2024

The 1st International Conference on Engineering Structures

&

Engineering Structures Editorial Board Meeting

PROGRAM BOOK

Guangzhou, China

November 8-11, 2024

Welcome to ICES2024

ICES2024 is the first of a series of conferences initiated under the auspices of Engineering Structures. The conference will be held on 8~11 November 2024 in Guangzhou, China. The conference will be hosted by Guangzhou University. ICES2024 is an international multi-discipline forum for scientists and engineers to disseminate the latest innovations and achievements, discuss current trends and emerging issues in structural engineering and structural mechanics communities, and promote academic exchange and cross-fertilisation within this multidiscipline field.

Organized by

Engineering Structures Journal

Guangzhou University

Supported by

Research Center for Wind Engineering and Engineering Vibration, Guangzhou University

School of Civil Engineering and Transportation, Guangzhou University

Earthquake Engineering Research & Test Center, Guangzhou University

Conference Co-chairs

Jie Yang	Lead Editor-in-Chief, Engineering Structures
Jiyang Fu	Vice President, Guangzhou University

International Steering Committee

Jie Yang	Peng Feng	Heung Fai Lam	Dong Ruan
Bassam Izzuddin	Shahria Alam	Gabriele Milani	Seymour Spence
Ching Tai Ng	Kaiming Bi	Manuel Romero	Hua Yang
James Ricles	Wei Gao		

International Advisory Committee

Jose Adam	Michael Faber	Yuanming Lai	Gunther Meschke
Mark Bradford	Dan Frangopol	Hui Li	Satish Nagarajaiah
Zhengqing Chen	Leroy Gardner	Shucai Li	David Nethercot
Xiangsheng Chen	Philip L Gould	Hanlong Liu	Jianguo Nie
Yunmin Chen	Hong Hao	Jiaping Liu	Jinping Ou
Xiuli Du	Chuan He	Jiaping Liu	Shunquan Qin
Yanliang Du	Ahsan Kareem	Paulo Lourenco	Junuthula N. Reddy
Wenhui Duan	Sritawat Kitipornchai	Xilin Lu	Nuno Silvestre
Bruce Ellingwood	Theodor Krauthammer	Herbert Mang	Ian Smith
Billie F. Spencer	Quan Wang	Ben Young	Xigang Zhang
Jin-Guang Teng	Mike Yi Min Xie	Qingrui Yue	Jianlong Zheng
Jose Torero Cullen	Feng Xing	Bin Zeng	Fulin Zhou
Georgios Tsampras	Jian Xu	Wanming Zhai	Xuhong Zhou
Chien Ming Wang	Shilang Xu	Jianming Zhang	Chuangbin Zhou
Fuming Wang	Yeongbin Yang	Xiao Lin Zhao	Hehua Zhu

International Scientific Committee

Francis T.K.Au	Tommy Chan	Mary Beth Deisz Hueste	Hong Guan
Michael Beer	Weiqiu Chen	Yang Ding	Polat Gulkan
Brahim Benmokrane	Xinzhong Chen	Larry Fahnestock	Anxin Guo
Fabio Biondini	Wensu Chen	Jiansheng Fan	Jian Guo
Steve Cai	Jianbing Chen	Feng Fan	Tong Guo
Ivo Calio	Wenli Chen	Qin Fang	Qiang Han
Luca Caracoglia	Nawawi Chouw	Michalis Fragiadakis	Qinghua Han
Robby Caspeele	Kwok Fai Chung	Hanbin Ge	Yan Han
Noel Challamel	Jie Cui	Yaojun Ge	Linhai Han

Siu Lai Chan
Johnny Ho
Gunter Hofstetter
Shaowei Hu
Xugang Hua
Xiaodong Huang
Jong-Su Jeon
Thomas Kang
Jimmy Kim
Mieczyslaw S.Kuczma
Oh-Sung Kwon
John Mander
Antonio Mari
Enzo Martinelli
Shozo Nakamura
Teng Yong Ng
Giang Nguyen
Yi-qing Ni
Ditao Niu
Osman Ozbulut
Peng Pan
Yuyin Wang
Yun Wang
Zhan Wang
Martin Wieland
Yu-Fei Wu
Chengqing Wu
Bo Wu
Jianying Wu
Yangang Zhao
Ying Zhou
Mingfeng Huang
Hongzhi Cui
Siu Seong Law
Chiking Lee
Jaehong Lee
Andrew Leung
Jun Li
Yue Li
Aiqun Li
Gang Li
Guoqiang Li
Guochang Li
Ser Tong Quek
Ananth Ramaswamy
Wei Xin Ren
Fengming Ren
Giuseppe Ricciardi
Jorge Daniel Riera
Charles Rodeer
M.E. Rodriguez
Criseida Ruiz
Juan Sagaseta
Zhishen Wu
Yong Xia
Jianzhuang Xiao
Yan Xiao
Lihua Xu
Longhe Xu
Zhaodong Xu
Chengshun Xu
Jianting Zhou
Yingwu Zhou
Xianglin Gu
Hongnan Li
Jianzhong Li
Kefei Li
Qiusheng Li
Yongle Li
Zhongxian Li
Qing Quan Liang
Richard J.Y.Liew
CW Lim
Maria Giuseppina Limongelli
Halil Sezen
Xudong Shao
Gang Shi
Yanchao Shi
Yongjiu Shi
Scott Smith
Chongmin Song
Gangbing Song
Mark Stewart
Li Sun
Fuyou Xu
Weichen Xue
Jian Yang
Qiang Yang
Qingshan Yang
Jihong Ye
Tinghua Yi
Bai Yu
Hongping Zhu
Ledong Zhu
Xuhui He
John van de Lindt
Jiepeng Liu
Tiejun Liu
Airong Liu
Ricardo Lopez
Guoxing Lu
Xinzheng Lu
Yaozhi Luo
Hongwei Ma
Lorenzo Macorini
Kang Hai Tan
Ping Tan
Jacek Tejchman
David Thambiratnam
Kam Tim Tse
Brian Uy
Hamid Valipour
Yong Wang
Hao Wang
Jinting Wang
Yong Yuan
Changhai Zhai
Lihai Zhang
Ailin Zhang
Qilin Zhang
Lin Zhao
Weijian Zhao
Xianzhong Zhao
Yan Zhuge
Alphose Zingoni

Co-Chairs of International Organizing Committee

Ching Tai Ng	University of Adelaide, Australia
Airong Liu	Guangzhou University, China
Paul Heung Fai Lam	City Univeristy of Hong Kong, Hong Kong SAR, China

International Organizing Committee

Yi Bao	Fengliang Zhang	Chris Karayannis	Roberto Nascimbene
Kang Gao	You Dong	Jian Li	Stephanie Paal
Ou Zhao	Jennifer Bridge	Jun Li	Bernhard Pichler
Jiaolong Zhang	Steffen Freitag	George P Mavroeidis	Kay Smarsly
Susanna Lin	Daniel Gomez Pizano	Oya Mercan	Alfred Strauss
Tianyu Xie	Hyeon-Jong Kwang	Arturo Montoya	Da Chen
Damith Mohotti	Thong Pham	Junjie Zeng	Jing Yu

Co-Chairs of Local Organizing Committee

Ping Tan	Guangzhou University
Airong Liu	Guangzhou University
Yuhong Ma	Guangzhou University
Fengming Ren	Guangzhou University

Local Organizing Committee

Jiurong Wu	Bingcong Chen	Yangxue Wang	Mingxiang Xiong
An Xu	Kang Zhou	Yijie Liu	Yadong Li
Yuncheng He	Nan Wu	Shuai Yuan	Meixiang Gu
Yonghui Huang	Youqin Huang	Yajiu Zhang	Jiang Yi
Mao Ye	Jianting Wen	Zhiwen Su	Yujie Liu
Yuwei Ma	Xiaowei Ouyang	Yanfei Niu	Cheng Yuan
Zhifang Zhang	Haoran Pan	Xijun Ye	Zhuangcheng Fang
Jialin Wang	Ting Deng	Sasa Cao	Zhipeng Zhai
Mianheng Lai	Yuguo Yu	Junyong Zhou	Yafeng Li
Di Wu	Zhicheng Yang	Dong Yang	Shenchun Xu
Yukai Zhong	Yingjing Liang	Wenzhi Zheng	Huawei Li
Ruohong Zhao	Yiqun Guo	Liwen Zhang	Cheng Liu
Dan Xie	Peng Huang	Jian Liu	Shaodi Wang
Shuai Teng	Yinghou He	Qiang Fu	Gu Li
Rui Rao	Yixiao Zhang		

Proposed Sessions

➢ Mini-Symposia (MS)

Session ID	Title
MS01	Extreme Loads, Dynamics, and Performance Assessment of Coastal Bridges
MS02	Structural Dynamics, Condition Monitoring and Vibration Control of Offshore Wind Turbines
MS03	Green and Sustainable Concrete Materials and Structures
MS04	Progressive Collapse of Structures under Extreme Events
MS05	Structures in Fire: Challenges and Research Trend
MS06	Numerical Modelling of Nanomaterials and Nanostructures
MS07	Modelling and Mitigation of Wind-induced Vibration for Long-span Bridges
MS08	Impact and Blast Protection of Engineering Structures
MS09	Advances and Innovations in Steel Structures
MS10	Vibration Control of Large-scale Flexible Structures
MS11	Structural Application and Additive Manufacturing of High Performance Fibre Reinforced Cementitious Composite
MS12	AI-based Structural Health Monitoring for Enhancing Operational Safety of Infrastructure
MS13	Recent Advances in Elastic Metamaterials and Engineering Applications
MS14	AI in Metamaterials and Porous Composites
MS15	Advanced Concepts for Uncertainty Quantification and Reliability Analysis in Structural Dynamics
MS16	Origami and Kirigami Inspired Engineering Structures
MS17	Collision on Engineering Structures
MS18	AI-empowered Structural Dynamic Analysis of Complex Structures
MS19	Nonlinear Wind-induced Vibration of Long and Flexible Structures
MS20	3D Printed Metallic Structures and Structural Optimization
MS22	Advances in NDT of Engineering Structures
MS23	Engineering Structures for Wind Turbines
MS24	Towards Resilient Renewable Energy Infrastructure
MS25	Safety Assessment of Bridge under Multi-hazards
MS26	Resilience-based Seismic Design, Assessment, and Protection of Nonstructural Elements
MS27	Innovative Application and Structural Design of UHPC and/or FRP
MS28	Bio-Inspired Structures
MS29	High-performance Steel Structures
MS30	Recent Advances in AI and IoT Technologies for the Monitoring, Inspection and Maintenance of Engineering Structures
MS31	Nonlinear Vibration of Thin-walled Plate Shell Structures
MS32	Concrete for Resilient and Enduring Transportation Infrastructure
MS33	Modularized Discrete Energy Absorption Structures
MS34	Intelligent Structural Maintenance and Smart Disaster Prevention
MS35	SMA-based Engineering Structures for Seismic Resilience Enhancement
MS36	Structural Strengthening and Repair with Novel Construction Materials
MS37	Advances in Vehicle-Bridge Interaction Dynamics
MS38	Performance Evolution and Control of Sustainable Engineering Structures
MS39	Fatigue Assessment of Steel Structures
MS40	Resilience-based Seismic Evaluation of Bridges Subjected to Cross/near-fault Excitations
MS41	Unfolding the Future: Exploring Deployable Structures for Sustainable Solutions
MS42	Shape Memory Alloys and Polymer Materials in Construction
MS43	Advances in Civil Infrastructures Incorporated with High-performance Materials
MS44	High-performance Materials and Innovative Shear Connectors for Steel-concrete Composite Structures
MS45	Perception, Evaluation and Mitigation of Bridge Structure Damages under Moving Loads
MS46	Impact-Resistant Structural Design
MS47	Disaster Damage Assessment of High-performance Building Structure
MS48	New Structural System and Wind-resistant Performance for Large Photovoltaic Power Stations
MS49	Wind Effects on Building Structures
MS50	Advanced Materials and Novel Technologies for Bridge Structure Resilience Improvement

➢ Special Sessions (SS)

Session ID	Title
SS01	Mechanical Behaviors and Applications of Advanced Materials and Structures
SS02	Decarbonising Building Structures Using Renewable Materials
SS03	Building Information Modelling (BIM) and Engineering Structures
SS04	Design Strategies for Improving the Dynamic Performance of Offshore Wind Turbine Systems
SS05	Energy Absorption of Advanced Materials and Structures
SS06	Graphene Reinforced High-performance and Multifunctional Composite Structures
SS07	Multi-scale Dynamic Behavior and Design Principle of Fiber Composite Structures
SS08	Machine Learning -based Structural Analysis and Optimization
SS09	Advancing Modular Construction: Innovations, Design, Construction and Sustainability
SS10	Nonlinear Dynamics of Engineering Structures
SS11	Concrete Filled Steel Tubular Structures
SS12	Advanced Concrete Technology and Composite Structures
SS13	Damage Identification Under Changing Environmental and Operational Conditions in Structural Health Monitoring
SS14	Shape Memory Alloy-based Passive Seismic Protection Technologies for Resilient Structural Design
SS15	Metallic and Bimetallic Structures for Long-life Service
SS16	Recycled Aggregate Concrete Structures and Components
SS17	Bayesian System Identification and Structural Health Monitoring of Engineering Structures:Algorithms, Machine Learning Methods and Applications

Conference Program Overview

Registration opens: Friday, November 8, 2024		
14:00 – 22:00	Registration	Lobby of Building 3
Day 1: Saturday, November 9, 2024		
08:00 – 12:05	Opening Session & Plenary Session	Oriental Hall, 2F, Building 3
09:45 – 10:05	Coffee Break	
12:05 – 13:30	Buffet Lunch	Pear River Hall D/E/F, 1F, Building 3
13:30 – 18:45	20 Parallel Sessions	1F, 2F, 3F, Building 2 and Building 4
15:55 – 16:15	Coffee Break	
19:00 – 22:00	Conference Banquet	Oriental Hall, 2F, Building 3
Day 2: Sunday, November 10, 2024		
08:00 – 12:05	2 Parallel Keynote Sessions	Guangdong Grand Hall, 4F, Building 2 / Pear River Hall A, 2F, Building 2
09:40 – 10:00	Coffee Break	
12:10 – 13:30	Buffet Lunch	Pear River Hall D/E/F, 1F, Building 3
13:30 – 18:45	20 Parallel Sessions	1F, 2F, 3F, Building 2 and Building 4
15:55 – 16:15	Coffee Break	
19:00	Buffet Dinner	Pear River Hall D/E/F,1F, Building 3
20:00 – 22:00	Engineering Structures Editorial Board Meeting	ShenZhen Room 2201, 2F, Building 2
Day 3: Monday, November 11, 2024		
08:00 – 10:30	Plenary Session	Oriental Hall, 2F, Building 3
10:30 – 10:50	Coffee Break	
10:50 – 11:40	Face to Face with Editors	Oriental Hall, 2F, Building 3
11:40 – 12:00	Awards Ceremony	Oriental Hall, 2F, Building 3
12:00 – 12:10	Next Host Presentation	Oriental Hall, 2F, Building 3
12:10 – 13:30	Buffet Lunch	Pear River Hall D/E/F, 1F, Building 3
13:30 – 18:45	5 Parallel Sessions	1F, 2F, Building 4
15:55 – 16:15	Coffee Break	
19:00	Buffet Dinner	LHG Full-time Restaurant, 2F, Building 1

Program of Plenary Sessions

November 9, 2024, Morning Session (08:00-12:00） **Oriental Hall, 2F, Building 3, (3 号楼二楼东方厅)**	
Opening Ceremony Chair: Ching Tai Ng, University of Adelaide	
08:00-08:05	**Welcome Address by Jiyang Fu**, Vice president of Guangzhou University, Co-chair of ICES 2024
08:05-08:10	**Opening Remarks by Jie Yang**, Lead Editor-in-Chief of Engineering Structures, Co-chair of ICES 2024
08:10-08:40	**Address by Hongying Zhu**, Elsevier Representative
08:40-08:45	Photo session
Plenary Session, Co-Chairs: Sritawat Kitipornchai, Guangzhou University & Chien Ming Wang, University of Queensland	
08:45-09:15	**Plenary speaker: Fulin Zhou, Guangzhou University** New Progress on Seismic Isolation and Dual Control of Vibration-Seismic Isolation for Engineering Structures
09:15-09:45	**Plenary speaker: Bassam A. Izzudin, Imperial College London** Robustness of Multi-storey Buildings: Rational Assessment and Design
09:45-10:05	Coffee Break
Plenary Session, Co-Chairs: Bassam A. Izzudin, Imperial College London & Peng Feng, Tsinghua University	
10:05-10:35	**Plenary speaker: Yeongbin Yang, Chongqing University** Is There a Limit on the Length of Long-Span Bridges?
10:35-11:05	**Plenary speaker: Leroy Gardner, Imperial College London** Progress on the Use of Metal 3D Printing in Construction
Plenary Session, Co-Chairs: Yan Zhuge, University of South Australia & Guowei Ma, Hebei University of Technology	
11:05-11:35	**Plenary speaker: Hong Hao, Guangzhou University/ Curtin University** Prediction of Blast-induced RC Slab Fragmentation Using ALE-FEM-SPH and FGN Methods
11:35-12:05	**Plenary speaker: Ahsan Kareem, University of Notre Dame** Embracing the Winds of Change: A Journey through Wind Effects on Structures and the Next Frontiers
12:05-13:30 Lunch (Buffet)	

