

## KEYNOTE SESSIONS

DAY 1, 26/07/2023

Venue : GMMPH		
<u>Time</u>	<u>Paper Title</u>	<u>Authors' Name</u>
09:45- 10:20	Christchurch Post-Earthquake Recovery	Dr. Gregory MacRae Professor, University of Canterbury, New Zealand
10:20- 10:40	Role of Engineer's Corps of Bangladesh Army in Different Mega Infrastructure Projects	Maj Gen Abu Syeed Md Masud (Retd) BD Army

Venue : GMMPH		
Session Chair : Prof. Dr. Raquib Ahsan, BUET		
<u>Time</u>	<u>Paper Title</u>	<u>Authors' Name</u>
14:15- 15:00	E-Defense Shake-Table Tests and Correlative Analyses on Full-Scale 5-story Buildings with/without Dampers	Dr. Kazuhiko Kasai Professor, Tokyo Institute of Technology, Japan

DAY 2, 27/07/2023

Venue : GMMPH		
Session Chair : Prof. Dr. Khan Mahmud Amanat, BUET		
<u>Time</u>	<u>Paper Title</u>	<u>Authors' Name</u>
09:00- 09:40	An Innovative Steel Braced Frame System for Controlled Self-Centering Elastic Seismic Response of Low-Rise Steel Building Structures	Dr. Robert Tremblay Professor, Polytechnique Montréal, Canada
09:40- 10:20	Cold-formed Stainless Steel Double Shear Bolted Connections in Fire	Dr. Ben Young Professor, Hong Kong Polytechnic University, Hong Kong

<b>Venue : GMMPH</b>		
<b>Session Chair : Prof. Dr. Larry Fahnestock, UIUC</b>		
<b><u>Time</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
10:45- 11:15	Designing Resilient Structures and Components Under Extreme Loading Conditions	Dr. Tasnim Hassan Professor, North Carolina State University, USA
11:15- 11:45	Future Infrastructures for the People by the Professionals Crafted by the Educators	Dr. AFM Saiful Amin Professor, Bangladesh University of Engineering and Technology, Bangladesh

<b>Venue : GMMPH</b>		
<b>Session Chair : Prof. Dr. Munaz Ahmed Noor, BUET</b>		
<b><u>Time</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
11:45- 12:15	Towards Building Resilience through Reconnaissance: Artificial Intelligence Approaches for Structural Health Monitoring	Dr. Khalid Mosalam (Online) Professor, UC Berkeley, USA

<b>Venue : GMMPH</b>		
<b>Session Chair : Prof. Dr. Abdul Jabbar Khan, BUET</b>		
<b><u>Time</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
14:15- 15:00	Seismic Resilience through a Frame-Spine System with Force-Limiting Connections	Dr. Larry Fahnestock Professor, University of Illinois Urbana-Champaign, USA

<b>Venue : GMMPH</b>		
<b>Session Chair : Prof. Dr. Ben Young, HK</b>		
<b><u>Time</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
17:10- 17:40	Risk, Resilience and Sustainability of Civil Infrastructure under Single and Multiple Hazards in a Life-Cycle Optimization Framework	Dr. Dan Frangopol (Online) Professor, Lehigh University, USA

## **DISTINGUISHED SESSIONS**

**DAY 1, 26/07/2023**

<b>Venue : GMMPH</b>		
<b>Session Chair : Prof. Dr. Robert Tremblay, Polytechnique Montreal</b>		
<b><u>Time</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
11:45- 12:15	Super-elastic SMAs for Improved Seismic Performance of Concrete Structures	Dr Dan Palermo Professor, York University, Canada
12:15- 12:45	Optimization of Multiple Tuned Mass Damper Parameters Using Evolutionary Operation Algorithm Considering Soil-Structure Interaction	Dr. Raquib Ahsan Professor, Bangladesh University of Engineering and Technology, Bangladesh
12:45- 13:15	Experimental Validation of Life-Cycle-Oriented Computational Methods for Structural Analysis of Concrete Bridges under Corrosion	Dr Fabio Biondini Professor, Politecnico di Milano, Italy
13:15- 14:15	Lunch	

<b>Venue : GMMPH</b>		
<b>Session Chair : Prof. Dr. M. Shahria Alam, UBC</b>		
<b><u>Time</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
15:00- 15:30	Design and Applications of Low Carbon High Performance Concrete with Multiple Requirements	Dr Caijun Shi (Online) Professor, Hunan University, China
15:30- 16:00	Modelling of Large-deformation Problems in Geotechnical Engineering	Dr Bipul Hawlader Professor, Memorial University of Newfoundland, Canada
16:00- 16:30	Performance of Prestressed Concrete Girders Subjected to Over height Vehicle Impact	Dr Mohamed ElGawady Professor, Missouri University of Science and Technology, USA
16:30- 16:45	Refreshment	

**DAY 2, 27/07/2023**

<b>Venue : GMMPH (Distinguish/Keynote)</b>		
<b>Session Chair : Prof. Dr. Munaz Ahmed Noor, BUET</b>		
<b><u>Time</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>11:45- 12:15</b>	Towards Building Resilience through Reconnaissance: Artificial Intelligence Approaches for Structural Health Monitoring	Dr. Khalid Mosalam (Keynote-Online) Professor, UC Berkeley, USA
<b>12:15- 12:45</b>	Towards Earthquake Resilience: Using Super elastic SMA for High-Performance Seismic-Resistant Braced Frames	Dr. Songye Zhu Professor, The Hong Kong Polytechnic University, Hong Kong
<b>12:45- 13:15</b>	Cyclic Stress-Strain Model for Circular Concrete-Filled Steel Tubular Columns	Dr. Dipti Ranjan Sahoo (Online) Professor, Indian Institute of Technology Delhi, India
<b>13:15- 14:15</b>	Lunch	

<b>Venue : GMMPH</b>		
<b>Session Chair : Prof. Dr. Gregory MacRae, University of Canterbury, New Zealand</b>		
<b><u>Time</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>15:00-15:30</b>	New Seismic Design Provisions in BNBC-2020: A Quick Appraisal	Dr. Tahmeed M. Al-Hussaini Professor, Bangladesh University of Engineering and Technology, Bangladesh
<b>15:30- 16:00</b>	Corrosion-induced Performance Degradation of Bridges - from Material to the Infrastructure Level	Dr. Swagta Basu (Online) Assoc Professor, Indian Institute of Technology Bombay, India

## INVITED SESSIONS

**DAY 1, 26/07/2023**

<b>Venue : T1-Central Conference Room</b>		
<b>Session Chair : Prof. Dr. Tasnim Hassan, NCSU, USA</b>		
<u>Time</u>	<u>Topic</u>	<u>Authors' Name</u>
15:00- 15:15	U-shaped hysteresis SMA damper for seismic isolation: A numerical study	Dr. Anant Parghi Asst. Professor, Sardar Vallabhbhai National Institute of Technology, India
15:15- 15:30	An Alternative Aggregate for Sustainable Concrete	Dr. Md. Jahidul Islam Assoc. Professor, Military Institute of Science and Technology, Bangladesh
15:30- 15:45	Comprehensive Study on CPT-based Liquefaction Vulnerability Assessment: The Case Study of Araihasar, Bangladesh	Dr. Hossain Md Shahin Professor, Islamic University of Technology, Bangladesh
15:45- 16:00	Effectiveness of Vetiver Grass on Hill Slope Erosion and Drainage System of Chattogram Metropolitan	Dr. Mohiuddin Ahmed Assoc. Professor, Military Institute of Science and Technology, Bangladesh
16:00- 16:15	Padma Bridge Rail Link Project and its Implementation Challenges in the context of Bangladesh	Brig Gen Abul Kalam Azad, ndc, psc, PhD Padma Bridge Rail Link Project
16:15- 16:30	Development and Performance Evaluation of Geopolymer Concrete Incorporating Fly Ash, GGBS, and Graphene Nanoplatelets	Dr. Tanvir Qureshi (Online) University of West of England Bristol, UK
16:30- 16:45	Refreshment	

