>Ammara Kaynat, Mazhar Rizvi, Ali Raza Khoso</i></p>
<b>10:55 - 11:10</b>	<p>ID: 119</p> <p><b>E-Procurement And Supply Chain Performance In The Construction Industry Of Pakistan</b></p> <p><i>Zubair Ahmed, Dr Nafees Ahmed Memon, Anees Ahmed Vighio, Jazib Bashir Shaikh, Abdul Rehman Kori</i></p>	<p>ID: 84</p> <p><b>Experimental Investigation of Eco-Friendly Concrete Made Of Bentonite And Dolomite (Muzaffarabad Kamsar Quarry Dust)</b></p> <p><i>Israr Ahmad Awan, Syed Saqib Mehboob and Raja Wajahat Zahoor Khan</i></p>	
<b>11:10 - 11:30</b>	<b>TEA BREAK</b>		



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### DAY 02 – FRIDAY, FEBRUARY 17, 2023

#### TECHNICAL SESSION 3

SESSION NUMBER	TECHNICAL SESSION 3A	TECHNICAL SESSION 3B	TECHNICAL SESSION 3C
VENUE	Software Lab-II	Seminar Library	Seminar Hall
THEME	Sustainable Construction and Project Management	Sustainable Material and Innovative Structures	Intelligent Systems in Highway and Traffic Engineering
SESSION CHAIR	<i>Prof. Dr. Nafees Ahmed Memon</i>	<i>Prof. Dr. Abdullah Sand</i>	<i>Prof. Dr. Agha Faisal Habib</i>
SESSION CO-CHAIR	<i>Dr. Jam Shazaib</i>	<i>Prof. Dr. Zaheer Almani</i>	<i>Prof. Dr. Naeem Aziz Memon</i>
TIME SLOT	PAPERS TO BE PRESENTED		
11:30 - 11:45	ID: 122 <b>Causes Of Conflicts Due to Contractual and Technical Problems In Building Construction Projects</b> <i>Saifullah Abbasi, Nafees Ahmed Memon, Anees Ahmed Vighio, and Marina Stoian</i>	ID: 85 <b>Design And Comparison of RCC Building Using Integrated BIM-Based Design Workflow</b> <i>Muhammad Yousaf, Muhammad Habib, Mohammad Sohaila, Muhammad Tayyaba, Muhammad Javedan</i>	Keynote Talk by <b>Prof. Dr. Naveed Ahmed (online)</b> <b>Durability/Moisture Susceptibility Of Asphalt Concrete</b>
11:30- 11:45	ID: 123 <b>Tasks And Practices Involved In Conceptual Phase To Improve Construction Productivity</b> <i>Kanwar Ram, Aftab Hameed Memon, Nafees Ahmed Memon, Satram Das, Nicolae Postavaru</i>	ID 97 <b>Effect of Recycled Porcelain-Ceramic Aggregates on Concrete: A Review</b> <i>Mohsin Ali Bhutto and Mehran Sudheer</i>	ID: 11 <b>Exploring The Issue of Transportation Within MUET, Jamshoro</b> <i>Rida Zaman, Prof Dr Arabella Bhutto, Dr Adnan Pitafi, Fabiha Khan and Aifaz Uqaili</i>
11:45- 12:00	ID: 125 <b>Quantification of the Non-Biodegradable Waste Through Empirical Model</b> <i>Maham Imtiaz and Abdul Razzaque Sahito</i>	ID: 112 <b>Utilization Of Bacterial Concrete for Repair Works</b> <i>Syed Rafay Ali Bukhari, Syed Talha Ahmed, Ali Raza Khoso, Muhammad Taha</i>	ID: 28 <b>Development of Guidelines for Road Safety Education – A Way Forward Approach in Motorizing Countries</b> <i>Khawaja Sheeraz, Dr. Naeem Aziz Memon, Dr. Nafees Ahmed Memon, Dr. Aftab Hameed Memon and Khawaja Jamal Ahmed</i>



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12:00-12:15	ID: 126 <b>Development of the Model to Estimate the Biodegradable Solid Waste Generation Rate</b> <i>Saheba Memon and Abdul Razaque Sahito</i>	ID: 114 <b>Enhancing Mechanical Properties of Concrete Using Industrial Waste Materials</b> <i>Engr Norheen amina, Engr Habiba Mohsin, Engr Amna Irfan, Engr Hira Ishtiaq, Ihsan Shahbaz</i>	ID: 29 <b>Comparative Analysis for Base Materials of Flexible Pavement through Standard Combinations of Aggregates and Lab Procedures</b> <i>Syed Faraz Jafri, Dr. Naeem Aziz Memon, Dr. Rizwan Ali Memon and Kamran Khan</i>
12:15-12:30	ID: 127 <b>Barriers towards the Adoption of E-Procurement in Construction Industry of Sindh Pakistan</b> <i>Raja Zulquarnain Nizakat, Anees Ahmed Vighio, Dr. Nafees Ahmed Memon and Danish Talpur</i>	ID: 107 <b>Effect of Acid and Chloride Attack on Durability Properties of Mortar Containing Fly Ash</b> <i>Raja Wajahat Zahoor Khan, Muhammad Yaqub, Raja Shujahat Zahoor Khan</i>	ID: 38 <b>A Review on Congestion Pricing Solutions to Tackle the Urban Traffic Congestion</b> <i>Zaid Khan</i>
12:30-12:45	ID: 128 <b>An empirical study on the cost of collection of the MSW - A case study of Hyderabad</b> <i>Siddiqa Soomro, Abdul Razzaque Sahito, Maham Imtiaz, Sahiba Memon</i>	-	ID: 59 <b>Effects Of Waste Engine Oil And Crumb Rubber On Physical Properties Of Bitumen</b> <i>Muhammad Fahad Ali, Dr. Rizwan Ali Ali Raza Lashari, Muhammad Hamza Siddiquia, Aisha Ahmed</i>
12:45-13:00	ID: 109 <b>An Expert System for Disputes Avoidance in Highways, Public Sector Projects of Pakistan Construction Industry</b> <i>Saeed Ahmed, Nafees Ahmed Memon, Tauha Hussain Ali, Aftab Hameed Memon, Ali Raza Khoso</i>	-	ID: 61 <b>Empirical Analysis of Level of Service Based on Users Perception at Hyderabad Toll Plaza</b> <i>Aisha Ahmed, Muhammad Fahad Alia and Shoaib Abdullah</i>
13:00-13:15	CERTIFICATE DISTRIBUTION		
13:15 - 15:00	PRAYER & LUNCH BREAK		





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### DAY 02 – FRIDAY, FEBRUARY 17, 2023

#### CONCLUDING CEREMONY - USPCAS-W AUDITORIUM, MUET JAMSHORO

Time		Activity
From	To	
15:00	15:05	Guests to be seated
15:05	15:10	Recitation of Holy Quran
15:10	15:25	Keynote Talk by Sheikh Muhammad Farooq
15:25	15:30	Conference Achievements by Conference Co-Secretary
15:30	15:35	Conference Recommendations by Conference Co-Chair
15:35	15:50	Speech by Chief Guest
15:50	16:00	Announcement & Shield Distribution for the Best Paper Award, Shield Distribution to Conference Sponsors
16:00	16:15	Shield & Certificate Distribution to Conference Organizing Team
16:15	16:20	Vote of Thanks by Conference Patron- Dean Faculty of Architecture & Civil Engineering

#### TEA SERVING (16:20 TO 16:40)

### DAY 03 – SATURDAY, FEBRUARY 18, 2023

#### FIELD VISIT (08:30 TO 16:30)