November 11, 2024, Morning (08:00-12:10) Oriental Hall, 2F, Building 3, (3 号楼二楼东方厅)	
Plenary Session, Co-Chairs: Yixia Zhang, Western Sydney University & Jose M. Adam, Universitat Politècnica de València	
08:00-08:30	**Plenary speaker: Billie F. Spencer, University of Illinois Urbana-Champaign** Topology Optimization of Structures Subjected to Random Dynamic Loads
08:30-9:00	**Plenary speaker: Zhishen Wu, Southeast University/Henan University of Technology** Innovation and Application of High-Performance FRP-Steel Reinforced Concrete and PC Structures
Plenary Session, Co-Chairs: Guoxing Lu, Swinburne University of Technology & Nuno Silvestre, University of Lisbon	
09:00-9:30	**Plenary speaker: Yi Min 'Mike' Xie, RMIT University** Generalized Topology Optimization for Structural Design
09:30-10:00	**Plenary speaker: Jose Torero Cullen, University College London** Holistic Performance of Mass Timber Structures
10:00-10:30	**Plenary speaker: Chien Ming Wang, University of Queensland** SeaFisher – A Novel Fish Cage for Ocean Aquaculture
10:30-10:50	Coffee Break
Chair: Ching Tai Ng, University of Adelaide	
10:50-11:40	Face to Face with Editors
11:40-12:00	Best Paper Awards Ceremony
12:00-12:10	ICES2026 Host Announcement and Presentation
12:00-13:30 Lunch (Buffet)	

Program of Keynote Sessions

November 10, 2024, Morning (08:00-12:05) **Pearl River Hall A, 2F, Building 2 (2 号楼二楼珠江厅 A 区)**	
Keynote Session, Co-Chairs: Dong Ruan, Swinburne University of Technology & **Jun Li, Curtin University**	
08:00-08:25	**Keynote speaker: Guowei Ma, Hebei University of Technology** Integrated Optimization for Extrusion-Based 3D Concrete Printing
08:25-08:50	**Keynote speaker: Heng Hu, Ningxia University / Wuhan University** Quantum Computing Enhanced Data-Driven Computational Mechanics for Composite Structures
Keynote Session, Co-Chairs: Fengming Ren, Guangzhou University & **Kang Hai Tan, Nanyang Technological University**	
08:50-09:15	**Keynote speaker: Bo Wu, South China University of Technology** Shear and Flexural Behaviors of Precast Recycled Lump-Aggregate Concrete Laminated Beams Using Inclined-Crossed Stirrups
09:15-09:40	**Keynote speaker: Nuno Silvestre, University of Lisbon** Behaviour of Solar Sails Via a Multiscale Approach
09:40-10:00	Coffee Break
Keynote Session, Co-Chairs: Wei Gao, University of New South Wales & **Heung Fai Lam, City University of Hong Kong**	
10:00-10:25	**Keynote speaker: Qingshan Yang, Chongqing University** Estimation of Wind Effects on Cladding and Components
10:25-10:50	**Keynote speaker: Michael Beer, Leibniz Universität Hannover** Efficient Reliability Analysis with Aleatory and Epistemic Uncertainties
Keynote Session, Co-Chairs: Wensu Chen, Curtin University & **Xiaodong Huang, Swinburne University of Technology**	
10:50-11:15	**Keynote speaker: Yufei Wu, Shenzhen University** Low carbon, Economical and High-performance Concrete Material - Compression Cast Concrete and its Marine Floating Structure
11:15-11:40	**Keynote speaker: Jose M. Adam, Universitat Politècnica de València** Defining the Last Line of Defence Against Catastrophic Building Collapses
11:40-12:05	**Keynote speaker: Yixia Zhang, Western Sydney University** Development and Application of Green Magnesium Oxychloride Cement (MOC) and Fire Resistant MOC Based Fibre Reinforced Cementitious Composites for Cladding
12:10-13:30 Lunch (Buffet)	

November 10, 2024, Morning (08:00-12:05), Guangdong Convention Hall, 4F, Building 2 (2 号楼四楼广东大会堂)	
Keynote Session, Co-Chairs: Jian-Guo Dai, City University of Hong Kong & Michael Beer, Leibniz Universität Hannover	
08:00-08:25	**Keynote speaker: Jay Sanjayan, Swinburne University of Technology** Sustainable Construction using 3D Concrete Printing and Digital Automation Technologies
08:25-08:50	**Keynote speaker: Xianglin Gu, Tongji University** Multi-Scale Analysis of Failure Processes for Concrete and Masonry Structures based DEM
Keynote Session, Co-Chairs: Kaiming Bi, The Hong Kong Polytechnic University & Tianyu Xie, Southeast University	
08:50-09:15	**Keynote speaker: Zhongxian Li, Tianjin University** Research on Seismic Performance of Posttensioned Precast Segmental CFDST Bridge Piers
09:15-09:40	**Keynote speaker: Yuchen Ou, Taiwan University** Design and Development of Composite New-RCS Structures
09:40-10:00	Coffee Break
Keynote Session, Co-Chairs: Manuel L. Romero, Universitat Politècnica de València & Hua Yang, Harbin Institute of Technology	
10:00-10:25	**Keynote speaker: Linhai Han, Guangxi University / Tsinghua University** Concrete-Filled Steel Tubular (CFST) Structures: Research, Applications and Design Standards
10:25-10:50	**Keynote speaker: Guoxing Lu, Swinburne University of Technology** Large Deformation and Energy Absorption of Origami Structures
Keynote Session, Co-Chairs: Ou Zhao, Nanyang Technological University & Yingyan Zhang, RMIT University	
10:50-11:15	**Keynote speaker: Satish Nagarajaiah, Rice University** Adaptive Passive Negative-Positive Stiffness Structural Systems for Enhanced Non-Resonant and Damped Response Control
11:15-11:40	**Keynote speaker: Yan Zhuge, University of South Australia** FRP Reinforced Ultra-High-Performance Concrete Structures: Development, Durability and Application to 3D Printing
11:40-12:05	**Keynote speaker: Fabio Matta, University of South Carolina** A Landmark Application of Noncorrosive FRP Reinforcement: The Low Batrery Seawall Restoration in Charleston, South Carolina
12:10-13:30 Lunch (Buffet)	

Engineering Structures Editorial Board Meeting

November 10, 2024, Evening （20:00-22:00） Shenzhen Room 2201, 2F, Building 2 (2 号楼二楼深圳厅)	
Co-Chairs: Jie Yang, RMIT University & Ching Tai Ng, University of Adelaide	
20:00-21:00	**Engineering Structures Editorial Board Meeting**
21:00-22:00	**International Steering Committee Meeting**

Program of Mini-Symposia (MS) and Special Sessions (SS)