<b>Venue : T1-Central Conference Room (Invited/Technical)</b>		
<b>Session Chair : Prof. Dr. Songye Zhu, HK</b>		
<u>Time</u>	<u>Topic</u>	<u>Authors' Name</u>
16:45- 17:05	Structural Health Monitoring for Resilient Communities	Dr. Sifat Muin Asst. Professor, University of Southern California, USA
17:05- 17:25	Numerical Simulation of Residual Stresses in Structural Steel Members	Dr. Shahriar Quayuum Asst. Professor, Manhattan College, USA
17:25- 17:45	Vibration Analysis of Light Rail Transit (LRT) Bridge Supported on Rocking Pier(s) and Isolated Abutments	Engr Md. Saifuzzaman Parsons, Canada

17:45- 18:00	Influence of Fire Resilience Requirement on the Sustainability of Concrete Slabs	Dr. Safat Al-Deen (Online) University of New South Wales, Australia
18:00- 18:15	Tall Wood and Hybrid Buildings with Innovative Structural Concepts	Dr. Asif Iqbal (Online) Assoc. Prof, University of Northern British Columbia, Canada

**DAY 2, 27/07/2023**

<b>Venue : T1-Central Conference Room</b>		
<b>Session Chair : Prof. Dr. Mohamed ElGawady, MST, USA</b>		
<b><u>Time</u></b>	<b><u>Topic</u></b>	<b><u>Authors' Name</u></b>
11:45- 12:00	Stabilization of Expansive Subgrade Soil Using Industrial By-products: Role of Activators	Dr. M Russedul Islam Assoc. Professor, Military Institute of Science and Technology, Bangladesh
12:00- 12:15	Unlocking the Future: Synergizing Machine Learning and Biomechanics for Advancing Structural Engineering	Dr. Tanvir Mustafy Assoc Professor, Military Institute of Science and Technology
12:15- 12:30	Axial, Shear, and Bending Resistance of Pretensioned Spun Precast Concrete (SPC) Pile	Dr. Khondaker Sakil Ahmed Assoc. Professor, Military Institute of Science and Technology, Bangladesh
12:30- 12:45	Sustainable Construction Practices in Megacity Dhaka: Lowering Carbon Emissions and Meeting SDGs	Dr. Md. Tauhid Ur-Rahman Professor, Military Institute of Science and Technology, Bangladesh
12:45- 13:00	Asphaltene Precipitation Optimization Through Partial Dissolution Using Si-SARA Method	Dr. Nazmus Sakib Asst Professor, Islamic University of Technology, Bangladesh
13:00-13:15	Sustainable Concrete and Resilient RCC Structures - Essential for Economic Growth of Bangladesh	Dr. Rupak Mutsuddy Assoc. Professor, Bangladesh University of Engineering and Technology, Bangladesh
13:15-14:15	Lunch	

<b>Venue : GMMPH</b>		
<b>Session Chair : Prof. Dr. Dan Palermo, York University, Canada</b>		
<b><u>Time</u></b>	<b><u>Topic</u></b>	<b><u>Authors' Name</u></b>
16:00- 16:18	Characterizing the Long-lasting Resilience against Corrosion and Vehicular Collisions for Bridges in Canada	Dr. Cancan Yang Asst. Professor, McMaster University, Canada

16:18- 16:36	Vetiver Grass Technology for Climate Resilient Sustainable Infrastructure and Disaster Risk Reduction	Dr. Md Shariful Islam Professor, Bangladesh University of Engineering and Technology, Bangladesh
16:36- 16:54	Shape Memory Alloys for Multi-hazard Resiliency of Highway Bridges	Dr. Muntasir Billah Asst. Professor, University of Calgary, Canada
16:54- 17:12	Performance Based Concrete Mix and Cover Design in Saline Exposure: Why and How?	Dr. Tanvir Manzur Professor, Bangladesh University of Engineering and Technology, Bangladesh
17:12- 17:30	Development of a New Pavement Performance Model and Its Application	Dr. Kamal Hossain Assoc. Professor, Carleton University, Canada
17:30- 17:45	Refreshment	

<b>Venue : T1-Central Conference Room (Invited/Keynote)</b>		
<b>Session Chair : Prof. Dr. Ben Young, HK</b>		
<b><u>Time</u></b>	<b><u>Topic</u></b>	<b><u>Authors' Name</u></b>
16:00- 16:18	Improving structural performance and design of aluminum tubular member using CFRP composites under web crippling loading (C04-0003)	Dr. S M Zahurul Islam Professor, RUET, Bangladesh
16:18- 16:36	Seismic Performance Evaluation of Stainless Steel Frames	Dr. Shameem Ahmed Professor, Bangladesh University of Science and Technology, Bangladesh
16:36- 16:54	Smart method of FRP laminates for shear strengthening of RC beam: Research to Practice	Dr. Ashraful Alam Assoc. Professor, University of Asia Pacific, Bangladesh
16:54- 17:12	Seismic Fragility Assessment of Multispan RC Bridges using Generative Adversarial Networks of Machine Learning	Dr. Abdur Rahman Bhuiyan Professor, Chittagong University of Engineering and Technology, Bangladesh
17:12- 17:30	Risk, Resilience and Sustainability of Civil Infrastructure under Single and Multiple Hazards in a Life-Cycle Optimization Framework	Dr. Dan Frangopol (Keynote-Online) Professor, Lehigh University, USA
17:30- 17:45	Refreshment	

**TECHNICAL SESSIONS, T1 (DAY 1, 26-07-23)****Theme : Urban Infrastructure and Transportation Management-1****Venue : T3-L3-Cyber Range Conference Room****Session Chair : Prof. Dr. Javed Bari, NSU**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
15:00-15:15	C10-0001	An Analytical Study of Land Use and Transportation Scenario in Dhaka for Transit-Oriented Development: Steering towards Sustainability	Md. Anwar Uddin, Md. Shaharul Islam
15:15-15:30	C10-0004	Investigating Dhaka-Khulna (N8) Expressway Commuters' Perceptions on Travel Mode Choice Activity Patterns: Using Multinomial Logistic Regression Model	B. M. Assaduzzaman, Nur Shayeda Shoulin, Md. Shibber Hossain, Md. Mizanur Rahman
15:30-15:45	C10-0007	Assessing road profile using GPS, road mapping using ARC-GIS and analyzing the effect of speed breakers on vehicular speed reduction	Mohammad Shahriar, Rahman Riyad, Sarajeen Saima Hoque
15:45-16:00	C10-0009	Artificial Intelligence-based Perceived Motorcycle Risk Prediction in Bangladesh's Urban Driving Environment	Gausul Azam Noman, Md. Mushtaque Tahmid, Md Asif Raihan, Md. Shamsul Hoque
16:00-16:15	C10-0010	Comparative study on air pollution due to gas emission and energy consumptions of electric and internal combustion engine vehicles	Ahmed Imtiaz Zamee, Ritu Progga Saha, Tanima Roy, Md. Ibrahim Al Imran
16:15-16:30	C10-0016	Perception of Commuters about Local City Bus Services in Dhaka– A Case Study in Gabtoli to New Market Route	Umme Tahmina Toma, Joy Podder, Washilatun Nahar
16:30-16:45	Refreshment		

**TECHNICAL SESSIONS, T2 (DAY 1, 26-07-23)****Session : Structural Dynamics and Vibration-1****Venue : T1-L3-R301****Session Chair : Dr. Muntasir Billah, University of Calgary, Canada**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
15:00-15:15	C02-0011	Performance evaluation of default nonlinear hinges of ETABS to predict lateral behavior of RC frame	Mohaiminul Hassan, Debasish Sen, Matsutaro Seki, Md. Wahidul Islam
15:15-15:30	C02-0014	Investigation on the impact of bracings and shear walls on seismic performance of buildings	Shahriar Alam, Chowdhury Zubayer Bin Zahid, Redwan Ul Islam



15:30-15:45	C02-0016	Seismic performance of reinforced concrete (RC) frame structure with haunch beams	Md. Foisal Haque, Md. Mozammel Hoque
15:45-16:00	C02-0017	Vibration-based damage identification of a steel frame using an output-only algorithm	Nazmuz Sakib, Shohel Rana
16:00-16:15	C02-0019	Effect of LRB constitutive models on the seismic response of an LRB-isolated highway bridge	Vahid Aghaeidoost, AHM Muntasir Billah
16:15-16:30	C02-0023	Significance of shear walls on nonlinear behavior and seismic performance of reinforced concrete flat-plate buildings	Aditi Saha, Kashfia Nazneen
16:30-16:45	Refreshment		

### TECHNICAL SESSIONS, T3 (DAY 1, 26-07-23)

**Session : Structural Dynamics and Vibration-2**

**Venue : T1-L3-R302**

**Session Chair : Dr. Tanvir Mustay, MIST**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
15:00-15:15	C02-0026	Effect of transverse reinforcement on the seismic design of bridge substructure in high seismic zone of Bangladesh	Afiya Anzum Nimu, Tahsin Reza Hossain
15:15-15:30	C02-0029	Seismic performance assessment of flat slabs in buildings with shear walls	Kashfia Nazneen, Aditi Saha, Abir Khan Ratul
15:30-15:45	C02-0032	A multi-objective global optimization approach for vibration and cost minimization of a reinforced concrete tall building	Akib Mahmud, Raquib Ahsan
15:45-16:00	C02-0040	Plastic hinge length in reinforced concrete couple shear wall buildings for seismic reinforcement detailing – a comparison study	Sk Amjad Hossain, Ashutosh Bagchi (Online)
16:00-16:15	C02-0041	Assessing risk perception and enhancing earthquake awareness: a case study of Dhaka	Satabdi Podder, Anika Nawar, Maksuda Emon, Tanvir Mustafy
16:15-16:30	C05-0051	Parameters Contributing to the Strength Reduction of Self-Centering Concrete Bridge Piers	Devabrata Dutta, Nazrul Islam
16:30-16:45	Refreshment		

**TECHNICAL SESSIONS, T4 (DAY 1, 26-07-23)****Session : Structural Condition Assessment and Health Monitoring****Venue : T1-L3-R304****Session Chair : Dr. Khandakar Sakil Ahmed, MIST**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
15:00-15:15	C03-0009	Identification of FRP debonding of an I-girder bridge using statistical analysis of impulse induced vibration responses	Md. Abrar Rahman, Rumman Abrar, Shohel Rana
15:15-15:30	C03-0024	Screening and prioritization for detailed seismic evaluation of large stock existing RC buildings	Md Shafiul Islam, Akm Sajadur Rahman, Masaki Maeda, Md Ashraful Alam
15:30-15:45	C03-0031	Condition assessment of RC building as part of structural health monitoring (SHM) using micro-tremor measurement system in Bangladesh: a case study	Anik Das, S. M. Muhaiminul Islam, Md. Shafiul Islam, Partha Saha, Md. Abdur Rahman Bhuiyan, Md. Ashraful Alam
15:45-16:00	C03-0034	Structural Health Monitoring Implementation for Padma Bridge: Advancing Structural Safety and Maintenance Strategies	Maksuda Emon, Satabdi Podder, Anika Nawar, Tanvir Mustafy
16:00-16:15	C01-0010	A comparative study on the application of shallow foundations for sustainable construction in reclaimed lands: a comparison of field experiment and theoretical results in Dhaka, Bangladesh	Mohammad Ali, Quazi Umme Rukiya, Mirza Md Tasnim, Mukarram, Mahfuza Khanum, Sadman A Sakib
16:15-16:30	C03-0039	Inspection and Evaluation of Bridges and Culverts – An Initiative in Bangladesh	Jahidul Islam, Shishir Kanti Routh, Md Zikrul Islam, Md Moniruzzaman, Santanu Palit, Md Sajib Ahamed, Abdullah Al Mamun
16:30-16:45	Refreshment		

**TECHNICAL SESSIONS, T5 (DAY 1, 26-07-23)****Session : Repair, Rehabilitation and Retrofitting of Structures-1****Venue : T3-L3-CSE Conference Room****Session Chair : Dr. Cancan Yang, McMaster University**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
15:00-15:15	C04-0002	The impact of FRP on flexural behavior of reinforced concrete beams:	Kashfia Nazneen, Abir Khan Ratul

		a comparative study of design guidelines	
<b>15:15-15:30</b>	C04-0018	Prediction of interfacial bond strength of externally bonded CFRP laminate with embedded connector for shear strengthening of RC beam	Md. Ashraful Alam, Md. Delwar Hossain, Md. Mehedi Hasan Polash, Md. Sharia Islam, S.M Sharjiul Islam, Nur Mohammad
<b>15:30-15:45</b>	C04-0007	Enhancement of axial capacity of brick masonry column by reinforced concrete jacketing	Md. Zakaria Habib, Md. Ahsan Habib, Md. Mozammel Hoque
<b>15:45-16:00</b>	C02-0034	Analysis of Seismic Damage Patterns of a Cross-Fault Simply-supported Isolation Girder Bridge	Shengze Tian, M. Shahria Alam
<b>16:00-16:15</b>	C04-0011	Stiffening and strengthening of the frame elements of soft ground storied buildings using structural steel shapes	Faria Khan, Khan Mahmud Amanat
<b>16:15-16:30</b>	C03-0022	Assessment of Concrete Box-Girder Exposed to Interior Fire	Rakib Talukder, Farheen Siddique, Sk. Rakibul Islam, Tanvir Manzur
<b>16:30-16:45</b>	Refreshment		

### **TECHNICAL SESSIONS, T6 (DAY 1, 26-07-23)**

**Session : Repair, Rehabilitation and Retrofitting of Structures-2**

**Venue : T1-L3-R305**

**Session Chair : Dr. Ashraful Alam, UAP**

<b><u>Time</u></b>	<b><u>Paper ID</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>15:00-15:15</b>	C04-0014	Performance-based damage states for seismic retrofitting of reinforced concrete bridge bent	Abu Obayed Chowdhury, A. H. M. Muntasir Billah, M. Shahria Alam
<b>15:15-15:30</b>	C04-0016	Finite element investigation on the effect of FRP strengthening on capacity of steel square HSS columns	Maimuna Raisa Rafique, Khan Mahmud Amanat
<b>15:30-15:45</b>	C04-0017	Seismic strengthening of bridge piers using innovative jacketing methods: a critical review	M. Shahria Alam, Meraj Rubayat Kamal, Ahmed Bediwy
<b>15:45-16:00</b>	C04-0019	Experimental investigation on confinement of concrete using low-cost technologies	Shah Nawaj Rahman Rubel, Ismail Saifullah, Sk. Nahian Kabir, Mohammad Ferdous-Uz-Zaman, Mohammad Ali
<b>16:00-16:15</b>	C05-0039	Revisiting the shear design provisions for FRP-RC deep beams without stirrups	Khan Abid Ahsan, Kamrul Islam, S. M. Faisal Mahmood, Farabi Bin

			Ahmed, Md. Fazla Rabbi Anik
<b>16:15-16:30</b>	C05-0038	Ultimate compression capacity of Unbonded Steel-Mesh Reinforced Rubber Bearings	Han Li, M. Shahria Alam
<b>16:30-16:45</b>	Refreshment		