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) **Maoming Room 2102, 1F, Building 2 (2 号楼一楼茂名厅)** MS01: Extreme Loads, Dynamics, and Performance Assessment of Coastal Bridges	
Session 1, Co-Chairs: Kai Wei, Southwest Jiaotong University & Zilong Ti, Southwest Jiaotong University	
13:30-13:50	***Invited speaker: Min Luo, Zhejiang University** Numerical Simulation of Freak Wave Impact on a Fixed Platform Based on an Enhanced SPH Model
13:50-14:10	***Invited speaker: Qinghe Fang, Harbin Institute of Technology** Wave Force on Coastal Bridge Decks Located over Uneven Seabed
14:10-14:25	**Speaker: Xiaodong Bai, Hefei University of Technology** Active Learning of Structural Failure Probability of Floating Bridges under Extreme Wave Loadings
14:25-14:40	**Speaker: Mohd Asif, IIT Roorkee** Experimental Evaluation of the Scaled Outer Containment Wall against Rigid Missile Impact
14:40-14:55	**Speaker: Hasan Imani / Kai Wei, Southwest Jiaotong University** Effects of Wave Period on the Dynamics of Offshore Steel Trestles
14:55-15:10	**Speaker: Wanli Yu / Piguang Wang, Beijing University of Technology** Research on the Dynamic Response of Bridges under Combined Wave- Current-Earthquake Action
15:10-15:25	**Speaker: Jianguo Wang / Kai Wei, Southwest Jiaotong University** Numerical Investigation into the Effect of Bearing Modeling on the Dynamic Response of Bridge Structures under the Impact of Breaking Wave
15:25-15:40	**Speaker: Weiqi Zheng, Central South University** Mixed Copula Joint Values of Wind and Temperature Actions on Long-Span Bridges Based on Bayesian Copula Approach
15:40-15:55	**Speaker: Junzhi Pan, Southwest Jiaotong University** Dynamic Responses Evaluation for Sea-Crossing Bridge Pier Using Nonlinear High-Order Time Domain Boundary Element Method
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Yi Zhang, Tsinghua University & Min Luo, Zhejiang University	
16:15-16:35	***Invited speaker: Zilong Ti, Southwest Jiaotong University** Numerical Simulation of Wind Flows above Progressive Wave and Their Impact on the Aerodynamic Behavior of Sea-Crossing Bridges
16:35-16:50	**Speaker: Piguang Wang, Beijing University of Technology** Dynamic Responses of FOWT under Ocean Environmental Loadings and Earthquakes
16:50-17:05	**Speaker: Bo Huang, Chongqing Jiaoting University** Experimental Study of Dynamic Response of the Box-Girder Coastal Bridge under the Regular Wave Actions with Considering the Wave-Structure Coupling
17:05-17:20	**Speaker: Kun Wang, Central South University** Investigation on Three-Dimensional Nonlinear Coupled Vibration of Submerged Floating Tunnel Under Moving Vehicle Load
17:20-17:35	**Speaker: Chen Fang, Southwest Jiaotong University** Nonlinear Dynamic Response of Coastal Bridge under Correlated Wind and Waves
17:35-17:50	**Speaker: Wang Fei, Ningbo University of Technology** Dynamic Response of a Joint Anticollision Device for Adjacent Bridges under a Large-Tonnage Ship Impact
17:50-18:05	**Speaker: ZhengYao Wang / Kun Liu, Jiangsu University of Science and Technology** Collision Protection in Floating Docks: An Experimental and Simulation Study
18:05-18:20	**Speaker: Cong You / Chao Li, Dalian University of Technology** A Simplified Hydrodynamic Added Mass and Damping Model for Elevated Pile-Cap Foundation Considering Pile Cap-Pile Group Interaction
18:20-18:35	**Speaker: Weizhu Zhu / Junlin Heng, Shenzhen University / Sichuan University** Enhanced Monocular Vision System for Multi-Target Deformation Monitoring of Bridges via Oblique Photography
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) 1st Floor, Building 2, Jieyang Room, 2103 (2 号楼一楼揭阳厅) MS02: Structural Dynamics, Condition Monitoring and Vibration Control of Offshore Wind Turbines MS49: Wind Effects on Building Structures	
Session 1, Co-Chairs: Xugang Hua, Hunan University & Bei Chen, Hunan University	
13:30-13:50	***Invited speaker: Gang Liu, Chongqing University** Vibration Control of Wind Turbine Towers with the Nonlinear Tuned Liquid Damper Considering the Aero-Elastic Coupling Behavior
13:50-14:10	***Invited speaker: Yinlong Hu, Hohai University** Sliding Mode Pitch Control for Vibration Suppression in Floating Wind Turbines
14:10-14:30	***Invited speaker: Wouter De Corte, Ghent University** Exploring Optimization Techniques for Concrete Street Furniture: A Case Study of the Bench Galet
14:30-14:45	**Speaker: Bei Chen, Hunan University** Optimal design of tuned mass-damper-inerter(TMDI) in flexible structures
14:45-15:00	**Speaker: Huayi Peng, Harbin Institute of Technology (Shenzhen)** Aeroelastic Analysis of the Structural Responses of Horizontal-Axis Wind Turbines through Fluid-Structure Interaction
15:00-15:15	**Speaker: Tian Li, Chongqing University** A Numerical Model for Fully Coupled Aerodynamic-Hydrodynamic-Mooring-Wake Analysis of Floating Offshore Wind Turbines
15:15-15:30	**Speaker: Haixin Zhu / Chao Chen, Hunan University** An Efficient Method Simultaneously Evaluating Fatigue Life for The Tower and Blades of An Offshore Wind Turbine
15:30-15:45	**Speaker: Jun Liang / Ying Wang, Harbin Institute of Technology (Shenzhen)** Identification of Equivalent Wave Load on Offshore Wind Turbine Multi-Bucket Jacket Foundation
15:45-16:00	**Speaker: Xiang Li / Zili Zhang, Tongji University** Closed-Form Derivation of Aerodynamic Damping Matrix of Monopile-Supported Offshore Wind Turbines Considering Tower Higher-Mode Vibrations
16:00-16:15	Coffee Break
Session 2, Co-Chairs: Jiurong Wu, Guangzhou University & Shangyu Hu, Shantou University	
16:15-16:35	***Invited speaker: Shangyu Hu, Shantou University** New Approaches to Coupled Vibration Analysis of High-Rise Buildings via Aeroelastic Model Testing
16:35-16:55	***Invited speaker: Youqin Huang, Guangzhou University** Advanced Dynamic Wind Pressure Zoning and Area Reduction for Cylindrical Shells with Bayesian Optimization Deep Neural Networks
16:55-17:10	**Speaker: Haoran Pan, Guangzhou University** Investigation of Dynamic Properties of High-Rise Buildings under Typhoon Mangkhut via Bayesian Method
17:10-17:25	**Speaker: Yangxue Wang, Guangzhou University** Research on Wind Load Characteristics of Asymmetric Linked Twin Tower High-Rise Buildings
17:25-17:40	**Speaker: Yutao Zeng, Guangzhou University** Bayesian Optimization Deep Neural Networks for Predicting Extreme Wind Loads on Cylindrical Reticulated Shell Structures
17:40-17:55	**Speaker: Baile Wu, Guangzhou University** An Improved SRCNN Model for Wind Pressure Super-Resolution Reconstruction on Low-Rise Buildings
17:55-18:10	**Speaker: Honghao Zhang, Guangzhou University** Sparse Gaussian Process Based Wind Pressure Reconstruction for Low-Rise Buildings
18:10-18:25	**Speaker: Feiqiang Li / Zhuangning Xie, South China University of Technology** Long-Term Investigations of Dynamic Properties of a 441.8-Meter-High Skyscraper under Operational Conditions
18:25-18:40	**Speaker: Chengxi Pan, Zhejiang University** Prediction of Overall Shape Coefficient of High-Rise Buildings with Rectangular Section Based on Small Sample Machine Learning
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Meizhou Room 2105, 1F, Building 2(2 号楼一楼梅州厅) MS03: Green and Sustainable Concrete Materials and Structures	
Session 1, Co-Chairs: Yufei Wu, Shenzhen University & Xiaoxu Huang, Shenzhen University	
13:30-13:50	***Invited speaker: Biao Hu, Shenzhen University** A New Compression Cast Concrete Technology Towards Low Carbon, More Durable and High Performance
13:50-14:10	***Invited speaker: Feng Zhang, Shandong University** Research on Concrete Bridge Engineering
14:10-14:25	**Speaker: Feng Zhang, Shandong University** Flexural Capacity Design Model of Reinforced Concrete Beams Strengthened with Hybrid Bonded CFRP
14:25-14:40	**Speaker: Nixia Song / Yue Huang, Qingdao University of Technology** Mechanical Properties and Microstructure of Sustainable Ultra-High-Performance Seawater Sea-Sand Engineered Cementitious Composites (UHPSS-ECC) Incorporated with Metakaolin and Limestone Powder
14:40-14:55	**Speaker: Zechuan Yu, Wuhan University of Technology** Understanding Nanoscale Mechanism of Compression Casting on Rubber-Cement Interface: A Molecular Dynamics Study
14:55-15:10	**Speaker: Liangliang Wei, Dongguan University of Technology** Effects of Hybrid Fiber and Anodic Polarization on Mechanical Performance of Carbon Fabric Reinforced Cementitious Matrix (C-FRCM)
15:10-15:25	**Speaker: Lei Gao / Xianglun Meng, Qingdao University of Technology** Experimental Study on Strengthened of Corroded RC Beams with Mechanical Anchoring FRP
15:25-15:40	**Speaker: Wenhao Shi / Yulei Bai, Beijing University of Technology** Shear Behaviors of ECC Beams Reinforced with GFRP Bars and Stirrups
15:40-15:55	**Speaker: Shuwen Deng / Lian Shen, Changsha University** Study on the Static and Dynamic Performance of Fully Precast Steel-UHPC Lightweight Composite Bridge Joint
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Feng Zhang, Shandong University & Rui Zhou, Shenzhen University	
16:15-16:35	***Invited speaker: Xiaoxu Huang, Shenzhen University** Life Cycle Assessment and Life Cycle Cost Analysis of LC3 Concrete Considering Sustainability and Uncertainty
16:35-16:55	***Invited speaker: Yugui Cao, Wuhan University of Technology** Research on Mechanical Properties of Lightweight Ultra High Performance Concrete (LUHPC)
16:55-17:10	**Speaker: Qingjie Wen, China University of Mining and Technology** Bending Cracking Performance of Steel-UHPC Composite Continuous Girder Bridge
17:10-17:25	**Speaker: Ju Yi, Changsha University** Size effects on bond strength between steel strand and concrete
17:25-17:40	**Speaker: Hao Meng / Rongqiao Xu, Zhejiang University** Novel Insights into the Bearing Mechanisms of Perfobond Rib Shear Connectors through Experimental Study
17:40-17:55	**Speaker: Xin Jia, Shenzhen University** Study on Deformation Adaptability of Ballastless Track on Long-Span Cable-Stayed Bridge under Service Environment
17:55-18:10	**Speaker: Muhammad Fahad Ullah, Tongji University** Enhancing Compressive Strength and Microstructure of Sustainable Cement Using Extracted Micro Silica from Rice Husk Ash: Insights from SEM and XRD Analysis
18:10-18:25	**Speaker: Pulleti Siva Sankar, Birla Institute of Technology and Science** Buckling and Postbuckling Response of Natural Fiber Based Functionally Graded Composite Plates under In-plane Shear
18:25-18:40	**Speaker: Tang Wei / Zhan Baojian, Shenzhen University** Utilization of CO2 Curing to Enhance the Performances of the Recycled Aggregates Made from Silica Fume-Cement Composites
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Shenzhen Room 2201, 2F, Building 2 (2 号楼二楼深圳厅) MS04: Progressive Collapse of Structures under Extreme Events	
Session 1, Co-Chairs: Kang Hai Tan, Nanyang Technological University & Bo Yang, Chongqing University	
13:30-13:50	***Invited speaker: Leong Hien Poh, National University of Singapore** Improved plastic hinge models for ALP analysis of RC structures
13:50-14:10	***Invited Speaker: Wenda Wang / Long Zheng, Lanzhou University of Technology** Progressive Collapse Resistance of the Resilient CFST Column-Steel Beam Joints Based on Kinked Connected Components
14:10-14:25	**Speaker: Guisheng Chen / Yi Li, Beijing University of Technology** Progressive Collapse Resistance of Precast Concrete Beam–Slab–Column Assemblies with Different Composite Slabs under Uniform Load
14:25-14:40	**Speaker: Faxiang Xie, Hohai University** An Analytical Identification and Inverse Analysis of the Behavior of Embedded Rebars
14:40-14:55	**Speaker: Senna Wang / Yi Li, Beijing University of Technology** Rapid Prediction of Progressive Collapse Region of Reinforced Concrete Frame Structures Based on Graph Neural Network
14:55-15:10	**Speaker: Tran Manh Ha / Tan Kang Hai, Hanoi University of Civil Engineering / Nanyang Technological University** Mitigating Progressive Collapse of Structures against Blast Effects
15:10-15:25	**Speaker: Tran Manh Ha / Tan Kang Hai, Hanoi University of Civil Engineering / Nanyang Technological University** Residual Capacity of Post-Tensioned Precast Concrete Structures under Column Removal Scenarios at Large Deformation Stage
15:25-15:40	**Speaker: Jun Yu, Southeast University** A Vulnerability Assessment Framework for Progressive Collapse of RC Frame Structures Subjected to Multiple Column Removal Scenarios
15:40-15:55	**Speaker: Van Hung Nguyen, Hanoi University of Civil Engineering** Enhancing Crack Detection and Progressive Collapse Assessment of Earthquake-Damaged Precast Concrete Joints Using Digital Image Correlation
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Yi Li, Beijing University of Technology & Shaobo Kang, Chongqing University	
16:15-16:35	***Invited speaker: Shaobo Kang, Chongqing University** Effect of sandwich panel protective layer on the impact resistance of reinforced concrete slabs
16:35-16:50	**Speaker: Luchuan Ding / Jianbing Chen, Tongji University** Comparison of Different Failure Criteria for Determining the Collapse Limit State in Progressive Collapse Analysis of Multi-Story RC Structures
16:50-17:05	**Speaker: Xianzhen Liang / Xiaohuangcan He, Guangxi University** A Machine Learning-Based Study of Tensile Catenary Action Mechanism for RC Beam-Column Subassembley
17:05-17:20	**Speaker: Chen Yu, National University of Singapore** 3d Reduced-Order Modelling for ALP Analysis of RC Structures
17:20-17:35	**Speaker: Xiaoming Wang / Wenjie Yang / Jie Zou, Chang'an University** Time-Dependent Systematic Progressive Collapse Resistance of Steel Truss Arch Bridge under Hanger Fracture
17:35-17:50	**Speaker: Mehran Ahmad, Southeast University** A Review of Experimental Studies & Testing Approaches on Progressive Collapse of RC Structures
17:50-18:05	**Speaker: Denggao Chen / Rui Zhou, Shenzhen University** Study on Thermodynamic Performance of Double-Block Ballastless Track with New Type Limited Groove
18:05-18:20	**Speaker: Sheng Chen / Wenxi Wang, Hunan University** Mechanical Behavior and Seismic Control Performance of a Metallic Torsional Damper for Flexible Structures
18:20-18:35	**Speaker: Ziqi Zhao, Griffith University** Load Resistant Capacities of Post-Tensioned Flat Plate Slab-Column Connections Influenced by Different Strength of HPC
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Shantou Room 2202, 2F, Building 2 (2 号楼二楼汕头厅) MS06: Numerical Modelling of Nanomaterials and Nanostructures	
Session 1, Co-Chairs: Yingyan Zhang, RMIT University & Henin Zhang, RMIT University	
13:30-13:50	***Invited speaker: Guoxing Cao, Tongji University** Wrinkling Effect on Mechanical Characterization of Clamped, Pre-Stretched Freestanding Nanofilms via Indentation
13:50-14:10	***Invited speaker: Qingbin Zheng, The Chinese University of Hong Kong** Interfacial Welding Engineering of Carbon Networks
14:10-14:25	**Speaker: Yangao Hu, Chongqing University** Investigating Stress Transfer Mechanisms in Reinforced Composites
14:25-14:40	**Speaker: Yuanyuan Kang, Harbin Institute of Technology** Gas Adsorption and Self-Desorption of Carbon Nano-Network via Self-Shrinking Deformation: A Molecular Dynamic Study
14:40-14:55	**Speaker: Yi Wang, RMIT University** Investigation of Interfacial Mechanical Properties of Graphene Origami/Polyethylene Nanocomposites
14:55-15:10	**Speaker: Youzhe Yang, RMIT University** Cross-Plane Thermal Transport of Multilayer Graphene/H-BN VDW Heterostructures with Different Composition Distribution
15:10-15:25	**Speaker: Bin Dong, Zhejiang University** Tension-Compression Asymmetry of Nickel Alloy via Atomistic Simulations
15:25-15:40	**Speaker: ChuanXin Cui, Shanghai University** Molecular Dynamics Simulation for Phase Transition of CSPbI3 Perovskite: Parameterization of LJ-Coul/DSF and Buck-Coul/DSF Potentials
15:40-15:55	**Speaker: Yiting Zhang, The Hong Kong Polytechnic University** A Self-Powered Acoustic-Driven Triboelectric Nanogenerator System for Efficient Air Purification