**TECHNICAL SESSIONS, T7 (DAY 1, 26-07-23)**

**Theme : Innovative Materials and Structures**

**Venue : T3-L3-Artificial Intelligence Lab**

**Session Chair : Engr Md. Saifuzzaman, Parsons, Canada**

<b><u>Time</u></b>	<b><u>Paper ID</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>15:00-15:15</b>	C05-0012	Constitutive models of shape memory alloys for structural engineering applications	Ali Mohammad Gholipour, AHM Muntasir Billah
<b>15:15-15:30</b>	C05-0015	Lateral cyclic response of SMA-based hybrid steel bridge piers: a parametric study	Md.Fazla Rabbi Anik, Kamrul Islam, S. M. Faisal Mahmood, Khan Abid Ahsan
<b>15:30-15:45</b>	C05-0021	Behavior of beam-column joint in fully encased composite column subjected to cyclic and monotonic loading	Maliha Mannan, Auritry Saha, Khadiza-Tul Kobra, Takwiir Tahriim Khan, Tahseen Islam Talulder, Gazi Algaj Hossain, Md. Soebur Rahman
<b>15:45-16:00</b>	C05-0026	Experimental investigation of paralleled disc spring-based self-centering viscous dampers	Xin Yan, Ganping Shu, Shahria Alam
<b>16:00-16:15</b>	C05-0031	Performance of concurrent shear wall as a bracing system to resist lateral load on supertall structures	Nazmul Hasan, Md. Saiful Islam, Iftekhar Anam
<b>16:15-16:30</b>	C06-0006	Effect of thermo mechanically treated (TMT) bars in low and medium strength concrete beams.	Md. Faiyaz Shahriar, Noor Nasim
<b>16:30-16:45</b>	Refreshment		

**TECHNICAL SESSIONS, T8 (DAY 1, 26-07-23)****Session : Urban Infrastructure and Transportation Management-2****Venue : T3-L3-Cyber Range Conference Room****Session Chair : Dr. M Russedul Islam, MIST**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:45-17:00	C10-0033	An Empirical Investigation on User Satisfaction of Ride Sharing Services: A Structural Equation Modelling Approach	Fuad Al-Mahmud, Md.Shamsul Hoque
17:00-17:15	C10-0040	A Case Study on the Evaluation of Street Lightning Performance Efficiency in the Dhaka Metropolitan Area	Md Shibber Hossain, B. M. Assaduzzaman, Nur Shayeda Shoulin, Md. Mizanur Rahman
17:15-17:30	C10-0042	Visual Assessment of Selected Roads of Dhaka City	Mofizul Islam, Nur Shadia, Anup Kumar Paul
17:30-17:45	C10-0043	Impact of a Dedicated Bicycle Lane at a Selected Intersection	Anika Tahsin, Ahmed Ferdous Nafis, Nasir Uddin Ahmed
17:45-18:00	C10-0044	Optimizing the Evacuation Planning for The Rohingya Refugee Crisis in Bangladesh Using a Multi-Objective Optimization Technique	Samia Zakir Sarothi, Tanvir Mustafy
18:00-18:15	C10-0015	Cracking Behavior of Continuously Reinforced Concrete Pavement (CRCP) on National Highway in Bangladesh	Md. Joynul Abadin, Asik Kadir, A.H.M. Javed Hossain Talukdar, M. Afid Hussain, Santosh Kumar Roy, Md. Waliur Rahman

**TECHNICAL SESSIONS, T9 (DAY 1, 26-07-23)****Theme : Geotechnical Engineering-1****Venue : T1-L3-R301****Session Chair : Prof. Dr. Hossain Shahin, IUT****Session Aid : Lec Fariha**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:45-17:00	C08-0016	Effects of Nonplastic Silts on Engineering Properties of Sands	Asif Sadique, Md. Abdul Kader, Md Ferdous Alam
17:00-17:15	C08-0018	Determination of Flow Line Slope for One-Point Liquid Limit Test of Fine-grained Soils in Bangladesh	Md Ferdous Alam, Md Mohit Uzzaman, Ashkar Rahman Aquib, Asif Sadique

<b>17:15-17:30</b>	C08-0022	Seismic Site Classification Based on Average N30 values in Four Seismic Zones in Bangladesh	Indrajit Kumar Paul, Abdul Hafizh, Farzin Hassan Moumita, Partha Saha
<b>17:30-17:45</b>	C08-0026	Estimating Engineering Properties of Cohesive Soils Using Atterberg Limits	Ashkar Rahman Aquib, Md Mohit Uzzaman, Md Ferdous Alam
<b>17:45-18:00</b>	C08-0027	Geotechnical site characterization and liquefaction potential assessment of reclaimed soil in Jolshiri Abashon	Shoha Taiul Oyshe, Raihad Farin Mahi, Kh. Afia Farzana, Mohiuddin Ahmed, Khondaker Sakil Ahmed
<b>18:00-18:15</b>	C03-0032	Performance Assessment of Pile group Supported Highway Bridges Considering Scour and Earthquake Hazards	Lianxu Zhou, Aijun Ye, M. Shahria Alam

### **TECHNICAL SESSIONS, T10 (DAY 1, 26-07-23)**

**Theme : Performance of Construction Materials-1**

**Venue : T1-L3-R302**

**Session Chair : Prof. Dr. Sharmin Reza Chowdhury, AUST**

<b><u>Time</u></b>	<b><u>Paper ID</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>16:45-17:00</b>	C05-0007	An experimental study on rapid hardening cement to compare with normal hardening cement	Tasdia Haque Arpi, Dr. Raquib Ahsan, Bidyot Kumar Banik
<b>17:00-17:15</b>	C05-0017	Mechanical and durability properties of geopolymer concrete: a review	Subnam Mustary Anamica, Md. Jahidul Islam
<b>17:15-17:30</b>	C05-0018	Effect of various sodium hydroxide molarity and curing conditions on the compressive strength of induction furnace slag mortar	Subnam Mustary Anamica, Md. Jahidul Islam, Safiuddin Mahmood Shoaib, Mohammad Abdullah-Al-Kawser
<b>17:30-17:45</b>	C05-0035	The impact of foam concrete density on the hygrothermal performance of buildings: a simulation study	Hamais Sajid, Farnaaz Batool, Chen Bing
<b>17:45-18:00</b>	C05-0042	Strength comparison of concrete cylinders and cubes induced with different degrees of steel fibers	Soumya Suhreed Das, Md. Solaiman Sarker, Auchto Dey
<b>18:00-18:15</b>	C07-0001	Reaction degree and chloride binding in slag blends: influence of temperature on low water-to-binder ratio	Fahmida Parvin, Yao Luan

**TECHNICAL SESSIONS, T11 (DAY 1, 26-07-23)****Theme : Performance of Construction Materials-2****Venue : T1-L3-R304****Session Chair : Prof. Dr. Bipul Hawlader, MUN, Canada**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:45-17:00	C05-0049	Investigation of the Open Time and Compressive Strength of Alkali-Activated Mixtures for 3D-Printed Concrete	Fareh Abudawaba, Eslam Gomaa, Ahmed A. Gheni and Mohamed ElGawady
17:00-17:15	C07-0036	Optimization of silica-fume and fumed silica content in high-strength concrete	Foysal Ahmed, Md Reyazul Islam, Muhammad Rafiul Mahdi, Md. Moinul Islam
17:15-17:30	C07-0037	Assessment of Blended Cement Mortar with Fly Ash and Limestone Powder	Nahreen Mobasharah, Md. Mehedi Hassan, Misbah Uddin Ahmed, Tasnia Ahmed, Gazi Algaj Hossain, Md. Jahidul Islam
17:30-17:45	C01-0002	Life Cycle Cost Analysis on Airport Pavement Design with Different Types of Materials	B. M. Assaduzzaman Nur, Md. Shibber Hossain, Shayeda Shoulin, Md. Mizanur Rahman
17:45-18:00	C06-0014	Life cycle assessment of rigid and flexible pavements: A review in Bangladesh perspective	Abdur Razzak Zubaer, Riyadul Hashem Riyad,
18:00-18:15	C06-0038	Short-Term and Long-Term Aging Performance of Styrene Butadiene Styrene (SBS) Modified Asphalt Binder	Riyadul Hashem Riyad, Abdur Razzak Zubaer, Rahul Acharjee, Tahamina Fariya Supty, Mohd. Nafees Azam Khan

**TECHNICAL SESSIONS, T12 (DAY 1, 26-07-23)****Theme : Recycling, Reuse and Sustainability of Construction Materials-1****Venue : T3-L3-Artificial Intelligence Lab****Session Chair : Dr. Md. Soebur Rahman, MIST**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:45-17:00	C07-0003	Strength Behavior of Glass Fiber Reinforced Concrete with Recycled Coarse Aggregate.	Md Merajul Islam, Md Rabiul Hasan Shawon, Md. Moinul Islam, Md Zubair
17:00-17:15	C07-0007	Mechanical Properties of Fiber Reinforced Rubberized Recycled Concrete	Md Shahjalal, Kamrul Islam, Raquib Ahsan

<b>17:15-17:30</b>	C07-0047	Influence of Recycled Coarse Aggregate on Physical and Mechanical Properties of Concrete	Md Rokibul Islam, Shahnur Alam Sourav
<b>17:30-17:45</b>	C07-0011	Investigating the compressive strength of green concrete made with multiple times recycled aggregates	Md. Roknuzzaman, Nhm Kamrujjaman Serker, Mst. Mahbuba Mimi, Md. Manhazul Islam, Takia Mahanaj Eva
<b>17:45-18:00</b>	C07-0012	Evaluation of Porous Concrete for Strength and Permeability Polypropylene and Recycled Aggregates Towards Urban Sustainability in Dhaka City	Md. Sadman Islam, Nafis Ibna Oli, Md. Asif Khan
<b>18:00-18:15</b>	C07-0013	Effect of Partial Replacement of Fine Aggregate by Tannery Crumb on Mechanical Properties of Concrete	Mostafa Kamal Jihan, Md. Rezaul Miah, Rupak Mutsuddy

### **TECHNICAL SESSIONS, T13 (DAY 1, 26-07-23)**

**Theme : Infrastructure related to Environment and Water Resources-1**

**Venue : T1-L3-R305**

**Session Chair : Prof. Dr. Md. Tauhid Ur Rahman**

<b><u>Time</u></b>	<b><u>Paper ID</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>16:45-17:00</b>	C09-0014	Spatial accessibility analysis of the cyclone shelters in the southern part of bangladesh	Md. Touhidul Islam, Farhana Kabir, Sumia Rahaman
<b>17:00-17:15</b>	C09-0020	Purification of Surface Water by Sand Filtration with Activated Carbon	Md. Harun Ar Rashid, Md. Razib Ahmed
<b>17:15-17:30</b>	C09-0030	Integrating Embodied Carbon and Cost Reduction Strategies in Building Design: A Framework Contribution	Panchami Nandi, Md. Tauhid Ur Rahman, Tanvir Mustafy
<b>17:30-17:45</b>	C09-0023	Analyzing the Effects of PM10 Exposure on Health & Economy, A Case Study of Chattogram City Corporation (CCC)	Maisha Kabir, Prof. Sudip Kumar Pal
<b>17:45-18:00</b>	C09-0027	A Study on Climate Variability and Groundwater Drought in Naogaon District Using Remote Sensing	Briti Ray
<b>18:00-18:15</b>	C09-0032	Analyzing the role of Goranchatbari pump station and its performance in reducing water logging problem of Dhaka city	Md. Sirajul Islam, Monjurul Islam



**TECHNICAL SESSIONS, T14 (DAY 1, 26-07-23)****Theme : Recycling, Reuse and Sustainability of Construction Materials-2****Venue : T3-L3-CSE Conference Room****Session Chair : Dr. Anant Parghi, NIT, India**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:45-17:00	C07-0027	Properties of sustainable concrete made from recycle plastic and demolished concrete aggregates	Suvash Chandra Paul, Shamsul Islam, Md. Hasibul Islam, Md Abdul Basit, Noor Md. Sadiqul Hasan
17:00-17:15	C07-0024	Mechanical and Durability Properties of Induction Furnace Slag and Recycled Aggregate Concrete	Sakil Shahriar Araf, Md. Shahjalal, Tasnia Ahmed, Shinthia Islam Juthi, Syed Masudur Rahman, Md. Jahidul Islam
17:15-17:30	C07-0032	A Review on the Performance of RAP Binder Rejuvenated with Various Waste Oils	Joy Podder, Md Obaidur Rahaman, Mohammed Russeel Islam, Sanjida Noor Maisha, Sadia Farjana
17:30-17:45	C07-0041	Investigation on Mechanical and Durability Properties of Lead-Acid Battery Refinery Residue Based Concrete	Md. Abu Nayim, Dr. Ismail Saifullah, Shafayat Mahbub, Mohammad Ferdous-Uz-Zaman, Mohammad Ali
17:45-18:00	C07-0042	Mechanical Behavior of Concrete Incorporating Recycled Steel and Polypropylene Fibers: Experimental Investigation	Shahidul Islam, Ismail Saifullah, Mahmud Hasan, Zahurul Islam, S.M. Shaik-Ul-Karim
18:00-18:15	C05-0052	Effect of Lapping in One-way Reinforced Concrete Slabs with Welded Wire	Muhammad Rafiul Mahdi, Foysal Ahmed, Ishtiaque Ahmed, Nazrul Islam

**TECHNICAL SESSIONS, T15 (DAY 2, 27-07-23)****Theme : Geotechnical Engineering-2****Venue : T3-L3-CSE Conference Room****Session Chair : Prof. Dr. Md. Shariful Islam, BUET**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
11:45-12:00	C08-0001	Comparing Manual vs. Spreadsheet Design for Building Shore Protection Sheet Pile	Talha Bin Sharif, B. M. Assaduzzaman Nur, Md. Shibber Hossain, Shayeda Shoulin, Mohammad Shariful Islam
12:00-12:15	C08-0003	Optimizing Reliability Analysis of Concrete Dams: A Spreadsheet-Based Approach	Md. Rifat Bin Ahmed Majumdar

12:15-12:30	C08-0004	Numerical Modeling of Mumbai Marine Clay Improved with Prefabricated Vertical Drain	Mahabub Sadiq, Tanvir Alam
12:30-12:45	C08-0014	Discrepancies Between Automatic Trip Hammer and Donut Hammer in Standard Penetration Test on Bangladesh Perspective	Partha Saha, Indrajit Kumar Paul, Farzin Hassan Moumita
12:45-13:00	C08-0035	Effectiveness of Microbially Induced Calcite Precipitation (MICP) Treatment in the Mitigation of Seismic Liquefaction: A Review	Tasnim Naher Bushra, Mumtahmina Mim, Tisha Sikder, Shantanu Paul
13:00-13:15	C08-0048	Effect of Mould Length on Linear Shrinkage of Clayey Soil and Its Relations with Consistency Limits	Sirajam Munira, Abdun Nur, Md. Sabbir Ahamed, Md. Zoynul Abedin
13:15-14:15	Lunch		

### **TECHNICAL SESSIONS, T16 (DAY 2, 27-07-23)**

**Theme : Performance of Construction Materials-3**

**Venue : T1-L3-R305**

**Session Chair : Prof. Dr. Tahsin Reza Hossain, BUET**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
11:45-12:00	C06-0042	A database of concrete core test results and comparative analysis with ACI 562 guidelines: insights for structural assessment	Raysha Mobashira Esha, Anika Azad, Shoha Taiul Oyshe, Khondaker Sakil Ahmed, Tanvir Mustafy
12:00-12:15	C02-0020	Influence of different types of fibers on beam-column joint under cyclic loading: a review	Tasnia Ahmed, Md. Jahidul Islam, Ahmed Bediwy
12:15-12:30	C03-0005	Reliability analysis of reinforced concrete building subjected to seismic loads: material uncertainty	Sampa Akter, A T M Masum
12:30-12:45	C03-0008	Axial load behavior of new brick and recycled old brick aggregate columns	Abdullah Miah, Hasiba Afrin Eema Bachu, Md. Jahidul Islam, Md. Muniruzzaman, Md. Shahjalal, Tasnia Ahmed
12:45-13:00	C03-0018	Self-healing concrete: a review	Mahir Asiful Haque, Mansura Oyshi, Nafisa Tanjim Raisa, Md. Jahidul Islam
13:00-13:15	C05-0004	Static and dynamic behavior of fiber reinforced rubberized recycled concrete column	Md. Shahjalal, Kamrul Islam, Raquib Ahsan
13:15-14:15	Lunch		