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Shaoyu Zhao, RMIT University & Ning Wei, Jiangnan University	
16:15-16:35	***Invited speaker: Ning Wei, Jiangnan University** Location Dependency of Vacancy Defects Effect on the Mechanical Properties of Fullerene Networks
16:35-16:50	**Speaker: Cunxu Wang, RMIT University** Finite Element Simulation of Thermal and Residual Stress Field in 3D Printed Functionally Graded Materials
16:50-17:05	**Speaker: Muhan Zhang / Helezi Zhou, Huazhong University of Science and Technology** Carbon Nanomaterials Design Strategies in Carbon Fiber Reinforced Epoxy Composite with High Service Performances by Liquid Composite Molding
17:05-17:20	**Speaker: Miduo Yu, Xi'an Jiaotong University** Strength Criterion and Fracture Behaviors of Defective Two-Dimensional Materials
17:20-17:35	**Speaker: Heng Mei, Harbin Institute of Technology** Performance of RC Shear Keys under Multi-Hazard Action of Earthquake and Tsunami
17:35-17:50	**Speaker: Shiyi Zhang, Hunan University of Technology** Analytical and Numerical Study on the Dynamic Responses of the Buried Oval Lined-pipeline System under Strike-slip Fault
17:50-18:05	
18:05-18:20	
18:20-18:35	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Foshan Room 2203, 2F, Building 2 (2 号楼二楼佛山厅) MS07: Modeling and Mitigation of Wind-Induced Vibration for Long-Span Bridges	
Session 1, Co-Chairs: Qingkuan Liu, Shijiazhuang Tiedao University & Kun Xu, Beijing University of Technology	
13:30-13:50	***Invited speaker: Qing Zhu, Tongji University** Spanwise Layout Optimization of Aerodynamic Countermeasures for Vortex-Induced Vibration Control on Long-Span Bridges
13:50-14:10	***Invited speaker: Haiyan Yu, Dalian Jiaotong University** Research on Wind Resistance Performance of a Pipeline Suspension Bridge Based on Natural Wind Field Full Bridge Aeroelastic Model Tests
14:10-14:25	**Speaker: Zijie Zeng / Ching Tai Ng, The University of Adelaide** Performance Assessment of a Likelihood-Free Bayesian Framework for Guided Wave-Based Damage Identification on the Choice of Distance Functions and Signal Processing Techniques
14:25-14:40	**Speaker: Zhimin Chai / Yongxin Yang, Tongji University** Excitation Mechanism of Vertical Vortex-Induced Vibration for Closed-Box Girder
14:40-14:55	**Speaker: Hao Meng / Donglai Gao, Harbin Institute of Technology** Complex Vortex Dynamics of a Static Triple-Box Girder under Various Angles of Attack
14:55-15:10	**Speaker: Maliheh Tavoosi Gazkoh / Xiaoshan Lin, RMIT University** Design of Innovative Non-Planar Topological Interlocking Bricks for Tubular Structures
15:10-15:25	**Speaker: Sizhe Wu / Genshen Fang, Tongji University** Vortex-Induced Vibration Mitigation of Long-Span Bridges Using Various Damping Devices: A Comparative Study
15:25-15:40	**Speaker: Jiaying Wang/ Feng Wang, Chang'an University** Investigation of the Effect of Corner Modification and Experimental Parameters on the Vortex-Induced Vibration of a 10:1 Section
15:40-15:55	**Speaker: Zuopeng Wen, Tongji University** Evolution Mechanism and Explicit Solutions of Bridge Flutter Modality Regarding Phase Difference and Torsional Center
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Qing Zhu, Tongji University & Donglai Gao, Harbin Insitute of Technology	
16:15-16:30	**Speaker: Kun Xu, Beijing University of Technology** Bridge Flutter Control and Its Parameter Uncertainty Analysis by Using Lever-arm Tuned Mass Damper Inerter
16:30-16:45	**Speaker: Sanjukta Chakraborty, Indian Institute of Technology Palakkad** A Study on the Adverse Effect of Base Isolated Multi-Degree-Of-Freedom Structural System
16:45-17:00	**Speaker: Ruihong Xie / Lin Zhao, Tongji University** Mitigation of Vortex-Induced Vibration in Bridge Structure Using Nonlinear Energy Sink Inerter: Weight Effect and Compensational Strategies
17:00-17:15	**Speaker: Qilong Liu, Nanjing University of Science and Technology** Experimental Study on the Detection of Fatigue Cracks in Orthotropic Steel Bridge Decks Using Infrared Thermography
17:15-17:30	**Speaker: Fuchen Song, Southwest Jiaotong University** A New Train Derailment Arresting System Based on Collision Energy Transfer Concept: Design, Optimization and Numerical Verification
17:30-17:45	**Speaker: Liangrui Ni / Shubi Du, Southwest Jiaotong University** Wind Load Modification on Side Surfaces Considering the Effect of Turbulence Integral Scale
17:45-18:00	**Speaker: Haojun Tang, Southwest Jiaotong University** Mitigation of Wind-Induced Vibration of a Long-span Suspension Bridge during Erection
18:00-18:15	**Speaker: Dongzhi Guan, Southeast University** Concept and Behaviour of Controllable SMA Plate-Type Dampers for the Whole Phase of Main-Aftershock
18:15-18:30	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Zhanjiang Room 2302, 3F, Building 2 (2 号楼三楼湛江厅) MS08: Impact and Blast Protection of Engineering Structures	
Session 1, Co-Chairs: Li Chen, Southeast University & Jun Yu, Southeast University	
13:30-13:50	***Invited speaker: Wensu Chen, Curtin University** Experimental Study on Basalt Macro Fibres Reinforced Geopolymer Concrete Beams with Steel-FRP Composite Bars under Impact Loading
13:50-14:10	***Invited speaker: Xiong Zhang, Huazhong University of Science and Technology** Theoretical and Numerical Analysis on Bending Responses of Bionic Honeycomb Beams
14:10-14:25	**Speaker: Shunlong Li, Harbin Institute of Technology** Service Performance Evolution of Prestressed Concrete Girders in Realistic Cold-Regional Environments
14:25-14:40	**Speaker: Debo Zhao, Shenzhen University** Dynamic Shear Behavior of Axially Preloaded LRS-FRP Strengthened RC Short Columns under Transverse Impact
14:40-14:55	**Speaker: Yize Kang / Yingkang Yao, Sun Yat-sen University / Jianghan University** Noise Reduction and Spectral Characteristics of Blast Signals for High-Rise Cylindrical Structures
14:55-15:10	**Speaker: Emmanuel Bani / Weiqiang Wang, Hohai University** Response of FRP-UHPC Hybrid Bar Reinforced Concrete (HBRC) Column against the Lateral Impact Load
15:10-15:25	**Speaker: Siya Wang / Xiaoshan Lin, RMIT University** Impact Performance of New Topological Interlocking Structures
15:25-15:40	**Speaker: Mingjin Cao, Southeast University** Anti-Penetration Mechanism of Ultra-High Molecular Weight Polyethylene Fiber Laminates
15:40-15:55	**Speaker: Yizu Zhou, Shanghai Institute of Technology** Research Overview of the Bearing Capacity of Reinforced Concrete Composite Slabs without External Rebars
15:55-16:05	Coffee Break
Session 2, Co-Chairs: Bin Feng, Southeast University & Xinmei Xiang, Guangzhou University	
16:15-16:35	***Invited speaker: Xinmei Xiang, Guangzhou University** Study on Mechanical Properties of Microscale Miura-Ori Metamaterials Fabricated by Two-Photon Lithography Technique
16:35-16:55	***Invited speaker: Yifei Hao, Hebei University of Technology** Blast Resilience of RC Slab Using Sprayed Engineered Geopolymer Composite: Experimental Investigations
16:55-17:10	**Speaker: Bin Feng, Southeast University** Feature-Embedded Multi-Graph Neural Network for Reacting Flow Field Prediction with Non-Uniform Initial Concentration Distributions
17:10-17:25	**Speaker: Qiushi Yan, Beijing university of technology** Investigations on Damage Mechanism and Fragility of NRC Box Girder Subjected to Contact Explosion
17:25-17:40	**Speaker: Zhiwei Yan / Yulei Bai, Beijing University of Technology** Experimental Study on Impact Resistance of Large-Rupture-Strain (LRS) FRP Strengthened RC Bridge Piers under Lateral Impact Loading
17:40-17:55	**Speaker: Jiachen Li / Hongtuo Qi, Chongqing university** Integrated and Collaborative Optimization Design Method of Steel Modular Buildings
17:55-18:10	**Speaker: Waleed Mashrah / Rima Boufendassa, Dali Construction Group Co.,Ltd** A Novel Numerical Modelling Method for Single-Layer Reticulated Shells with and without Roofing Systems
18:10-18:25	**Speaker: Yan Lei, Southeast University** A Novel Hydro-Elastoplastic Constitutive Model Incorporating Hydrostatic Damage for Predicting High-Pressure Performance of Concrete under Blast Loading
18:25-18:40	**Speaker: Xiaoshu Gao, The University of Tokyo** Experimental Evaluation of Micro-Strain Monitoring Method for Local Damage Detection in Large-Scale Steel Structures
18:40-18:55	**Speaker: Sheng Zhang, Harbin Engineering University** Investigation on Damage of the RC T-Wall Subjected to Combined Loading of Blast and Fragments
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Jiangmen Room 2301, 3F, Building 2 (2 号楼三楼江门厅) MS09: Advances and Innovations in Steel Structures	
Session 1, Co-Chairs: Siu Lai Chan, South China University of Technology & Yaopeng Liu, South China University of Technology	
13:30-13:50	***Invited speaker: Cosmin G. Chiorean, Technical University of Cluj-Napoca** Direct Strength Capacity Assessment of Bi-axially Loaded SRC Cross-Sections Exposed to Full-Range Fire
13:50-14:10	***Invited speaker: Junxian Zhao, South China University of Technology** Seismic Performance of Resilient Steel Moment Connections with Top Shear Tabs and Bottom Replaceable Buckling-Restrained Plate
14:10-14:30	***Invited speaker: Xihong Zhang, Curtin University** Prediction of Blast Load from Accidental Hydrogen Explosion in Vented Storage Tank
14:30-14:45	**Speaker: Xiaoyi Lan, South China University of Technology** Recent Research Advances and Development of ISO Design Standard for Failure Modes of RHS Joints
14:45-15:00	**Speaker: Wei Lin / Yaopeng Liu, Ove Arup & Partners HK Limited / South China University of Technology** Crowning the Champion-Kai Tak Sports Park Main Stadium
15:00-15:15	**Speaker: Lunhua Bai, Foshan University** Fiber Beam-Column Element for Ultimate Strength of Stiffened Steel Box Section Members Considering Local Buckling
15:15-15:30	**Speaker: Chen Peng / Guo Jiachen, The Hong Kong Polytechnic University** Investigation on In-Plane Shear Behaviour Of a Demountable Interlocking Web Connection Applied in Precast Floor Diaphragms for Construction Circularity
15:30-15:45	**Speaker: Huanhuan Wei, Southeast University** Experimental Study on Fatigue Properties of Q690 High Strength Steel in Marine Corrosive Environment
15:45-16:00	**Speaker: Haochen Zhang, University of Edinburgh** Experimental Study on The Compressive Strength of Diamond Bird-Beak SHS Joints Under Corrosion
16:00-16:15	Coffee Break
Session 2, Co-Chairs: Junxian Zhao, South China University of Technology & Xiaoyi Lan, South China University of Technology	
16:15-16:35	***Invited speaker: Siwei Liu, The Hong Kong Polytechnic University** Structural Design of the First 3D Metal Printing Structure in Hong Kong Using WAAM: Innovation, Challenges and Insights
16:35-16:55	***Invited speaker: Dan Gan, Southwest Petroleum University** Behavior of Steel Staggered Truss Framing (SSTF) Structure Based on Experimental Research of an SSTF Sub-Structure
16:55-17:10	**Speaker: Pingchuan Ma / Lei Zhao, Southwest Jiaotong University** Mechanical Properties of Stainless Steel Expansion Tube Energy Dissipators for Flexible Protective Structures
17:10-17:25	**Speaker: Yueyang Ding / Yaopeng Liu, South China University of Technology** Probabilistic Study on Accidental Eccentricity for Mic Structures Due to Construction Discrepancy
17:25-17:40	**Speaker: Shan He / Ruiyang Zhang, Southeast University** Recurrent Transformer for Rapid Assessment of Structural Seismic Resilience under Mainshock-Aftershock Earthquakes
17:40-17:55	**Speaker: Qiusong Zheng / Chuang Cui, Southwest Jiaotong University** 3D Pose Estimation and Detection Method for Loosening and Loss of Multi-Bolt Targets Based on Monocular Camera
17:55-18:10	**Speaker: Ran Deng, The Hong Kong Polytechnic University** Hybrid FRP-Concrete-Steel Prestressed Double-Skin Towers: Sustainable Support Structures Towards Next-Generation Offshore Wind Turbines
18:10-18:25	**Speaker: Tianxun Zhu, Southeast University** Vehicle-Induced Bridge Vibration Prediction using ConvLSTM Neural Network and Modal Decomposition
18:25-18:40	**Speaker: Zexiu Zhu / Ray Kai Leung Su, The University of Hong Kong** Performance of a Demountable CFST Column-To-Column Connection in the Shear Wall System with Boundary Columns
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) **Yunfu Room 4101, 1F, Building 4 (4 号楼一楼云浮厅)** MS09: Advances and Innovations in Steel Structures MS10: Vibration Control of Large-scale Flexible Structures	
Session 1, Co-Chairs: Wenai Shen, Huazhong University of Science and Technology & Lin Chen, Tongji University	
13:30-13:50	***Invited speaker: Haoran Zuo, Curtin University** Dynamics and Structural Vibration Control of Offshore Wind Turbines
13:50-14:05	**Speaker: Lin Chen, Tongji University** Unified Design Method of Dampers for Multimode Vibration Mitigation of Stay Cables
14:05-14:20	**Speaker: Lixiao Li, Harbin Institute of Technology** Development of Lateral Loading Protocol for Testing of Steel Member under Wind Loads
14:20-14:35	**Speaker: Jianfei Kang, Suzhou University of Science and Technology** Closed-Form Optimal Design Formulas for Vertically Installed Tuned Viscous Mass Dampers for Vibration Control in Wind Turbines
14:35-14:50	**Speaker: Yue Xiang, Guangzhou University** Optimal Design of Hysteretic Damping Tuned Mass Damper (HD-TMD)
14:50-15:05	**Speaker: Zhipeng Cheng / Kaiming Bi, Beijing University of Technology / The Hong Kong Polytechnic University** Performance Enhanced Magnetic Negative Stiffness Eddy-Current Damper: Numerical Simulation and Experimental Investigation
15:05-15:20	**Speaker: Jinkun Wang / Junxian Zhao, South China University of Technology** Seismic Behavior of a Novel Tensile-Shear Composite Modular Steel Structure Joint
15:20-15:35	**Speaker: Linwei Jiang, Curtin University** A Novel Structural System for Modular High-Rise Buildings
15:35-15:50	
15:50-16:15	Coffee Break
Session 2, Co-Chairs: Zili Zhang, Tongji University & Haoran Zuo, Curtin University	
16:15-16:30	**Speaker: Rui Bai, Sun Yat-Sen University** Advanced Analysis Method of Wind Turbine Blades for Highly Efficient Integrated Analysis
16:30-16:45	**Speaker: Erfeng Du, Southeast University** Compressive Behavior of Double Steel Plate-Recycled Aggregate Concrete Composite Wall with Steel Truss
16:45-17:00	**Speaker: Chatumongkol Sonniyom / Yasothorn Sapsathiarn, Mahidol University** Numerical Study of Confinement Effect Due to Axial Load on RC Columns under Blast Loading
17:00-17:15	**Speaker: Daixin Yang / Lin Chen, Tongji University** A High-Damping Mooring System for Structural Control of Floating Offshore Renewable Energy Applications
17:15-17:30	**Speaker: ShunShun Zhu / ChangFu Hu, East China Jiaotong University** Lateral-Torsional Buckling of Catenary Arches Subjected to Infilled Gravity
17:30-17:45	**Speaker: Aflah Dani / Krishanu Roy, University of Waikato** Life Cycle Assessment Application for Buildings in New Zealand: A Case Study on a Structural Insulated Panel Modular House
17:45-18:00	**Speaker: Yang Zhang, China State Construction Engineering (Hong Kong) Ltd.** Innovative Design Optimization System for Steel Structures Supporting Tower Cranes
18:00-18:15	**Speaker: Shaoqing Yu / Ashraf El Damatty, The University of Western Ontario** Dynamic Analysis of Horizontal Axis Onshore Wind Turbines Under Turbulent EF2 Tornado Wind Field
18:15-18:30	**Speaker: Yasuo Yamasaki, Nishimatsu Construction Co., Ltd.** Development of Tall LGS Walls for Large-Scale Logistics Warehouses
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Zhaoqing Room 4102, 1F, Building 4 (4 号楼一楼肇庆厅) MS11: Structural Application and Additive Manufacturing of High Performance Fibre Reinforced Cementitious Composite	
Session 1, Co-Chairs: Yixia Zhang, Western Sydney University & Xiaoshan Lin, RMIT University	
13:30-13:50	***Invited speaker: Yixia Zhang, Western Sydney University** A Cost-Effective Testing Method for Spalling Resistance of Cementitious Composites Using Propane Torch