**TECHNICAL SESSIONS, T17 (DAY 2, 27-07-23)****Session : Vulnerability and Safety Assessment of Structures****Venue : T1-L3-R304****Session Chair : Prof. Dr. Abdur Rahman Bhuiyan, CUET**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
11:45-12:00	C01-0003	Proposal for the conceptual structural prototype of emergency shelter for the vulnerable Rohingya community of coastal camp of Bangladesh	Afeefa Adeeba Rahman, Shariar Alam Santo
12:00-12:15	C01-0008	A study on the safety hazards in the construction industry of Bangladesh	Md. Tariqul Islam, Mohd Salman Mazhar, Ishtiaque Ahmed
12:15-12:30	C01-0013	Availability of Seismic Data and Existing Attenuation Laws in Bangladesh: A Review	Khan Abid Ahsan, Sk. Rakibul Islam, Syed Hafijur Rahman Sagor, Mohammad Arifur Rahman, Abu Hena Mohammad Safa Sanjid
12:30-12:45	C01-0022	A spatial-temporal assessment of earthquake vulnerability using ArcGIS in Dhaka city	Md Istiak Hossain, H M Mahmudul Hasan, Tanvir Mustafy
12:45-13:00	C03-0035	Performance, Impact, and Significance of the Jamuna Bridge in Bangladesh's Infrastructure Development: A Comparative Analysis	Anika Nawar, Satabdi Podder, Maksuda Emon, Khondaker Sakil Ahmed, Tanvir Mustafy
13:00-13:15	C10-0022	GIS-based Mapping of Seismic Response Assessment due to Earthquake Vulnerability of Ward 33, Dhaka	M. Nazrul Islam, Ehshanur Rahman
13:15-14:15	Lunch		

**TECHNICAL SESSIONS, T18 (DAY 2, 27-07-23)****Theme : Recycling, Reuse and Sustainability of Construction Materials-3****Venue : T3-L3-Cyber Range Conference Room****Session Chair : Prof. Dr. Tanvir Manzur, BUET**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
11:45-12:00	C07-0044	Strength Development of Artificial Aggregate Manufactured from Geopolymerization of Waste Materials	Farah Moazzema Rifah, Muntaha Afifa Fatima, Abdullah Al Noman, Mohammad Russeel Islam

<b>12:00-12:15</b>	C07-0017	Utilization of GGBS, Fly Ash, and Recycled Aggregates for Sustainable Geopolymer Concrete: A Carbon Reduction Approach	Sabbir Ahamed, Md. Hafijul Islam, Fahmida Rafiq, M. N. Hossain, M B Islam
<b>12:15-12:30</b>	C07-0018	Effect of Galvanized Iron Fiber on Bond Strength of Partially Replaced Recycled Aggregate Concrete	Ummul Wara Labiba, Tasfiah Faisal Chowdhury, Md. Jahidul Islam, Tasnia Ahmed, Md. Shahjalal
<b>12:30-12:45</b>	C07-0045	Strength and Workability of Concrete Incorporating Volcanic Ash as a Partial Replacement for Cement	Md. Shakib Hasan, Joy Karmokar, S. M. Faisal Mahmood
<b>12:45-13:00</b>	C07-0029	Comparative study on properties of self-compacting concrete made with recycled aggregate	Failina Edib, Zarin Tasnim, Nhm Kamrujjan Serker
<b>13:00-13:15</b>	Invited Talk	A Review on Compressive Strength of Masonry	Dr. Sarkar Noor E Khuda (Invited - Online) Central Queensland University, Australia
<b>13:15-14:15</b>	Lunch		

### **TECHNICAL SESSIONS, T19 (DAY 2, 27-07-23)**

**Session : Structural Dynamics and Vibration-3**

**Venue : T1-L3-R302**

**Session Chair : Prof. Dr. S M Zahurul Islam, RUET**

<b><u>Time</u></b>	<b><u>Paper ID</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>11:45-12:00</b>	C02-0001	Fragility analysis of anchorage connection of circuit breaker in switchyards	Md Ashiquzzaman, Ellen Prinster, John Falkenrath
<b>12:00-12:15</b>	C02-0002	Review of National Building Code Design Provisions, Retrofit and Safety Guidelines for Nuclear Power Plant (NPP) Zone in Bangladesh	S. M. Muhaiminul Islam, Md. Nafizur Rahman, Md. Ashrafal Alam
<b>12:15-12:30</b>	C02-0003	Study of Multi-Storied Buildings in ETABS using Static and Dynamic Analysis for Different Seismic Zones in Bangladesh	Redwan ul Islam, Zeba Fariha, M A Bashar Bhuiyan
<b>12:30-12:45</b>	C02-0005	Seismic Performance Analyses of High-Rise Structures Constructed with Polyvinyl Alcohol (PVA) Fibered Engineered Cementitious Composite (ECC) in Bangladesh: Case Study	S. M. Muhaiminul Islam

<b>12:45-13:00</b>	C05-0013	Development of Design aids for the Design of Simply Supported Post-Tensioned PC Girder	Md. Mohirul Islam Mohir Prodip Kumar Mondal Rayhana Sultana
<b>13:00-13:15</b>	C02-0010	Earthquake Vibration Attenuation of the Building Structure using Floating Sand Fill Balls in Tuned Liquid Column Damper	Mohammad Sabbir Rahman, Aporajita Barua, Md. Tareq Aziz, Sudip Kirtonia, Mishkatur Rahman
<b>13:15-14:15</b>	Lunch		

### TECHNICAL SESSIONS, T20 (DAY 2, 27-07-23)

<b>Session : Design and Analysis of Composite Structures-1</b>			
<b>Venue : T3-L3-Artificial Intelligence Lab</b>			
<b>Session Chair : Dr. Md. Jahidul Islam, MIST</b>			
<b><u>Time</u></b>	<b><u>Paper ID</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>11:45-12:00</b>	C02-0004	Finite Element Analysis of Push-Out Test for Rebar Shear Connectors	Delphian Dip Sen, Mahbuba Begum
<b>12:00-12:15</b>	C06-0009	Compressive Behaviour of Slender Discontinuous Double Steel Tube Confined Concrete Column under Concentric Loading	Ann Nazmun Sakib, Md. Imran Kabir
<b>12:15-12:30</b>	C06-0019	Comparative Numerical Study on Concrete-Filled Stainless Steel Tubular (CFSST) Columns with Square Sections Exposed to Fire	Rumman Abrar, Q.M. Arefin Bin Zaman Neloy, Shameem Ahmed
<b>12:30-12:45</b>	C07-0034	Numerical Simulations of RACFST Columns under Concentric Axial Load	Ashik Ahmed, Mahbuba Begum
<b>12:45-13:00</b>	C01-0011	Numerical analysis on structural behavior of concrete filled steel tubular columns	Utkarsh, Bulbul Ahmed, P.K. Jain
<b>13:00-13:15</b>	C04-0008	Structural behavior of deficient steel and aluminum tubular members retrofitted by CFRP subjected to impact loading	S. M. Zahurul Islam, Faria Noushin Choya, Shaima Tasnim, Tanvir Hossen Rezvi, Abdullah Mohammad Noman, Md. Rashidul Hasan
<b>13:15-14:15</b>	Lunch		