13:50-14:10	***Invited speaker: Luoyu Xu, Ningbo University** Applications of Composite Strength Theory to Predict the Failure Strengths of Additively Manufactured Polymers
14:10-14:25	**Speaker: Dawei Gu / Jinlong Pan, Southeast University** Shear Strength Components of Reinforced Engineered Cementitious Composite (ECC) Beams
14:25-14:40	**Speaker: Dong An / Richard (Chuihui) Yang, Western Sydney University** Multi-Level Numerical Simulation Of 3d Concrete Printing: From Filaments to Structures
14:40-14:55	**Speaker: Huijie Wu / Xiaodan Teng, Guangxi University** Multi-Impact Characteristics of Polyethylene-Basalt Fiber Hybrid Engineered Cementitious Composites Incorporating Crumb Rubber
14:55-15:10	**Speaker: Heyang Wu, Qingdao Agricultural University** Numerical Investigation of Steel Fibre Reinforced Concrete Beams Subjected to Transient Temperature Field
15:10-15:25	**Speaker: Yangzhou Wu / Zhidong Gao, Beijing University of Technology / Tsinghua University** Seismic Performance Analysis of Structure Equipped with Tuned Mass Damper Considering Structure-Soil-Structure Interaction Effects (SSSI)
15:25-15:40	**Speaker: Lingfei Liu, Foshan University** Study on Seismic Performance of Ultra-High Performance Engineered Cementitious Composites (UHP-ECC) Coupling Beams
15:40-15:55	**Speaker: Chunbo Liu, Beijing University of Technology** A Boundary-Forced Response Displacement Method for Tunnel Longitudinal Seismic Analysis
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Xiaodan Teng, Guangxi University & Lingfei Liu, Foshan University	
16:15-16:35	***Invited speaker: Xiaodan Teng, Guangxi University** Deep learning-based crack detection and extraction in hybrid fiber-reinforced Engineered Cementitious Composites
16:35-16:55	***Invited speaker: Jie Xiao, Guangdong University of Technology** Strengthening Cracked Tunnel Lining with Ultra-High-Performance Concrete (UHPC): An Experimental Study
16:55-17:10	**Speaker: Xiaojie Zhu / Hao Wang, Southeast University** Probabilistic Ductile Deformation Limit State Prediction of Monolithic Exterior Shear Keys Based on Quantile Regression Machine Learning Techniques
17:10-17:25	**Speaker: Yu Zhang / Xiaodan Teng, Guangxi University** Study on the Influence of Water-To-Cement Ratio and Cement Substitution on the Mechanical Properties of LC3-ECC
17:25-17:40	**Speaker: Hanmo Wang / Alexander Lin, National University of Singapore** Physics-Informed Graph Neural Networks for Predicting Mechanical Responses in Hollow Concrete Blocks with Clay-Filled Honeycomb Patterns
17:40-17:55	**Speaker: Fengming Xu / Yiwei Weng, Hong Kong Polytechnic University** Application of Recycled Ceramic as Internal Curing Materials in 3d Printed Engineered Cementitious Composites
17:55-18:10	**Speaker: Yishun Liu, Hunan University of Technology** Finite Element Simulation of Flexural Behavior of Precast Assembled Beams with Ultra-high Performance Concrete Segments
18:10-18:25	**Speaker: Muneeb Qureshi, The University of Technology Sydney** Flexural Performance of Rubberized Concrete Beams Reinforced with Waste Tyre Steel Fibres
18:25-18:40	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Qingyuan Room 4103, 1F, Building 4 (4 号楼一楼清远厅) MS12: AI-Based Structural Health Monitoring for Enhancing Operational Safety of Infrastructure1	
Session 1, Co-Chairs: Yiming Zhang, Southeast University & Jianxiao Mao, Southeast University	
13:30-13:50	***Invited speaker: Xiaoyou Wang, The Hong Kong Polytechnic University** Maximizing Machine Learning Model Adaptation and Generalization Ability for Structural Health Monitoring
13:50-14:05	**Speaker: Fei Kang, Dalian University of Technology** A Data-Driven Deformation Monitoring Model for Super High Arch Dams Based on Gated Recurrent Unit and Temporal Convolutional Network with a Self-Attention Mechanism
14:05-14:20	**Speaker: Yixian Li, The Hong Kong Polytechnic University** Physics-Informed Deep Learing in Structural Full Response Virtue Sensing
14:20-14:35	**Speaker: Xun Su / Hao Wang, Southeast University** Deep Learning-Based Automated Identification of Vortex-Induced Vibration of Long Suspenders of The Suspension Bridge
14:35-14:50	**Speaker: Yushi Shan, The Hong Kong Polytechnic University** GNN-Based Semi-Supervised Temperature Prediction Model: Bridging the Gap between Numerical Simulation and Field Measurement
14:50-15:05	**Speaker: Ruixuan Liao / Yiming Zhang, Southeast University** Digital Twin-Enhanced Intelligent Ship Size Measurement for Avoiding Ship–Bridge Collision
15:05-15:20	**Speaker: Zuoqiang Li / Shun Weng, Huazhong University of Science and Technology** Machine Learning-Based Damage Identification Method with Feature Derived from Transmissibility Matrix
15:20-15:35	**Speaker: Zhaohan Huang, Fujian Urban and Rural Planning Design Institute** Digital and AI-Empowered Maintaining of Regional Infrastructures Integrally
15:35-15:50	**Speaker: Haoyu Liu / Mingming Song, Tongji University** Online Structural State-Input Estimation Using Acceleration Measurements Based on Gaussian Process Latent Force Model
15:50-16:05	Coffee Break
Session 2, Co-Chairs: Xiaoyou Wang, The Hong Kong Polytechnic University & Yasutaka Narazaki, Zhejiang University	
16:15-16:35	***Invited speaker: Yasutaka Narazaki, Zhejiang University** Point Cloud-Based Visual Recognition of Bridge Components toward Fully Automated Scan-To-BIM: Preliminary Results
16:35-16:50	**Speaker: Jingxi Qin, The Hong Kong Polytechnic University** Quick-Response Bokeh-Based Structural Dynamic Monitoring under Various Lighting Conditions
16:50-17:05	**Speaker: Junjie Tao, Chang'an University** Multi-Rate Real-Time Hybrid Simulation with Adaptive Discrete Feedforward Controller-Based Compensation Strategy
17:05-17:20	**Speaker: Seung Woo Song / Do Kyun Kim, Seoul National University** Optimisation of Stress Measurements and Mode Selection for Effective Conversion Models in Floating Structures
17:20-17:35	**Speaker: Wangchen Yan, Xiangtan University** An Efficient Bridge Weigh in Motion Algorithm Using Transfer Learning
17:35-17:50	**Speaker: Yaodong Liu / Jianxiao Mao, Southeast University** Automatic Recognition of Primary Components of Power Transmission Tower Using the Improved YOLO Algorithm with Multilevel Visual Feature Fusion
17:50-18:05	**Speaker: Zida Chen / Kang Gao, Southeast University** A Non-Contact Vehicle Weight-In-Motion Method Based on Large Vision Model and Machine Learning
18:05-18:20	**Speaker: Gil Hwan Wang / Jong Su Jeon, Hanyang University** Explainable Machine Learning Models for Predicting the Damage State of the Reinforced Concrete Piers after Vehicle Collision
18:20-18:35	**Speaker: Wenming Xu, Chongqing University** Bridge Damage Identification Based on Synchronous Statistical Moment Theory of Vehicle-Bridge Coupled Vibration
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Dongguan Room 4201, 2F, Building 4 (4 号楼二楼东莞厅) MS13: Recent Advances in Elastic Metamaterials and Engineering Applications	
Session 1, Co-Chairs: Kaiming Bi, The Hong Kong Polytechnic University & Xin Ren, Nanjing Tech University	
13:30-13:50	***Invited speaker: Zhigang Cao, Zhejiang University** Locally Resonant Meta-Foundation and Meta-Concrete for Attenuating Subway-Induced Structure-Borne Vibrations
13:50-14:10	***Invited speaker: Guobiao Hu, The Hong Kong University of Science and Technology** A Novel Metamaterial Attached with Inclined Beam Oscillators for Broadband Vibration Suppression
14:10-14:25	**Speaker: Chunfeng Zhao, Hefei University of Technology** A Novel Approach for the Prediction and Topology Optimization of 2D Phononic Crystals
14:25-14:40	**Speaker: Xingbo Pu, The Hong Kong Polytechnic University** An Analytical Formulation for Modeling a Half-Space Coupled to a Generic Distribution of Oscillators at the Surface
14:40-14:55	**Speaker: Wenhan Yin / Feifei Sun, Tongji University** Inter-Story Vibration Barrier: Mode-Based Vertical Vibration Control for Buildings Adjacent to Railway
14:55-15:10	**Speaker: Xiao Wang / Qilin Zhao, Nanjing Tech University** Topology Optimization of Periodic Pile Barriers for Bulk Wave Isolation
15:10-15:25	**Speaker: Zoe Yaw, The Hong Kong Polytechnic University** Sound Absorption by Acoustic Metasurface at Low Frequencies
15:25-15:40	**Speaker: Linyun Zhou, Nanjing University of Science and Technology** Topological transport of elastic wave in metamaterial plate
15:40-15:55	**Speaker: Anchen Ni, Beijing Jiaotong University** Impact of Sliding Interfaces on Wave Attenuation in Periodic Pile Barriers
15:55-16:15	Coffee Break
Session 2, Co-Chair: Xingbo Pu, The Hong Kong University of Science and Technology	
16:15-16:35	***Invited speaker: Zhihui Wen, Shanghai Jiao Tong University** Observation of Quasi-Bound State in the Continuum for Elastic Plates
16:35-16:50	**Speaker: Hao Gao, Shanghai Jiao Tong University** Nonreciprocal Wave Propagation in Spatiotemporally Modulated Meta-Structures
16:50-17:05	**Speaker: Ru Yue, Southeast University** Vibration Control and Optimization of Topological Metamaterial Plates
17:05-17:20	**Speaker: Jingyu Luo / Kaiming Bi, The Hong Kong Polytechnic University** Mechanism of Zero-Frequency Bandgap of Seismic Metamaterials
17:20-17:35	**Speaker: Liangliang Wu / Zhifei Shi, Beijing Jiaotong University** Broadband Surface Wave Manipulation by Metasurfaces in Unsaturated Soil: A Theoretical Study
17:35-17:50	**Speaker: Nirvan Makoond, Universitat Politècnica de València** On the Effectiveness of Fuse-Based Segmentation for Improving the Robustness of Buildings
17:50-18:05	**Speaker: Mingzhu Chen, Ghent University** Parametric Analysis of CDP Modeling of High-Strength Concrete in ABAQUS to Study the Direct-Shear Behavior of Joints in Precast Concrete Segmental Bridges
18:05-18:20	**Speaker: Hubdar Hussain / Dong-keon Kim, Dong-A University** Data-Driven Prediction of Cumulative Plastic Deformation for Buckling Restrained Braces Using Generative Adversarial Networks (GAN) Synthetic Data Augmentation
18:20-18:35	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Zhongshan Room 4202, 2F, Building 4 (4 号楼二楼中山厅) MS14: AI in Metamaterials and Porous Composites	
Session 1, Co-Chairs: Da Chen, University of New South Wales & Kang Gao, Southeast University	
13:30-13:50	***Invited speaker: Kang Gao, Southeast University** Design, Optimization and Analysis of Functionally Graded Porous Structures
13:50-14:10	***Invited speaker: Da Chen, The University of New South Wales** ANN-Based Mechanical Performance Prediction of Triply Periodic Minimal Surface Structure
14:10-14:25	**Speaker: Yongkui Wu, Southeast University** Impact Resistance of Aluminum Alloy Composite Tubes Embedded with Gradient Aluminum Foam
14:25-14:40	**Speaker: Ziqi Yang, University of Auckland** Pounding Behaviour of Skewed Bridges under Spatially Varying Ground Excitations
14:40-14:55	**Speaker: Dongliang Meng, Central South University** Research on the Dynamic Behavior of High-Speed Railway Bridge Piers Due to the Earthquake-Induced Horizontal Impact at Pier Top
14:55-15:10	**Speaker: Min Zhang, Southeast University** Parametric Metamaterials: Shell-Based Lattice Structures with Tunable Mechanical Properties
15:10-15:25	**Speaker: Jinlong Liu, Southeast University** A novel digital unit cell library generation framework for topology optimization of multi-morphology lattice structures
15:25-15:40	**Speaker: Zhiqiang Zou, Southeast University** A Data-Driven Inverse Design Framework of Functionally Graded Porous Structures with Target Dynamic Responses
15:40-15:55	**Speaker: Haiqing Zhu, Wuhan Institute of Technology** Dynamic Responses of Bridge Under Catastrophic Flood Considering Fluid-soil-structure Interactions
15:55-16:15	Coffee Break
Session 2, Chair: Zhangming Wu, Cardiff University	
16:15-16:30	**Speaker: Zijin Qiu / Hongtuo Qi, Chongqing University** Automatic and Multi-Objective Optimization of Highrise Frame-Tube Composite Structures
16:30-16:45	**Speaker: Sheraz Abbas, Tongji University** Experimental and Numerical Study of Shrinkage Behavior in Economical UHPC for Naturally Cured Orthotropic Steel-UHPC Composite Decks
16:45-17:00	**Speaker: Chunlong Xu, Yiwu Industrial & Commercial College** A Novel Method for Structural Dynamic Reliability Analysis by Combining Adaptive Double-Loop Kriging Model with Direct Integration Algorithm
17:00-17:15	**Speaker: Hanmo Wang, National University of Singapore** Physics-Informed Graph Neural Networks for Predicting Mechanical Responses in Hollow Concrete Blocks with Clay-Filled Honeycomb Patterns
17:15-17:30	**Speaker: Shaobo Qi, Beijing Institute of Technology** Blast Mitigation Effects and Dynamic Response of Flexible Composite Structures Based on TPU Airbag and PU Foam
17:30-17:45	**Speaker: Huayi Peng / Hongjun Liu, Harbin Institute of Technology** Non-Gaussian Properties and Design Approach for Wind Loads on Flat-Roofed Photovoltaic (PV) Arrays
17:45-18:00	
18:00-18:15	
18:15-18:30	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Yangjiang Room 4203, 2F, Building 4 (4 号楼二楼阳江厅) MS15: Advanced Concepts for Uncertainty Quantification and Reliability Analysis in Structural Dynamics MS48: New Structural System and Wind-Resistant Performance for Large Photovoltaic Power Stations	
Session 1, Co-Chairs: Wangji Yan, University of Macau & Jingran He, Guangdong University of Technology	
13:30-13:50	***Invited speaker: Mengze Lyu, Tongji University** A Dimension-Reduced Treatment for Probabilistic Response Determination of High-Dimensional Nonlinear Dynamical Systems Excited by Gaussian and/or Poisson Noise
13:50-14:05	**Speaker: Weijing Zhang, Beijing University of Technology** Cyclic Testing of Precast Hollow Shear Walls with New Structure and Connection
14:05-14:20	**Speaker: Fan Kong, Hefei University of Technology** A Novel Method for the Analytical Solution of Stochastic Integer/Fractional Order Dynamic Systems
14:20-14:35	**Speaker: Zhenhao Zhang, Changsha University of Science & Technology** Probability Analysis of Ship Structures against Capsizing Considering Multiple Threshold-Crossings of Stochastic Sea Waves
14:35-14:50	**Speaker: Yuliang Chen, Guangxi University of Science and Technology** Experimental Study on Seismic Performance and Shear Capacity Calculation of H-Shaped Steel Reinforced Concrete Columns under Combined Torsion
14:50-15:05	**Speaker: Huxiao Shi, Politecnico di Torino (Italy)** Data-Driven Prognostics and Health Management Solutions in the Case of Multiple Degradations in Complex Systems
15:05-15:20	**Speaker: Tengteng Hao / Wangji Yan, University of Macau** A Deep Learning Scheme for Solving the Dimension-Reduced Probability Density Evolution Equation in Stochastic Dynamic Systems
15:20-15:35	**Speaker: Songhe Liu, Tongji University** Inerter-Based Hybrid Isolation System for Robustness Enhancement
15:35-15:50	**Speaker: Zhenxing Zhu / Lu Yang, Beijing university of technology** Research on the Performance of Hydraulic Expansion and Reel Lay Installation Processes for Mechanically Lined Pipes
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Mingfeng Huang, Zhejiang University/Guangxi University & Haiwei Xu, Zhejiang University	
16:15-16:35	***Invited speaker: Chunhe Wang, Zhejiang University** Topology Optimization of High-Rise Buildings Based on Conceptual Design and an Improved Whale Optimization Algorithm
16:35-16:50	**Speaker: Pengxin Wang / Genshen Fang, Tongji University** Practical Formula for Estimating Fundamental Frequency of Flexible Cable-Supported Photovoltaic Structures
16:50-17:05	**Speaker: Guanjun Wang / Genshen Fang, Tongji University** Competition of Torsional Divergence and Flutter on Flexible Cable-Supported Photovoltaic Structures
17:05-17:20	**Speaker: Yiqing Shi, Zhejiang University** Structural Performance Analysis of Modular Prefabricated 3D Printing Concrete Residences Based on Multi-Scale Numerical Simulation
17:20-17:35	**Speaker: Chenguang Guo, Zhejiang University** Numerical Wind Effect Analysis of Latticed Shell Roof Structures of High-Rise Buildings