**TECHNICAL SESSIONS, T21 (DAY 2, 27-07-23)****Theme : Performance of Construction Materials-4****Venue : T1-L3-R301****Session Chair : Dr. Kamal Hossain, Carleton University, Canada**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
11:45-12:00	C06-0016	A review on the compressive & tensile strength of different fiber-reinforced concrete	Raisul Islam Shuvo, Sharmin Reza Chowdhury
12:00-12:15	C06-0021	Strength and workability of normal strength concrete with increasing amounts of fine aggregate for different water-cement ratios	Mohammad Tahmidul Islam, Rezwanul Islam, Mahmudul Hasan Sohan, S. M. Faisal Mahmood
12:15-12:30	C10-0039	Short-term ageing behaviour of bitumen commonly used in Bangladesh for road construction	Sanjida Noor Maisha, Sadia Farjana, Joy Podder, Mohammed Russeelul Islam
12:30-12:45	C06-0023	Investigation on the mechanical properties of power-plant based high volume fly ash concrete	Md. Rashedul Haque, Ismail Saifullah, Nasif Khan
12:45-13:00	C06-0034	Applicability of iron slag as coarse aggregate in concrete production	Mahbub Karim, Jobair Rahman Ridoy, Souvik Sikder, Amit Nath, Habiba Rashid, Khondaker Sakil Ahmed, S.M Ashfaquul Hoq
13:00-13:15	C06-0037	The comprehensive uses of hollow concrete block in Bangladesh: prospects, challenges & environmental impact	Md Tafsirul Islam, Md Rabiul Hasan, Aninda Ghosh Partha, Mehedi Hasan
13:15-14:15	Lunch		

**TECHNICAL SESSIONS, T22 (DAY 2, 27-07-23)****Session : Machine learning and Artificial Intelligence****Venue : T1-L3-R301****Session Chair : Dr. S. M. Faisal Mahmood, BUET**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:00-16:15	C08-0030	Effective Machine Learning Models for Predicting SPT-N of Reclaimed Jolshiri Area, Dhaka	Nur Mohammad Shuman, Mohiuddin Ahmed, Nafisa Amin Chowdhury, Md. Azmine Abrar, Khondaker Sakil Ahmed

<b>16:15-16:30</b>	C07-0025	Applied Machine Learning in Crumb Rubber and Recycled Aggregate Concrete: A Review	Mohammad Ramezan Khani, Peiman Azarsa, Shahria Alam
<b>16:30-16:45</b>	C06-0018	Comparative Analysis of Machine Learning Algorithms for Predicting Compressive Strength of Concrete Containing Silica Fume and Metakaolin	Raiyan Mannan, Muhammad Rafiul Mahdi, Chowdhury Zubayer Bin Zahid
<b>16:45-17:00</b>	C03-0036	Evaluation of the Compressive Strength of Generic and Geopolymer Concrete by Artificial Intelligence	Tasnia Tabassum Anika, S. M. Raiyan Chowdhury, Ismail Saifullah
<b>17:00-17:15</b>	C03-0038	Data-driven Bearing Capacity Prediction of Self-drilling Screw in Cold-formed Steel using Machine Learning	Samia Zakir Sarothi, Khondaker Sakil Ahmed, Aziz Ahmed, Khan Mahmud Amanat
<b>17:15-17:30</b>	C01-0025	Extended Reality in Civil Infrastructure: A Comprehensive Review	Saniya Alam, Sabrina Alam, Khalad Hasan
<b>17:30-17:45</b>	Refreshment		

### **TECHNICAL SESSIONS, T23 (DAY 2, 27-07-23)**

**Session : Design and Analysis of Steel Structures**

**Venue : T1-L3-R302**

**Session Chair : Prof. Dr. Mohammad Al Amin Siddique, BUET**

<b><u>Time</u></b>	<b><u>Paper ID</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>16:00-16:15</b>	C02-0035	Finite Element Analysis of Cyclic Behavior of Steel Shear Links of Different Materials	Md. Zubayer Yeaser, Khan Mahmud Amanat
<b>16:15-16:30</b>	C05-0032	Nonlinear Fe investigation of HSS column base plate connection	Haisam Bin Mahbub, Khan Mahmud Amanat
<b>16:30-16:45</b>	C06-0012	Lateral Torsional Buckling Strength of High Strength Steel Beam under Various Moment Gradient	Sazid Rahman, Wassi Ul Azam, Sakib Ahmed Dipta, Md. Imran Kabir
<b>16:45-17:00</b>	C01-0016	Impact of Flood Loading on a Representative Steel Girder Bridge	Mohammad Ibrahim, Swagata Basu
<b>17:00-17:15</b>	C01-0021	Non-linear Finite Element Analysis of Steel Plate Shear Wall with Different Plate Thickness and Column Sizes	Sadia Salam, Khan Mahmud Amanat
<b>17:15-17:30</b>	C01-0023	Prediction of Moment Capacity of Flush End Plate Connection: A Machine Learning Approach	Anika Nawar, Tanvir Mustafy

17:30-17:45	Invited Talk	Climate Resilient Design of Civil Infrastructural Systems	Dr. Subhrajit Dutta (online) Asst. Professor, National Institute of Technology Silchar, India
-	Refreshment		

**TECHNICAL SESSIONS, T24 (DAY 2, 27-07-23)**

**Theme : Urban Infrastructure and Transportation Management-3**

**Venue : T1-L3-R304**

**Session Chair : Prof. Dr. Md. Hadiuzzaman, BUET**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:00-16:15	C10-0017	User perception of city bus service quality in 'new-normal situation': A case study of Dhaka, Bangladesh	Anusree Saha Tithi, Tonmoy Paul, Nafis Anwari
16:15-16:30	C10-0018	A Decision-support conceptual framework for selecting the optimally effective Temporary Traffic Management Strategies for the underground metro rail station construction works in a densely populated metropolis.	Khaled Anowar Sagar
16:30-16:45	C10-0021	A Study on Parking Characteristics at Some Important Locations in Dhaka City	Tahmina Chowdhury, Md. Mohibullah
16:45-17:00	C10-0028	Integration of Intelligent Transportation System (ITS) with Conventional Traffic Management in Developing Countries	Adeeba Naz, Ifratul Hoque
17:00-17:15	C10-0029	Planning for a sustainable streetscape: A study of transportation system and pedestrian issues of New Market area, Dhaka, Bangladesh	Md Shariful Shadat, Sabrina Mehjabeen Ratree
17:15-17:30	C10-0032	Mode Choice Modeling of University Faculties in Dhaka: A Case Study of BUET	Afia Ibnat Subah, Tanjila Rashid Rhythy, Md Asif Raihan, M. Neaz Murshed
17:30-17:45	C01-0014	Importance of Road Safety Measures in Selected LGED Roads Using Structural Equation Modeling Approach	Shah Md Muniruzzaman, Chowdhury Meher Afroz, Shahena Afrose, Md. Asrad Zaman, Md. Mohaimenul Islam Sourav
-	Refreshment		



**TECHNICAL SESSIONS, T25 (DAY 2, 27-07-23)****Theme : Advanced Finite Element Modeling and Simulation****Venue : T1-L3-R305****Session Chair : Prof. Dr. Mohammad Nazmul Islam, NSU**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:00-16:15	C01-0029	Simplified Solution for Thin Plates Responses Using Beams Theory with Repetitive Boundary Conditions	Abdullah Al-Moneim, Tarif Uddin Ahmed, Md. Sirajul Islam, Khondaker Sakil Ahmed
16:15-16:30	C05-0048	In-Plane Seismic Performance of Partially Grouted Reinforced Masonry Walls	Tousif Mahmood, Ahmed A. Ghent and Mohamed ElGawady
16:30-16:45	C05-0044	Impact Loading Effects on the Upper Cervical Spine under Dynamic and Static Conditions Using Finite Element Analysis	Maksuda Emon, Satabdi Podder, Tanvir Mustafy
16:45-17:00	C08-0034	Finite Element Analysis of an Unpaved Road Embankment under Drawdown Conditions	Faizur Rahman Himel, Eqramul Hoque
17:00-17:15	C10-0005	Bridging the Gap: A Systematic Analysis and Design of U-Loop Post-tensioning Box Girder Bridges with the Aid of CSI bridge Software	Abir Khan Ratul, Kashfia Nazneen
17:15-17:30	C07-0023	A Review of The Effect of Fly Ash on Durability Properties of Fiber Reinforced Concrete	Emama Binte Rahman, Saadman Sakib, Nishatee Binte Shahid
17:30-17:45	Refreshment		