17:35-17:50	
17:50-18:05	
18:05-18:20	
18:20-18:35	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Hongmian Room 4207, 2F, Building 4 (4 号楼二楼红棉厅) MS16: Origami and Kirigami Inspired Engineering Structures MS42: Shape Memory Alloys and Polymer Materials in Construction	
Session 1, Co-Chairs: Zhejian Li, Guangzhou University & Yao Chen, Southeast University	
13:30-13:50	***Invited speaker: Yao Chen, Southeast University** Origami-Based Acoustic Metastructures for Adjustable Sound Absorption and Low-Velocity Impact Resistance
13:50-14:10	***Invited speaker: Jianjun Zhang, Swinburne University of Technology** Crushing Behaviour and Energy Absorption of Origami Tubes
14:10-14:25	**Speaker: Xiaohuangcan He, Guangxi University** Analytical Classification System for Diaphragm Stiffness in Steel Module Core Tube Structures
14:25-14:40	**Speaker: Zeyi Wang, Chang'an University** Dynamic Response of Bidirectional Bonded Prestressed Concrete Slabs Subject to Low Velocity Impact
14:40-14:55	**Speaker: Sihao Han, South China University of Technology** Machine Learning-Aided Customized Design of Multifunctional Origami Metamaterials
14:55-15:10	**Speaker: Anqi Shi, National University of Singapore** Dimensional and Angular Effects on Shear Behavior of 3D-Printed Concrete Shear Keys
15:10-15:25	**Speaker: Ruofei Yan, Guangzhou University** Impact Resistance of Curved Panels with Stacked Miura Origami Core
15:25-15:40	**Speaker: Changxin Liu, Tongji University** Study and Prediction of Bonding Strength in Big-Area Additive Manufacturing Parts Based on Glass Fiber-Reinforced ASA Material
15:40-15:55	**Speaker: Zhongyu Xiang, Xiangtan University** Study on the Design of the Origami-Inspired Sandwich Energy-Absorbing Structure for Inspection Well Surroundings
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Hong Zhu, Southeast University & Xuhong Qiang, Tongji University	
16:15-16:35	***Invited speaker: Elyas Ghafoori, Leibniz University Hannover** Development and Application of Iron-Based Shape Memory Alloys (Memory-Steels) in Construction
16:35-16:55	***Invited speaker: Qianqian Yu, Tongji University** SMA for Prestressed Strengthening of Steel Structures: A Review
16:55-17:15	***Invited speaker: Zhiqiang Dong, Southeast University** Exploration of Engineering Application Technology Based on Self-Prestressing Fe-SMAs
17:15-17:30	**Speaker: Yapeng Wu / Xuhong Qiang, Tongji University** Experimental Research and Practical Application of Repairing Cracked Steel Bridge Diaphragm Employing CFRP and SMA
17:30-17:45	**Speaker: Yanjie Xue, Jilin University** Experimental study on mechanical and recovery properties of Fe-SMA/FRP composite laminate
17:45-18:00	**Speaker: Yu Sun / Hong Zhu, Southeast University** Shear Performance Improvement of Damaged Concrete T-Beams Strengthened with Diagonal Self-Prestressed Fe-SMA Bars
18:00-18:15	**Speaker: Cheng Xu, Southeast University** Hysteretic Behavior and Recoverability of Iron-Based Shape Memory Alloy Bars under Cyclic Loading
18:15-18:30	**Speaker: Chushi Cui, Southeast University** Axial Compressive Behavior of UHPC Columns Reinforced with Fe-SMA Spiral Stirrups
18:30-18:45	**Speaker: Pu Zhang, Haoxiang Li, Zhengzhou University** Research on the Recovery Stress and Secondary activation Performance of Fe-SMA-FRP Composite Reinforcement
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Chaozhou Room 4301, 3F, Building 4 (4 号楼三楼潮州厅) MS17: Collision on Engineering Structures SS11: Concrete Filled Steel Tubular Structures	
Session 1, Co-Chairs: Ling Zhu, Wuhan University of Technology & Yanjie Zhao, China Ship Scientific Research Center	
13:30-13:50	***Invited speaker: Nianzhong Chen, Tianjin University** A Study on Auxetic-Inspired Bottom Structure for Enhanced Grounding Resistance
13:50-14:10	***Invited speaker: Ling Zhu, Wuhan University of Technology** Recent Advances on Experiments for Ship Collision and Grounding
14:10-14:25	**Speaker: Tingsen Zheng/Nianzhong Chen, Tianjin University** Collision Performance Assessment for A Steel-Rubber Combination Anti-Collision Structure for Offshore Wind Turbines (OWTs)
14:25-14:40	**Speaker: Xiangbiao Wang, Wuhan University of Technology** Study on the Effect of Bow Shape on the Crashworthiness of Side Structure
14:40-14:55	**Speaker: Weijie Li / Yiyan Lu, China University of Mining & Technology-Beijing / Wuhan University** Mechanism-based Unified Design Formula for Axially Loaded CFST Columns with Various Profiles
14:55-15:10	**Speaker: Yunkai Zhang, Dalian University of Technology** Dynamic Response Analysis of Stiffened Plate Under Repeated Ice Impacts
15:10-15:25	**Speaker: Ci Song, Tongji University** The Load-Bearing Capacity of CFST Short and Slender Columns with High-Strength Materials
15:25-15:40	**Speaker: Meiyan Zou, Wuhan University of Technology** Experimental Investigation on Collision between Ship and Offshore Wind Turbine Semi-Submersible Foundation
15:40-15:55	**Speaker: Sunhang Ji / Wenda Wang, Lanzhou University of Technology** Behaviour of Steel-Reinforced Concrete-Filled Steel Tubular Columns under Combined Action of Fire and Lateral Impact
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Hua Yang, Harbin Institute of Technology & Wei Li, Tsinghua University	
16:15-16:35	***Invited speaker: Hua Yang, Harbin Institute of Technology** Seismic Behaviour of Concrete-filled Corrugated Steel Tubes Subjected to Combined Compression, Bending and Torsion
16:35-16:55	***Invited speaker: Wei Li, Tsinghua University** Structural Performance of Concrete-Filled Double Skin Steel Tubular Structures Using Recycled Aggregate Concrete
16:55-17:10	**Speaker: Chuanchuan Hou, Beihang University** Analysis of dynamic properties of damaged concrete-filled steel tubular (CFST) structures
17:10-17:25	**Speaker: Yingying Yu, Chongqing University** Seismic Performance of the Reinforcement-Lapped Square CFST Column Base
17:25-17:40	**Speaker: Zhicheng Yang, Tsinghua University** Seismic performance of grouted CFDST column base: Investigation and design method
17:40-17:55	**Speaker: Xiaoqiang Yang, Fuzhou University** Lateral Impact Resistance and Damage Assessment of UHPC-FHST Members
17:55-18:10	**Speaker: Gaoming Zhu, Nanyang Technological University** Experimental and Numerical Investigation on Precast CE-CFST Column-To-Column Connections Subjected to Axial and Eccentric Compression
18:10-18:25	**Speaker: Bowen Chen, Guangxi University** Performance of Trussed CFST Hybrid Structures under Construction, Long-Term and Ultimate Loads
18:25-18:40	**Speaker: Ziming Yang / Ju Chen, Zhejiang University** Eccentric Behavior and Design Calculations of Large-Scale CFST Slender Columns with Latticed Annular Steel
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Zhuhai Room 4302, 3F, Building 4 (4 号楼三楼珠海厅) MS38: Performance Evolution and Control of Sustainable Engineering Structures	
Session 1, Co-Chairs: Xianglin Gu, Tongji University & Elyas Ghafoori, Leibniz University Hannover	
13:30-13:50	***Invited speaker: Elyas Ghafoori, Leibniz University Hannover** Repair and Lifetime Extension of Steel Structures Using CFRP and Fe-SMA Materials
13:50-14:10	***Invited speaker: Shangtong Yang, China University of Mining and Technology** Time-Dependent Reliability Analysis of Non-Uniform Corrosion-Induced Concrete Cracking
14:10-14:25	**Speaker: Qifang Liu, Shandong University** Time-dependent Non-uniform Corrosion and Crack Patterns of Reinforced Concrete under Marine Environments
14:25-14:40	**Speaker: Qiming Chen, Guangzhou University** A Seismic Analysis Approach for Subway Stations Considering Rainfall Infiltration
14:40-14:55	**Speaker: Hongyuan Guo / You Dong, The Hong Kong Polytechnic University** Bayesian Network-Driven Seismic Time-Dependent Resilience Assessment of Sea-Crossing Bridges
14:55-15:10	**Speaker: Kuan Lu, Zhejiang University of Technology** Carbon Emission Analysis of Environment-Friendly Concrete Considering Its Transport Properties
15:10-15:25	**Speaker: Mao Ye, Tongji University** Development of Prestressed Bonded Strengthening Solution with NiTiNb-SMA Plates
15:25-15:40	**Speaker: Hanqing Liu, Wenzhou University of Technology** Experimental Study on the Mechanical Properties of Cfrp Reinforced Lightweight Concrete Beams under Impact
15:40-15:55	**Speaker: Yilin Lu / Feng Lin, Tongji University** Experimental Study on Beam-Column-Slit Slab Joint to Achieve Proper Failure Mode of Existing RC
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Yong Dong, The Hong Kong Polytechnic University	
16:15-16:30	**Speaker: Xiaoming Zhang, Chongqing University** Buckling Analysis and Lightweight Design for Ultra-Long Wind Turbine Blades
16:30-16:45	**Speaker: Tingyu Xiang, Tongji University** Prediction of Flexural Bearing Capacities of Corroded Reinforced Concrete Beams Based on Bayesian Updating
16:45-17:00	**Speaker: Shangtao Hu, Guangzhou University** Experimental Study on the Dynamic Performance of the Degraded Fluid Viscous Damper Due to Oil Leakage
17:00-17:15	**Speaker: He Qun, The Hong Kong Polytechnic University** HCF Life Prediction of the Bolted Connection Made by HSS Q690 Based on Crystal Plasticity
17:15-17:30	**Speaker: Tianhua Deng, Tongji University** Numerical Study for Seismic Performance of RC Walls Designed with Novel Self-Centring Coupling Beams
17:30-17:45	**Speaker: Walid Andy Kana Hancco, Universidad Nacional de San Agustin de Arequipa** Parametric Seismic Analysis of Water Elevated Intze Tanks
17:45-18:00	**Speaker: Lingling Zhu, Hefei University of Technology** Convolutional Neural Network-Based Performance Prediction Model for Steel Fiber Reinforced Concrete
18:00-18:15	
18:15-18:30	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Heyuan Room 4305, 3F, Building 4 (4 号楼三楼河源厅) MS39: Fatigue Assessment of Steel Structures	
Session 1, Co-Chairs: Bin Cheng, Shanghai Jiaotong University & Yongbo Shao, Xihua University Heng Liu, Tianjin University	
13:30-13:50	***Invited speaker: Kun Tang, Southwest Jiaotong University** Numerical Reconstruction of Coupled Corrosion-Fatigue Damage Evolution in Steel Structures
13:50-14:10	***Invited speaker: Heng Liu, Tianjin University** Experimental and Numerical Investigation on Fatigue Behaviors of Q690D Butt Welds
14:10-14:25	**Speaker: Yongjian Guo, Chongqing University** Corrosion Fatigue Crack Growth of Serviced X56 Pipeline
14:25-14:40	**Speaker: Wanquan Fang, Tianjin University** Experimental Study on Mechanical and High Cycle Properties of Wire Arc Additively Manufactured Carbon Steels
14:40-14:55	**Speaker: Xudong Wang, Southeast University** Experimental Investigation on the Repair of Rib-To-Deck Joints Using Adhesively Bonded Patches
14:55-15:10	**Speaker: Xinbo Zhang, Southwest Jiaotong University** Quantitative assessment of low-temperature highfrequency fatigue life based on entropy
15:10-15:25	**Speaker: Haibo Yang / Ping Wang, Shandong Agricultural University / Harbin Institute of Technology** Fatigue Crack Detection at U-Rib Welds in Steel Bridges Using Phased-Array Imaging Technique
15:25-15:40	**Speaker: Qi Guo, Taiyuan University of Technology** Experimental Study on Axial Mechanical and Fatigue Performance of Corroded High-Strength Bolts
15:40-15:55	**Speaker: HeeYeong Yang / Do Kyun Kim, Seoul national university** A Study on Welding Residual Stress for Ship Curved Plate: Analysis of Distribution Patterns and Development of Idealised Empirical Formulae
15:55-16:15	Coffee Break
Session 2, Co-Chair: Chuang Cui, Southwest Jiaotong University	
16:15-16:35	***Invited speaker: Liang Zong, Tianjin University** Experimental Investigation on Fatigue Performance of Q690D High Strength Steel Welded H-shaped Beams
16:35-16:50	**Speaker: Shiyun Pang / Weiyong Wang, Chongqing University** Flexural Buckling of High Strength Steel Welded H-section Columns at High Temperature
16:50-17:05	**Speaker: Shen Li, University of Strathclyde** Plate-Stiffener Combination Modeling Effect on Ultimate Strength Reliability of Ship Hull Girders in Vertical Bending
17:05-17:20	**Speaker: Yuanzuo Wang, Beijing university of technology** A phase-field framework for corrosion fatigue prediction in elastoplastic metallic materials
17:20-17:35	**Speaker: Jiawei Liu / Qinghua Zhang, Southwest Jiaotong University** Rational Construction and Optimized Design of Composite Beams in Transverse Negative Bending Moment Regions
17:35-17:50	**Speaker: Yu Yao Lin / Do Kyun Kim, Seoul National University** Technical Recommendations for Specimen Extraction Location and Dimension Determination in Fracture Toughness Tests
17:50-18:05	**Speaker: Zhiyu Jie, Ningbo University** Effect of Residual Stresses on Fatigue Performance of Full Penetration U-Rib Welds
18:05-18:20	
18:20-18:35	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Huizhou Room 4306, 3F, Building 4 (4 号楼三楼惠州厅) MS20: 3D Printed Metallic Structures and Structural Optimization	
Session 1, Co-Chairs: Mantai Chen, Shanghai Jiao Tong University & Leroy Gardner, Imperial College	
13:30-13:50	***Invited speaker: Ke Jiang, University of Canterbury** Wire Arc Additively Manufactured ER70S-6 Steels After Exposure to Fire
13:50-14:10	***Invited speaker: Lan Kang, South China University of Technology** Theoretical and Experimental Study on Locally Damaged Steel Structures Repaired by Laser Cladding Additive Manufacturing
14:10-14:25	**Speaker: Yibin Liu , National University of Singapore** Dynamic Mechanical Characterization and Validation of Additive Manufactured Copper
14:25-14:40	**Speaker: Junyu Cheng, Southeast University** Mechanical Properties of Q235 Steel Repaired by Laser Cladding with Powders of Different Yield Strengths
14:40-14:55	**Speaker: Xiang Zhang, Southeast University** Experimental Study on High-Cycle Fatigue Performance of Laser Cladding Additively Manufactured 316L Stainless Steel
14:55-15:10	**Speaker: Shasha Song, Zhejiang University** Behaviour of Concrete-Filled Wire Arc Additively Manufactured Steel Tubes Under Axial Compression
15:10-15:25	**Speaker: Xiao Xiao, Shanghai Jiao Tong University** SIMP-Based Topology Optimization of Lattice Structures
15:25-15:40	**Speaker: Haoyu Huang, Newcastle University** Performance of Deltabeam-Cross-Laminated Timber (CLT) Composite Floors under Human-Induced Vibration
15:40-15:55	**Speaker: John Mark Payawal / Dong-Keon Kim, Dong-A University** Optimizing Seismic Performance of Reinforced Concrete Frames: Strategic Placement of Metallic Yield Dampers Based on Multi-Criteria Analysis and Genetic Algorithm with Multiple Objective Functions
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Chunlin Wang, Southeast University & Lu Yang, Beijing University of Technology	
16:15-16:35	***Invited speaker: Mantai Chen, Shanghai Jiao Tong University** Fatigue Crack Growth in WAAM Super-Duplex Stainless Steel
16:35-16:50	**Speaker: Kaidong Wu, Hohai University** Elevated Temperature Mechanical Properties of Wire Arc Additively Manufactured Stainless Steel
16:50-17:05	**Speaker: Yue Yuan, Southeast University** Mechanical Properties of Laser-Cladding Additively Manufactured 316L Stainless Steels and Bimetallic Steels
17:05-17:20	**Speaker: Syed Humayun Basha, Huaqiao University Xiamen** Multi-Material Optimization of 3D-Printed Concrete Flexural Members
17:20-17:35	**Speaker: Zheng Baofeng, Southeast University** Experimental Investigation of the Monotonic and Cyclic Properties of Wire Arc Additively Manufactured Steels
17:35-17:50	**Speaker: Hanming Zhang, Shandong University** Reducing Earthquake Hazard of Existing Steel Buildings Using Innovative TnT Braces
17:50-18:05	**Speaker: Lianhuo Wu, Fuzhou University** Structural Dynamic Stress Analysis of Long-Span Suspension Bridge during Flutter
18:05-18:20	**Speaker: Ruizhi Zhang, Imperial College London** Experimental and numerical study of fracture behaviour of stainless steels under various stress states
18:20-18:35	
19:00 Conference Banquet	

November 9, 2024, Afternoon Parallel Sessions (13:30-18:45) Shaoguan Room 4303, 3F, Building 4 (4 号楼三楼韶关厅) MS22: Advances in NDT of Engineering Structures MS50: Advanced Materials and Novel Technologies for Bridge Structure Resilience Improvement	
Session 1, Co-Chairs: Jiangpeng Shu, Zhejiang University & Dan Li, Southeast University	
13:30-13:50	***Invited speaker: Hai Liu, Guangzhou University** Non-Destructive Testing of Debonding Defects in Concrete-Filled Steel Tubes
13:50-14:10	***Invited speaker: Dan Li, Southeast University** Topology and Path Planning-Aided Acoustic Emission Damage Location in Large-Scale Complex Structures
14:10-14:30	***Invited speaker: Dongdong Chen, Nanjing Forestry University** Computed Tomography (CT) of Ancient Timber Structures Based on LTI-SIRT Algorithm - Considering the Influence of Chord Angle and Moisture Content
14:30-14:45	**Speaker: Xingxing Zou, Nanjing Forestry University** Scanning Eddy Current Thermography (SECT) for Visualization of Debonding Gap of Concrete Filled Steel Tube (CFST)
14:45-15:00	**Speaker: Xiangtao Sun / Qingzhao Kong, Tongji University** Rebar Corrosion Monitoring Using Ultrasonic Guided Waves
15:00-15:15	**Speaker: Bin Ma / Qingzhao Kong, Tongji University** MUST: A Multi-channel Ultrasonics Spectrograms Transformer for Multi-Scale Damage Detection and Evaluation
15:15-15:30	**Speaker: Pan Yu, Chongqing University** Modelling Method and Load Resisting Mechanism of Palace-Type Traditional Timber Frame in Chinese Song Dynasty
15:30-15:45	**Speaker: Srilatha Abhishek, Indian Institute of Technology Palakkad** Revisiting the Potent of Frequency Sensitive Control Force Distribution for Large-Scale Structures
15:45-16:00	
16:00-16:15	Coffee Break
Session 2, Co-Chairs: Jun Deng, Guangzhou University & Yi Wang, Central South University	
16:15-16:35	***Invited speaker: Pengru Deng, Central South University** Performance of a Steel Attachment Using UHPFRC for Resisting Axial Shear Forces Acting on Prestressed Concrete Girders
16:35-16:55	***Invited speaker: Xingxing Zou, Nanjing Forestry University** How Defects Influence FRP-Concrete Bond Behavior: A Finite Difference Method (FDM) Approach
16:55-17:10	**Speaker: Dong Guo, Guangzhou University** Bond Behavior of CFRP-To-Steel Interfaces under Quasi-Static Cyclic Loading at Mild Temperatures
17:10-17:25	**Speaker: Ridho Surahman / Yi Wang. Central South University** Bond Behavior of TRUHPC-Concrete Interface Using a Combined End Anchorage and Grooving Technique
17:25-17:40	**Speaker: Yangyang Bao/ Xie Wen, Ningbo University** Experimental Investigation and Numerical Simulation on Self-Centering Bridge Bents with Energy-Dissipation Beams
17:40-17:55	**Speaker: Mingqian Li / Lifeng Wang, Nanjing University of Aeronautics and Astronautics** The Orthotropic Model for the Resonation of Multilayered Black Phosphorus Plate
17:55-18:10	**Speaker: Muhong Jiang / Zhang Yong, Huaqiao University** Origami-Inspired Kagome Honeycomb with Superior Impact Resistance
18:10-18:25	**Speaker: Xingpei Wu, Guangzhou University** YOLOv8-SE: Underwater Structural Object Detection Algorithm Based on Multibeam Forward-Looking Sonar
18:25-18:40	
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Meizhou Room 2105, 1F, Building 2(2 号楼一楼梅州厅) MS05: Structures in Fire: Challenges and Research Trend	
Session 1, Co-Chairs: Liming Jiang, The Hong Kong Polytechnic University & Asif Usmani, The Hong Kong Polytechnic University	
13:30-13:50	***Invited speaker: Anthony Chun Yin Yuen, The Hong Kong Polytechnic University** Developing Wood Pyrolysis Kinetics for Timber Building Fire Simulation Studies
13:50-14:10	***Invited speaker: Shaojun Zhu, Tongji University** Experimental and Numerical Investigation on Collapse of a Real Building with Truss Roof in Fire
14:10-14:30	***Invited speaker: Manuel L. Romero, Universitat Politecnica de Valencia** Fire Protection Systems for Steel-Concrete and Steel-Timber Composite Beams with Demountable Shear Connectors
14:30-14:45	**Speaker: Zhiwei Song / S.K.Lai, The Hong Kong Polytechnic University** A Space-Time Matched Interface and Boundary Method for Transient Thermal Performance Analysis of Laminated Glass Windows under Fire
14:45-15:00	**Speaker: Xuesong Cai / Liming Jiang, The Hong Kong Polytechnic University** Model-Updating Hybrid Fire Simulation of Steel Frame Structures via AI Techniques
15:00-15:15	**Speaker: Junjie Wei / Chao Zhang, Wuhan University** A Novel Localized Fire Model for Bridge Safety
15:15-15:30	**Speaker: Wei Ji / Shaojun Zhu, The Hong Kong Polytechnic University / Tongji University** Real-Time Fire-Induced Collapse Prediction of Steel Poral Frame Buildings via Deep Learning
15:30-15:45	**Speaker: Zhuojun Nan, Eindhoven University of Technology / Delft University of Technology** Pyrolysis Model to Simulate the Thermomechanical Behaviour of Cross-Laminated Timber Structures in Fire
15:45-16:00	**Speaker: Abdul Ghafar Wahab, Kunming University of Science and Technology** Seismic Analysis of a Hillside Reinforced Concrete Building Isolated by High-Damping Rubber Bearings Using DHI Model Type
16:00-16:15	Coffee Break
Session 2, Co-Chairs: David Lange, University of Queensland & Shaojun Zhu, Tongji University	
16:15-16:35	***Invited speaker: David Lange, University of Edinburgh** Blaze: The Finite Element Solver for Structures in Fire on High Performance Computing Infrastructure
16:35-16:55	***Invited speaker: Liming Jiang, The Hong Kong Polytechnic University** Preliminary Study on Fire Performance of 'Timber-insulation Mixed Ceiling' Strategy in Large Open Compartments with Non-uniform Fuel Load
16:55-17:15	***Invited speaker: Manuel L. Romero, Universitat Politècnica de València** Numerical and experimental study on the fire performance of slender steel-reinforced concrete-filled steel tubular columns with high performance materials
17:15-17:30	**Speaker: Wenbo Xie / Zhiqiang Zhang, Southeast University** Simulation of Tuned Mass Damper Vibration Damping Control for Offshore Monopile Wind Turbine Structure under Combined Wind and Ice Loads
17:30-17:45	**Speaker: Honghui Qi / Shaojun Zhu, Tongji University** Deep Learning Methods for Real-Time Prediction of Axial Forces in CFST Columns under Actual Fire Conditions
17:45-18:00	**Speaker: Huiqi Liang / Zhiqiang Zhang, Southeast University** Analysis of Human-Induced Vibration Response in Station Hall Structures Based on Social Force Model
18:00-18:15	**Speaker: Yijing Lu / Zhiqiang Zhang, Southeast University** Shaking Table Test of TLD/TLCD Vibration Control for Offshore Wind Turbine Support Structure
18:15-18:30	**Speaker: Qinglin Jia, Southwest Jiaotong University** Numerical Simulating on Post-Fire Axial Compressive Behavior of Basalt Fiber Reinforced Recycled Aggregate Concrete-Filled Steel Tube Short Columns
18:30-18:45	**Speaker: Jinglun Li / Kang Gao, Southeast University** Analytical Solution of Transient Heat Conduction Bridge Cables Considering Fire Protection Layers
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) **Shenzhen Room 2201, 2F, Building 2 (2 号楼二楼深圳厅)** MS23: Engineering Structures for Wind Turbines MS44: High-Performance Materials and Innovative Shear Connectors for Steel-Concrete Composite Structures MS47: Disaster Damage Assessment of High-Performance Building Structure	
Session 1, Co-Chairs: Christopher Vogel, University of Oxford & Lixian Zhang, Chongqing University	
13:30-13:50	***Invited speaker: Shanghui Yang, Sichuan University** Dynamic Wind Farm Real-Time Cooperative Control Based on Short-Term Wind Speed Predictions
13:50-14:10	***Invited speaker: Kaiyuan Jin, Chongqing University** Study on Tensile-Compressive Hysteresis Performance of Prestressed Concrete-Filled Double Skin Steel Tubes for Wind Turbine Structures
14:10-14:25	**Speaker: Xingxing Zou, Nanjing Forestry University** Array Infrared Thermography for Visualization of Defected FRP-Substrate Joints
14:25-14:40	**Speaker: Zheng Zhou, Hunan University** Mechanical Behavior of Prestressed UHPC-Steel Hybrid Tower to Support a 15 MW Offshore Wind Turbine
14:40-14:55	**Speaker: Wei Ren / Yuhang Wang, Chongqing University** Compression-Bending Behavior of Prestressed Concrete Towers for Wind Turbines
14:55-15:10	**Speaker: Yi Huang / Zheng Li, Tongji university** Experimental Investigation on the Static Mechanical Performance of Prestressed-Concrete-Filled with Steel Tube(PCFST) K-Joint
15:10-15:25	**Speaker: Kun Yang / Xiaowei Deng, The University of Hong Kong** Pareto Frontier for Multi-Objective Wind Farm Layout Optimization Balancing Power Production and Turbine Fatigue Life
15:25-15:40	**Speaker: Yu Cheng, Chongqing University** Intelligent Design of Steel-Concrete Hybrid Wind Turbine Tower
15:40-15:55	**Speaker: Jinbin Liang, Sun Yat-Sen University** Investigating the Control Co-design of the Platform Structure and Passive Structural Control for Floating Offshore Wind Turbines
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Letian Hai, University of Science and Technology Beijing & He Zhao, University of Science and Technology Beijing	
16:15-16:35	***Invited speaker: Liyan Xu, Beihang University** Research and application of cyclic constitutive model for structural steels
16:35-16:55	***Invited speaker: Beibei Li, Hefei University of Technology** Buckling Behaviour of Friction Stir Welded 6061-T6 Aluminium Alloy H-Section Stub Columns
16:55-17:10	**Speaker: He Zhao, University of Science and Technology Beijing** Seismic Performance Evaluation of Post-Earthquake Composite Frame Structures with Different Damage Levels
17:10-17:25	**Speaker: Letian Hai, University of Science and Technology Beijing** Influence of Cyclic Softening Behavior of Structural Steel on Seismic Performance of Steel Beam-Columns
17:25-17:40	**Speaker: Xiujiang Shen, VITO University** Shear Behavior of Steel Dowel Connector in Thin UHPFRC Element with Different Failure Modes
17:40-17:55	**Speaker: Xiaofeng Yang / Letian Hai, University of Science and Technology Beijing** Research on Constitutive modeling and Low-cycle fatigue behavior of Titanium-clad Bimetallic Steel
17:55-18:10	**Speaker: Wenjie Tu / Haibo Jiang, Guangdong University of Technology** Experimental Study on the Seismic Performance of an Irregular Socket Bridge Piers
18:10-18:25	**Speaker: Dongyang He, Guangxi University** Mechanical Behavior of Rubber-Sleeved Stud Shear Connectors in UHPC under Combined Shear and Tension Loads
18:25-18:40	**Speaker: Jiachen Guo / Tak-Ming Chan, The Hong Kong Polytechnic University** Behaviour of a Demountable Continuous Shear Connector in Steel-Concrete Composite Beams
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Shantou Room 2202, 2F, Building 2 (2 号楼二楼汕头厅) MS24: Towards Resilient Renewable Energy Infrastructure	
Session 1, Co-Chairs: Elyas Ghafoori, Leibniz University Hannover & Junlin Heng, Sichuan University	
13:30-13:50	***Invited speaker: Chao Sheng, Sichuan University** Tropical Cyclone Wind and Wave Multi-Hazards under Climate Change and Its Effect on the Reliability of Offshore Wind Turbines
13:50-14:10	***Invited speaker: Qinlin Cai, Sichuan University** Self-Powered Semi-Active Vibration Control of Monopile Offshore Wind Turbines
14:10-14:25	**Speaker: Jiawei Tang, Sichuan University** Integrated Strategy with Pitch Control and TMDI System for the Vibration Supression of Wind Turbine
14:25-14:40	**Speaker: Junlin Heng, Sichuan University** Digital Twins for Deteriorating Offshore Wind Turbine Structures
14:40-14:55	**Speaker: Sidong Feng, Changsha University of Science & Technology** Cyclic Behavior of LYP Steel Beam with Corrugated Web: Experimental and Numerical Investigation
14:55-15:10	**Speaker: Zhi Li / Yunlong Guo, Sichuan University** Analysis of Soil-Structure Interaction Effects on All Design Load Cases and Structural Optimization Results for Offshore Monopile Wind Turbines
15:10-15:25	**Speaker: Liqiang Wang / Yi Xia, Chongqing University** Intelligent Optimization of Steel Modular Integrated Buildings Considering Both Standardization and Structural Performance
15:25-15:40	**Speaker: Erhan Huang, Sichuan University** Title of Dissertation: Aerodynamic Characteristics Study of a Pentagonal Heliostat Using Computational Fluid Dynamics (CFD)
15:40-15:55	**Speaker: Zihang Yang, Sichuan University** Effect of Wind Loads on the Concentrating Efficiency of Heliostat Fields
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Kaoshan Dai, Sichuan University & Songye Zhu, The Hong Kong Polytechnic University	
16:15-16:35	***Invited speaker: Jun He, Changsha University of Science & Technology** Demountable Shear Connector for Sustainable Steel-Concrete Composite Structures
16:35-16:50	**Speaker: Shanghong Chen, Fuzhou University** Detection Technique of Grouting Sleeve for Lamb Wave Time Reversal
16:50-17:05	**Speaker: Hao Wang / Songye Zhu, The Hong Kong Polytechnic University** Latching control: a wave energy converter inspired strategy for vibration control of floating offshore wind turbines
17:05-17:20	**Speaker: Weizhu Zhu / Zhixiang Zhou, Shenzhen University** Novel Monocular Vision-Based Approach for Smart Insfrastructure Monitoring
17:20-17:35	**Speaker: Ying Chang, Sichuan University** A Wind Tunnel Study on Wind Loads on Heliostats in Fields
17:35-17:50	**Speaker: Zhen Li, Sichuan University** Wind-Induced Static and Dynamic Loads on a Pentagonal Heliostat
17:50-18:05	**Speaker: Wen Cheng, University of Liverpool** In-fire Material Properties of High-strength Aluminium Alloys
18:05-18:20	
18:20-18:35	
18:35-18:50	
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Foshan Room 2203, 2F, Building 2 (2 号楼二楼佛山厅) MS25: Safety Assessment of Bridge under Multi-Hazards	
Session 1, Co-Chairs: Gang Zhang, Chang'an University & Qinghua Zhang, Southwest Jiaotong University	
13:30-13:50	***Invited speaker: Shichao Wang, Chang'an University** Study on Residual Load Capacity of Combined Steel Truss Bridge after Vehicle Fire
13:50-14:10	***Invited speaker: Jiatong Liu, Hunan University** Lateral Impact-Resistant Capacity of UHPC and RC Piers Considering Varying Impact Locations
14:10-14:25	**Speaker: Baixue Ge / Rujin Ma, Tongji University** A Framework for Time-Dependent Multi-Hazard Seismic Vulnerability and Risk Assessment of Reinforced Concrete Bridges under Climate Change Impacts
14:25-14:40	**Speaker: Xiaocui Zhao / Gang Zhang, Chang'an University** A Numerical Method for Evaluating Structure Temperature in Hot-Cast Anchorage under Fire Exposure Conditions
14:40-14:55	**Speaker: Yuhang Ding / Gang Zhang, Chang'an University** A Method for Fire Performance Prediction through Explainable Machine Learning
14:55-15:10	**Speaker: Zhenhao Fan / Rujin Ma, Tongji University** Dynamic Responses and Safety Assessment of Parallel Steel Wire Cables in Explosion after a Tanker Truck Fire
15:10-15:25	**Speaker: Benjin Wang, Tongji University** A Numerical Study on Bridge Safety under Jet Fire Induced by Leakage of High Pressure Hydrogen
15:25-15:40	**Speaker: Panpan Liu, Harbin Institute of Technology** Fatigue Behaviour of Corroded RC Continuous Beams Repaired with Polarized CFRCM Plates
15:40-15:55	**Speaker: Mingyu Chen, Central South University** Research on the modeling method for connectors in the train-track-bridge system within a co-simulation platform
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Yifei Hao, Hebei University of Technology & Wei Fan, Hunan University	
16:15-16:35	***Invited speaker: Gersena Banushi, University of California Berkeley** Seismic Fragility and Global Sensitivity Analysis of Buried Operating Steel Pipeline
16:35-16:55	***Invited speaker: Lihai Zhang, The University of Melbourne** Life-Cycle Performance Assessment of Offshore Concrete Structures
16:55-17:10	**Speaker: Wenbiao Sun / Wei Fan, Hunan University** Shear Failure Mechanism and Resistance of RC Columns Under Near-Support Impact
17:10-17:25	**Speaker: Qinglin Wu / Wei Fan, Hunan University** Vulnerability Analysis of Corroded Bridge Piers under Oblique Impact of Barges
17:25-17:40	**Speaker: Bin Wang, Xi'an University of Architecture & Technology** Seismic Mechanism and Design Method of Slotted RC Walls Connected with Self-Centering Dampers
17:40-17:55	**Speaker: Abdulaziz Baatiah, King Saud University** Flexural Performance of Code-Compliant and Excessively Deflecting RC Wide Beams with Planted Columns
17:55-18:10	**Speaker: Omar Al-Hamed, King Saud University** Performance of Shear-Deficient and Code-Complying RC Wide Beams with Planted Columns
18:10-18:25	
18:25-18:40	
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Zhanjiang Room 2302, 3F, Building 2 (2 号楼三楼湛江厅) MS26: Resilience-Based Seismic Design, Assessment, and Protection of Nonstructural Elements	
Session 1, Co-Chairs: Tao Wang, China Earthquake Administration & Qingxue Shang, China Earthquake Disaster Prevention Center	
13:30-13:50	***Invited speaker: Zilan Zhong, Beijing University of Technology** Shaking Table Tests and Seismic Fragility Analysis of Lightweight Hollow Partition Walls
13:50-14:10	***Invited speaker: Baofeng Huang, Shanghai Normal University** Hysteretic Behavior and Seismic Analysis of Granite Cladding with Dowel-Pin Connection
14:10-14:25	**Speaker: Qingxue Shang, China Earthquake Disaster Prevention Center** Development of Numerical Model for Building Piping Systems and Its Application in Seismic Performance Assessment
14:25-14:40	**Speaker: Jing Luo, Shanghai Normal University** Load-Bearing Performance of Dowel Plate Connection in Ceramic Cladding
14:40-14:55	**Speaker: Wenjuan Shao, Chongqing University** Mechanical Performances of Columns with Different Grooves in Traditional Multi-Storey Chinese Wooden Structures
14:55-15:10	**Speaker: Weiwei Chen, Sichuan University** A Transformer-Based Seismic Response Prediction Method for Unanchored Non-Structural Component
15:10-15:25	**Speaker: Zhangyan Chen, Guangzhou University** Fragility Functions for Damped Masonry Infill Wall Under ISeismic response prediction and ning
15:25-15:40	**Speaker: Yuhong Hu, Sichuan University** A Methodology for Floor Response Spectrum Prediction of Steel Frame Buildings Based on Deep Learning Algorithms
15:40-15:55	**Speaker: Yingjie Chi, Nanjing University of Science and Technology** Experimental Study on Infrared Thermal Imaging Detection of Water Accumulation in Steel Box Girders
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Jianze Wang, Sichuan University & Zhe Qu, China Earthquake Administration	
16:15-16:30	**Speaker: Rongwei Luo / Xiaodong Ji, Tsinghua University** Seismic behavior of a stone curtain wall system with undercut bolt anchorage
16:30-16:45	**Speaker: Kadeeja Sensy, Indian Institute of Technology Palakkad** A Study on the Adverse Effect of Base Isolated Multi-Degree-of-Freedom Structural System
16:45-17:00	**Speaker: Ryo Majima, Toyohashi University of Technology** Shaking Table Experimental Study of Multi-Story Vibration Control System Based on Pulley Mechanisms
17:00-17:15	**Speaker: Jinyu Li / Peng Huang, Tongji University** Experimental and Numerical Investigation on Wind Vibration Control in High-Rise Buildings Based on Pre-Tension Nonlinear Energy Sink
17:15-17:30	**Speaker: Jiale Li, Guangzhou University** Hysteretic Behavior of Hollow Laminated Viscoelastomer-Filled Austenitic Stainless Steel Tube Dampers
17:30-17:45	**Speaker: Benjin Wang, Tongji University** Fatigue Retrofitting of OSDs with Penetrating Cracks by Bonding MMA Layers
17:45-18:00	**Speaker: Tianyu Liao / Ying Wang, Fuzhou University** The Axial Tensile Behavior of an Innovative Connection Between SC Composite Wall and RC Foundation
18:00-18:15	
18:15-18:30	
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Jiangmen Room 2301, 3F, Building 2 (2 号楼三楼江门厅) MS27: Innovative Application and Structural Design of UHPC and/or FRP	
Session 1, Co-Chairs: Yi Shao, McGill University & Peng Feng, Tsinghua University	
13:30-13:50	***Invited speaker: Xudong Shao, Hunan University** Research and Application of Long-Life Light-Weighted UHPC Bridge Deck Structures for Long-Span Bridges
13:50-14:10	***Invited speaker: Yi Shao, McGill University** Low-Cost and Ductile Prestressed UHPC Girders: Experiments and Design Methods
14:10-14:25	**Speaker: Haibo Jiang, Guangdong University of Technology** Shear Behavior of Non-Stirrup Utra-High Performance Concrete Beams
14:25-14:40	**Speaker: Qizhi Xu, Naniing Technology University** Seismic Behavior of Composite Shear Walls with Post-Casting UHPC Boundary Elements and CRB600H Steel Bars
14:40-14:55	**Speaker: Yuanzhang Yang, Shaoxing University** Failure Mechanism of Wound FRP Reinforcement and Impacts of Reinforcement Layout on the Shear Capacity of Concrete Beams