**TECHNICAL SESSIONS, T26 (DAY 2, 27-07-23)****Theme : Design and Analysis of Concrete Structures****Venue : T3-L3-CSE Conference Room****Session Chair : Dr. Rupak Mutsuddy, BUET**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:00-16:15	C01-0009	Comparative Effectiveness of L-Shape & Rectangular Columns around The Lift Core for Moderate & Very Severe Seismic Prone Area in Bangladesh	Md. Mohiuddin Ahmed, Md. Johirul Islam Raju, Maqsuda Haque, Hasibul Jahid, Md. Omor Faruk
16:15-16:30	C02-0022	Progressive Collapse of Multi-Story Frame Structure Under Column Loss Scenarios	Khondaker Sakil Ahmed, M. M. Emtiaz, Jarin Tasnim

<b>16:30-16:45</b>	C04-0004	Evaluating the residual capacity of reinforced concrete column after standard fire exposure	Shameem Ahmed, Md. Mehedi Hassan Bhuiyan
<b>16:45-17:00</b>	C02-0006	Effect of Re-centering shape memory alloy damper on seismic response of torsionally coupled idealized frame system	Anant Parghi, Jay Gohel, Snehal V. Mevada
<b>17:00-17:15</b>	C07-0019	Shear Behaviour of Reinforced Concrete Beam with Partially Replaced Recycled Aggregate	Md. Jahidul Islam, Tasnia Ahmed, Masruf Hasan, Fazla Rabby, Md. Shahjalal
<b>17:15-17:30</b>	C07-0015	Investigation on bond strength of recycled aggregate concrete using crumb rubber and polypropylene fiber as partial replacements for conventional construction materials	Quazi Umme Rukiya, F M Zahid Hossain, Kishoare Tamanna, M. Shahria Alam
<b>17:30-17:45</b>	Refreshment		

### **TECHNICAL SESSIONS, T27 (DAY 2, 27-07-23)**

<b>Theme : Infrastructure related to Environment and Water Resources-2</b>			
<b>Venue : T3-L3-Artificial Intelligence Lab</b>			
<b>Session Chair : Dr. Kazi Shamima Akter, MIST</b>			
<b><u>Time</u></b>	<b><u>Paper ID</u></b>	<b><u>Paper Title</u></b>	<b><u>Authors' Name</u></b>
<b>16:00-16:15</b>	C09-0001	Environmental Monitoring of a Newly Construction Railway Project in Bangladesh	Rokibul Hossain Titu, Mahabub Sadiq, Imtiaz Mahmud
<b>16:15-16:30</b>	C09-0002	Water Quality Assessment of the Dhaka WASA Water Supply and Distribution Network at Mirpur, Dhaka	Rumman Mawla Chowdhury, Adib Ashhab Ankon
<b>16:30-16:45</b>	C09-0007	Treatment of a Tannery Chrome Effluent by Electrocoagulation	S. A. Mamun, Saadat Shahidi, Akram Mahmud, M. A. Jalil
<b>16:45-17:00</b>	C09-0009	Urban Stormwater Inundation Mapping in Chattogram City	Israt Jahan Ruva, Farzin Hassan Moumita, Aysha Akter
<b>17:00-17:15</b>	C09-0010	Impact on Sediment Transportations in a Channel due to Immovable Boulders on Channel Bed and Pier Structures Obstructing Channel Flow: A Review	Md Shihab Uddin, Indronil Sarkar
<b>17:15-17:30</b>	C09-0012	Assessment of Fecal Sludge Management Practices in Bangladesh: A Case Study of Kushtia Municipality	Atiar Chowdhury, Md. Farhan Ishrak
<b>17:30-17:45</b>	Refreshment		

**TECHNICAL SESSIONS, T28 (DAY 2, 27-07-23)**

**Session : Construction Engineering and Management**

**Venue : T3-L3-Cyber Range Conference Room**

**Session Chair : Prof. Dr. Shah Md Muniruzzaman, MIST**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:00-16:15	C01-0020	Factors Affecting Construction Delay in Dhaka City	Md. Ramjan Ali, Md. Rakibul Islam Chowdhury, Sheikh Azim Ur Rashid, Rahul Islam Chowdhury
16:15-16:30	C03-0007	Cost-Efficient iot Approach for Remotely Monitoring Construction Site Environment and Machine Runtime to Mitigating False Fuel Consumption Reporting	Saqib Shahriar, Anika Tabassum Jerin, Md. Shahin Munsif
16:30-16:45	C03-0033	A comprehensive overview of Risk Factors, Challenges and Control Measures for work-related Musculoskeletal Disorders among Construction Workers Worldwide	Satabdi Podder, Maksuda Emon, Tanvir Mustafy
16:45-17:00	C06-0008	Utilizing Tax-Payer Funds Efficiently: Selection of Superpave Bituminous Binder for Highway Construction in Bangladesh	Md. Masud Rana, Surya T. Swarna, Kamal Hossain, Md. Abdul Hakim, Hamza Ibn Mujib
17:00-17:15	C06-0022	The Possibility of a Radical Change in the Construction Sector: In Emergence of Sand-Cement Block Aggregate, Comparative Study of Its Mechanical Properties	Syed Ahmed Tasnim, Sajjad Hossain, Forhad Hossain, Md Arifujjaman
17:15-17:30	C07-0010	Effects of Waste Plastic Bottle Strips as Reinforcement on the Engineering Properties of Soil for Sustainable Soil Stabilization	Akib Hasan Rafin, Md Ferdous Alam
17:30-17:45	Refreshment		

**TECHNICAL SESSIONS, T29 (DAY 2, 27-07-23)**

**Session : Engineering Materials and Structural Analysis**

**Venue : T1-L1-Terzaghi Lab**

**Session Chair : Dr. Mohiuddin Ahmed, MIST**

<u>Time</u>	<u>Paper ID</u>	<u>Paper Title</u>	<u>Authors' Name</u>
16:00-16:15	C03-0030	Building response assessment of a high-rise RC structure for the aftershock of Kocaeli, Turkey earthquake- a case study	Md. Rakibul Islam Chowdhury, Khondaker Sakil Ahmed
16:15-16:30	C04-0015	Bond strength prediction of externally bonded CFRP laminate with embedded bar anchor through pull out test of prism for shear strengthening of RC beam	Md Ashrafal Alam, Md. Mehedi Hasan, Md. Mehedi Hasan Polash, and Md. Mahmudul Hasan, Mst. Rifa Tasfiya Tashin
16:30-16:45	C05-0010	Experimental Study of the Behavior of Reinforced Masonry Wall Under Cyclic loading	Sadia Sabrin, Raquib Ahsan, Mahir Asif
16:45-17:00	C07-0026	Effect of Source of Recycled Aggregate on Concrete Properties - A Case Study	Jahidul Islam, Tasfia Tasneem Tanha, Md Arif Hossain and Md Sakil
17:00-17:15	C07-0048	Analysis of Recycling of Steel Slag as Construction Material	Md. Tazul Islam, Md. Shariful Islam, Md. Shamshed Tibriz
17:15-17:30	C07-0040	Wood ash-based low-carbon cementitious composites	Rubaiya Rumman, Meraj Rubayat Kamal, Ahmed Gaber Bediwy, M. Shahria Alam
17:30-17:45	Refreshment		