14:55-15:10	**Speaker: Yuquan Ma / Kuanghuai Wu, Guangzhou University** Design and Experimental Study of Prestressed Ultra-High Performance Concrete - Reinforced Concrete (UHPC-RC) Box-Section Composite Beam without Web Reinforcement
15:10-15:25	**Speaker: Ye He / Ran Ding, Tsinghua University** Investigation of Seismic Performance of UHPC-RC Frame Based on Deep Learning with Composite Features
15:25-15:40	**Speaker: Xirui Li, Tohoku University** Development of Seismic Resilient Bridge Piers with Innovative Damage-Free Design Approaches in High Seismic Zones
15:40-15:55	**Speaker: Chuangjie Fang, Guangzhou City University of Technology** First Mode Damping Oriented Optimal Design of Viscously Damped Outrigger Systems: Theoretical Foundation and Explicit Approximate Formulas
15:55-16:15	Coffee Break
Session 2, Chair: Xudong Shao, Hunan University	
16:15-16:30	**Speaker: Yongcheng Ji, Northeast Forestry University** Implementing Multi-objective Optimization of Various Recycled Concrete Based on Aggregate Physical Properties
16:30-16:45	**Speaker: Kai Liu / Lin Jing, Southwest Jiaotong University** Bamboo-Inspired Design and Crashworthiness Optimization of Anti-Climbing Energy Absorber for High-Speed Trains
16:45-17:00	**Speaker: Shulin Zhu / Xiaolei Zhang, Tongji University** Intelligent Prediction of Vibration Caused by Metro Train Operation Based on Machine Learning
17:00-17:15	**Speaker: Jinqiang Li / Zilian Zhong, Beijing University of Technology** Seismic Motion Inversion and Seismic Performance Analysis of Subway Station Structures Based on Artificial Neural Networks
17:15-17:30	**Speaker: Xuqi Liang, Jinan University** Experimental study on Seawater Sea-sand Concrete filled FRP-Steel-UHPC Composite Tubular Columns under Compression
17:30-17:45	**Speaker: Mithulraj M, Indian Institute of Technology, Palakkad** Implementation of Compatibility Based Strut and Tie Modelling on Scaled Cantilever Bridge Bent Cap Specimen
17:45-18:00	**Speaker: Xiaolong Wang, Qingdao University of Technology** Mix Design and Performance Study of High-Performance Seawater Sea-Sand Concrete
18:00-18:15	**Speaker: Xiujiang Shen, VITO, Belgium** Tensile Behavior of Reinforced UHPFRC with Different Reinforcement Ratios
18:15-18:30	**Speaker: Yuxin Duan, Zhejiang University** Flexural Behavior and Design Method of Joints with Different Bar Details Connecting Beam
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Yunfu Room 4101, 1F, Building 4 (4 号楼一楼云浮厅) MS28: Bio-Inspired Structures	
Session 1, Co-Chairs: Dong Ruan, Swinburne University of Technology & Lingling Hu, Sun Yat-sen University	
13:30-13:50	***Invited speaker: Dong Ruan, Swinburne University of Technology** Axial Crushing of Hierarchical Tubular Structures Inspired by Skeletal Muscle Tissues
13:50-14:10	***Invited speaker: Zhonggang Wang, Central South University** Aperiodic Artificial Interpenetrating Phase Composite Mechanical Metamaterials Inspired by Elusive Einstein Tile
14:10-14:25	**Speaker: Weibai Li, Swinburne University of Technology** Engineering Acoustic Crystals: Broad Bandgaps and Topological States via Topology Optimization
14:25-14:40	**Speaker: Huan Li, Beijing University of Technology** Numerical and Experimental Investigations of a Quasi-Active Negative Stiffness Damper System for Achieving Optimal Active Control Performance
14:40-14:55	**Speaker: Lintao Xie, Chongqing University** Ground Vibration Induced by a Pulsating Moving Load on Railway Tracks Resting on Layered Soils by 2.5D Approach
14:55-15:10	**Speaker: Zhipeng Gao, Lanzhou University of Technology** The Crashworthiness of Hierarchical Sandwich Circular Tubes
15:10-15:25	**Speaker: Hetian Shao, Harbin Institute of Technology** Macro-Scale Digital Twin of High-Rise Building with Interlayer Flexible-Shear Coupling Model
15:25-15:40	**Speaker: Zhaoji Li / Qingliang Zeng, Shandong University of Science and Technology** Non-Dimensional Parameters Governing the Crashworthy Performance of Tubes with Complex Cross-Sections
15:40-15:55	**Speaker: Yufeng Zhang / Xuening Liu, Beijing Institute of Technology** Modified Face-Centered Cubic Lattice with Enhanced Mechanical Properties
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Ye Yuan, Beijing Institute of Technology & Zhipeng Gao, Lanzhou University of Technology	
16:15-16:35	***Invited speaker: Xiaodong Huang, Swinburne University of Technology** Stress Topology Optimisation of Continuous Structures
16:35-16:55	***Invited speaker: Huu-Tai Thai, The University of Melbourne** Connecting Method for Composite Modular Tall Buildings
16:55-17:10	**Speaker: Hanfeng Yin, Hunan University** Study on the Impact Resistance Characteristics of a Novel Bionic Structure Based on Beetle Elytra
17:10-17:25	**Speaker: Zhixin Huang, Wuhan University of Technology** Bioinspired Solid-Liquid Biphasic Structures with Programmable and Tunable Impact Resistance Properties
17:25-17:40	**Speaker: Zhikang Deng, ETH Zurich** Structural Behaviour of Laminated Glass Beams Post-Tensioned with Adhesively Bonded Iron-Based Shape Memory Alloy Considering the Effect of Service Temperature and Pre-Stress Levels
17:40-17:55	**Speaker: Wenqian Ma / Xuguang Wang, The University of Hong Kong** Understanding the Cyclic Behavior of Bio-Based Planar Truss: Experiments and Simulations via Bayesian Model Updating
17:55-18:10	**Speaker: Shubham Tiwari Tiwari / Krishanu Roy, University of Waikato** Trapezoidal Insulated Sandwich Metal Roof Cladding under Static Wind Uplift: Numerical Investigation
18:10-18:25	**Speaker: Hongzhou Zeng / Xin Ruan, Tongji University** Mesoscopic Numerical Simulation of Concrete Carbonation Based on Cellular Automata
18:25-18:40	**Speaker: Speaker: Xiang Li, Southwest Jiatong University** Fatigue Performance of Load-Carrying Full Penetration Welded Cruciform Joints with Principal Stress Oblique to the Weld Toe
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Zhaoqing Room 4102, 1F, Building 4 (4 号楼一楼肇庆厅) MS29: High-Performance Steel Structures	
Session 1, Co-Chairs: Jiaji Wang, The University of Hong Kong & Yukai Zhong, Guangzhou University	
13:30-13:50	***Invited speaker: Yukai Zhong, Guangzhou University** Cross-Section Behaviour and Design of Stainless Steel Hexagonal and Octagonal Hollow Sections
13:50-14:05	**Speaker: Dingbin Li / Yun Zhou, Guangzhou University** Experimental Evaluation on Different Prototypes of the Force-Resisting Rotational Friction Damper: Friction Behavior and Re-Storability
14:05-14:20	**Speaker: Chenghao Shang / Yun Zhou, Guangzhou University** Hysteretic Performance of Arc-Shaped Corrugated Steel Plate Dampers under Bidirectional Loading
14:20-14:35	**Speaker: Jinpeng Cheng / Andi Su, Harbin Institute of Technology** Unified Machine-Learning-Based Design Method of High Strength Steel I-Section Columns and Beam–Columns
14:35-14:50	**Speaker: Xiaoling Liu / Huiyong Ban, Tsinghua University** Overall Buckling Behaviour of Welded I-Section Steel Column with Longitudinally Profiled Flanges
14:50-15:05	**Speaker: Xi Chen, Imperial College London** GA-Aided Optimal Seismic Retrofitting Design for RC Frames Equipped with Steel Shear Walls
15:05-15:20	**Speaker: Parsa Yazdi, University of Waikato** Gradient Boosting Framework for Predicting Axial-Capacity of Cold-Formed Steel Channels
15:20-15:35	**Speaker: Yichen Zhang, Ghent University** Numerical Analysis of Tensile Behavior of Tiled Laminates: An Innovative Composite Material for Bridge Decks
15:35-15:50	**Speaker: Yajun Zhang / Yuqing Liu, Xiamen University of Technology / Tongji University** Bending Responses of Steel Box Girder with Hybrid Bolted Connection
15:50-16:15	Coffee Break
Session 2, Co-Chairs: Andi Su, Harbin Institute of Technology & Ke Jiang, University of Canterbury	
16:15-16:30	**Speaker: Jiaji Wang, The University of Hong Kong** Physics Informed Neural Operator for Differentiable Solver of Solid Mechanics
16:30-16:45	**Speaker: Li Zhang / Liyu Xie, Tongji University** Yoke-Type Inerter for Improving Structural Response Mitigation under Multi-Level Earthquakes
16:45-17:00	**Speaker: Junzhi Liu, Beijing Normal University** Residual Stresses and Local Instability of Double-Sided Stainless-Clad Bimetallic Steel Angle Section Stub Columns under Axial Compression
17:00-17:15	**Speaker: Jiarong Huang / Xiang Wang, Sun Yat-Sen University** Statistical Subspace-Based Damage Detection for Monopile-Supported Offshore Wind Turbines
17:15-17:30	**Speaker: Zhiqiang Xie, Beijing University of Civil Engineering and Architecture** Mechanical Properties, Design Method and Engineering Application for Self-piercing Riveting in CFS Structures
17:30-17:45	**Speaker: Songwei Lin / Yun Zhou, Guangzhou University** Experimental Study on Performance of Energy-Dissipating Stair Bearing
17:45-18:00	**Speaker: Hulin Luo/ Xuechun Liu, Xuesen Chen, Beijing University of Technology** Performance of Embedded Steel Plate Composite Shear Walls With Steel Truss Connector under Axial Compression
18:00-18:15	**Speaker: Yongsheng Cao / Yun Zhou, Guangzhou University** Failure, Performance, and Theories of Butted Connection Gusset Plates with a Cruciform Section under Tension
18:15-18:30	**Speaker: Yufei Zhu, Shanghai Normal University** Behaviour and Design of High Strength Steel Structural Elements and Frames
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Qingyuan Room 4103, 1F, Building 4 (4 号楼一楼清远厅) MS30: Recent advances in AI and IoT technologies for the Monitoring, Inspection and Maintenance of Engineering Structures	
Session 1, Co-Chairs: Gao Fan, Guangzhou University & Yu Xin, Hefei University of Technology	
13:30-13:50	***Invited speaker: Gao Fan, Guangzhou University** A Transformer and 3D Reconstruction Based Method for Surface Damage Detection and Quantification of Concrete Structures
13:50-14:10	***Invited speaker: Yu Xin, Hefei University of Technology** Hybrid-Driven Digital Twin Framework for Time-Variant Reliability Assessment of Civil Structures
14:10-14:25	**Speaker: Shuo Wang, Tsinghua University** Vision-Based Model Updating and Evaluation of Miter Gates on Inland Waterways
14:25-14:40	**Speaker: Gongyong Mei / Haibo Jiang, Guangdong University of Technology** Experimental Research and Finite Element Analysis on the Mechanical Properties of UHPC-Strengthened NC Bridge Deck Pavement Layer
14:40-14:55	**Speaker: Xianming Zeng/Wu Nan, Guangzhou University** Design, Modeling and Experiments of Bistable Piezoelectric Energy Harvester with Self-Decreasing Potential Energy Barrier Effect
14:55-15:10	**Speaker: Xutong Zhang / Xinqun Zhu, University of Technology, Sydney** Neural Ordinary Differential Equations Based Structural Damage Identification
15:10-15:25	**Speaker: Qibang Lin, Harbin Institute of Technology (Shenzhen)** Effects of Typhoon-Wave-Current Coupling on the Wind Loads and Platform Motions of Floating Horizontal-Axis Wind Turbines
15:25-15:40	**Speaker: Jinqiang Li, Beijing University of Technology** Seismic Fragility Assessment of Utility Tunnel and Internal Pipeline System
15:40-15:55	**Speaker: Zirong Li, Southwest Jiaotong University** Coupling Influence of Plain Concrete and Chopped Basalt Fiber on Compressive Strength and Practical Data-Driven Models to Evaluate Compressive Strength
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Jun Li, Curtin University & Cheng Yuan, Guangzhou University	
16:15-16:35	***Invited speaker: Suwen Chen, Tongji University** Fast Prediction Model for Explosion Loads in Complex Scenarios
16:35-16:55	***Invited speaker: Jun Li, Curtin University** Structural Damage Identification Using Physics-Guided Deep Learning
16:55-17:10	**Speaker: Pinghe Ni, Beijing University of Technology** Intelligent Condition Assessment of Small and Medium Span Bridges with Internet of Things Technology
17:10-17:25	**Speaker: Xingyu Fan, Xian University of Technology** Electro-Mechanical Impedance Based Loosening Detection of Bolted Connections in Pipeline Using Generative Adversarial Networks
17:25-17:40	**Speaker: Jiamei Wang, The Hong Kong Polytechnic University** Design Optimization of Tri-hybrid Vibration-based Energy Harvester via Advanced Time-marching Physics-informed Neural Network
17:40-17:55	**Speaker: Yuchen Tao / Weijian Zhao, Zhejiang University** Experimental Research on Seismic Behavior of New Precast RC Column-Steel Beam Joint
17:55-18:10	**Speaker: Naeem Muhammad / Xuhui He, Central South University** Impact of Wind-Wave Misalignment-Induced Motions on the Power Production of Floating Offshore Wind Turbine FOWT
18:10-18:25	**Speaker: Jiaqing Jiang / Weiqiu Chen, Zhejiang University** Two-Dimensional Analysis of Composite Linings Using Mixed Finite Element and DQM
18:25-18:40	**Speaker: Huan Chen / Tugen Feng, Hefei University of Technology / Hohai University** Health Monitoring and Analysis of Factors Influencing Existing Tunnels Laterally Adjacent to Foundation Pit Excavations
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Dongguan Room 4201, 2F, Building 4 (4 号楼二楼东莞厅) MS31: Nonlinear Vibration of Thin-Walled Plate Shell Structures MS18: AI-Empowered Structural Dynamic Analysis of Complex Structures	
Session 1, Co-Chairs: Yuxin Hao, Beijing Information Science and Technology University & Yaze Liu, Inner Mongolia University of Technology	
13:30-13:50	***Invited speaker: Yaze Liu, Inner Mongolia University of Technology** Dynamic Modelling and Free Vibration Analysis of Graphene Reinforced Glass-Fiber Wind Turbine Blades
13:50-14:10	***Invited speaker: Jing Rao, Beihang University** Defect Detection in Multi-Material Additively Manufactured Parts Using Ultrasonic Full Waveform Inversion and Reverse Time Migration
14:10-14:25	**Speaker: Ashraf El Damatty, The University of Western Ontario** Impact of Roof Curvature on Load-Carrying Capacity of Cable-Strut Structures
14:25-14:40	**Speaker: Rui Zhou / Hao Wang, Southeast University** Flutter Stability Analysis of Photovoltaic Flexible Support Based on ANSYS
14:40-14:55	**Speaker: Chengzhi Lu / Wenxi Wang, Hunan University** Control of Nodal Modes for Stay Cables Using a Single-Sided Pounding Tuned Mass Damper (SS-PTMD)
14:55-15:10	**Speaker: Yongshuai Zhao / Xuhui He, Central South University** A Deep Learning Model for Predicting the Stochastic Responses of Vehicle-Bridge System Based on Temporal Convolutional Network and Gaussian Process
15:10-15:25	**Speaker: Na Hao / Liaoliang Ke, Tianjin University** Softening-Spring Nonlinearity in Large Amplitude Vibration of Unsymmetric Double-Layer Lattice Truss Core Sandwich Beams
15:25-15:40	**Speaker: Shuangcheng Liu, Tsinghua University** An Maximum Norm Error Estimate Method for Thin Plate Bending Based on Reduced Element Technique
15:40-15:55	**Speaker: ChenChen Wu, Beijing Information Science and Technology University** Dynamic Response Analysis of Variable Stiffness Bistable Laminates with MFC Actuators
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Tianyou Tao, Southeast University & Shujin Laima, Harbin Institute of Technology	
16:15-16:35	***Invited speaker: Kaiqi Lin, Fuzhou University** Cluster Computing-Aided Open-Source Framework for Model Updating of Civil Structures
16:35-16:55	***Invited speaker: Shujin Laima, Harbin Institute of Technology** Vortex-Induced Vibration Prediction of Long-Span Bridge Based on Machine Learning Method
16:55-17:10	**Speaker: Xijun Ye, Guangzhou University** An Advanced AI-Based Lightweight Two-Stage Underwater Structural Damage Detection Model
17:10-17:25	**Speaker: Mengze Lyu, Tongji University** A Full-Probabilistic Approach to Seismic Fragility Analysis via Decoupled Multi-Probability Density Evolution Method
17:25-17:40	**Speaker: Teng Tong, Southeast University** Bayesian inference for long-term deflection of PC bridges aided with machine learning
17:40-17:55	**Speaker: Xu Hong, Hefei University of Technology** A Tropical Cyclone Intensity Model Based on the Generative Adversarial Network
17:55-18:10	**Speaker: Zengpeng Zhang, Tongji University** Effectiveness Assessment of TMDs in Bridges under Strong Wind and Temperature Incorporating Machine-Learning Techniques and Vibration
18:10-18:25	**Speaker: Qiang Li, NingboTech University** Data-Model Hybrid-Driven and Artificial Intelligence-Based Monitoring Threshold Update and Short-Term Response Prediction for High-Formwork Support System
18:25-18:40	**Speaker: Dingli Jin, Tongji University** Structural Behavior of Post-Cast UHPC Joints Connecting Prefabricated Walls and Baseplates: Experimental Investigations and Multi-scale Modelling
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) **Zhongshan Room 4202, 2F, Building 4 (4 号楼二楼中山厅)** MS32: Concrete for Resilient and Enduring Transportation Infrastructure MS19: Nonlinear Wind-Induced Vibration of Long and Flexible Structures	
Session 1, Co-Chairs: Tianyu Xie, Southeast University / University of Adelaide & Tengfei Xu, Southwest Jiaotong University	
13:30-13:50	***Invited speaker: Yiming Yao, Southeast University** Distributions of Coarse Aggregate and Steel Fiber in UHPC: Migration Behavior and Correlation with Compressive Strength
13:50-14:10	***Invited speaker: Kaihua Liu, Guangdong University of Technology** Bond Behavior of Ultra-High Performance Concrete-Normal Concrete in Marine Environment
14:10-14:25	**Speaker: Ruoyan Pan / Rongqiao Xu, Zhejiang University** Self-Monitoring Performance of Smart Concrete Structures Embedded with Cement-Based Piezoresistive Sensors
14:25-14:40	**Speaker: Yang Liu, Zhejiang University** Experimental Study on Mechanical Properties and Seismic Performance of Large-Diameter Grouted Sleeve Connections
14:40-14:55	**Speaker: Huan Gao / Lihua Xu, Wuhan University** Upgrading Seismic Performance of Precast RAC Shear Walls Using Steel-Polypropylene Hybrid Fibers
14:55-15:10	**Speaker: Dengyu Qian, Guangxi University** Nonlinear Dynamics of In-Plane 2:1 Internal Resonance of a Stayed Cable Excited by VIV
15:10-15:25	**Speaker: Zengshun Chen, Chongqing University** Flow Field Mechanism of Wind-Induced Vibration for the Square Cylinder Considering Fluid-Structure Interaction
15:25-15:40	**Speaker: Qian Feng, Zhejiang University** Analysis and control of hydration thermal effect of long span precast concrete box girder
15:40-15:55	**Speaker: Qianqian Zhang / Shouyu Cai, Zhengzhou University** Topology Optimization of Heat Dissipation Structures with Length Scale Control Based on the Adaptive Feature-Driven Method
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Wenming Zhang, Southeast University & Yi Hui, Chongqing University	
16:15-16:35	***Invited speaker: Yi Hui, Chongqing University** Establishment of A Novel Dual-Oscillator Model for Predicting Amplitude of Vortex-Induced Vibration in 4:1 Rectangular Structures
16:35-16:55	***Invited speaker: Marco Donà, University of Padova** Seismic Fragility Models for Unbraced Steel Pallet Racks
16:55-17:10	**Speaker: Xiaoyu Ji / Haiquan Jing, Central South University** Comparative Investigations of Aerodynamic Effects Induced by High-Speed Train Passing through a Tunnel and an Enclosed Noise Barrier
17:10-17:25	**Speaker: Shun Li / Shouyu Cai, Zhengzhou University** Concurrent Optimization of Support Positions and Structural Topology to Maximize the Fundamental Frequency of Shell Structures
17:25-17:40	**Speaker: Liming Zhao, Southeast University** Nonlinear unsteady aerodynamic forces modeling of long-span bridges at multiple wind speeds based on deep learning
17:40-17:55	**Speaker: Vittoria Borghese, Roma Tre University** Optimized Parametric Design of RC Structures for Reducing Global Potential Warming under Seismic Loads
17:55-18:10	**Speaker: Binyi Liang / Shunhua Chen, Sun Yat-sen University** Numerical Investigations on Structural Damage of Wind Turbine Blades under Fluid-Structure Interaction Loads
18:10-18:25	**Speaker: Mengfei Huang, Dalian University of Technology** TMD Optimization for Multi-mode Vortex-induced Vibration Control of Structures With Closely Spaced Modes
18:25-18:40	**Speaker: Kaiyi Chi / Jun Li, University of Technology Sydney** Impact Response of Reinforced Concrete Beams Exposed to Cryogenic Temperatures
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Yangjiang Room 4203, 2F, Building 4 (4 号楼二楼阳江厅) MS33: Modularized Discrete Energy Absorption Structures MS45: Perception, Evaluation and Mitigation of Bridge Structure Damages under Moving Loads	
Session 1, Co-Chairs: Yilin Zhu, Southwest Petroleum University & Kuijian Yang, Sun Yat-sen University & Fangliang Guo, Chongqing University	
13:30-13:50	***Invited speaker: Jian Xiong, Harbin Institute of Technology** Design and energy absorption characteristics of origami-based modular discrete structures
13:50-14:10	***Invited speaker: Yutong Fu, Chongqing University** Design and Mechanical Performance Analysis of Biomimetic Leaf Vein Lattice Metamaterials
14:10-14:25	**Speaker: Yilin Zhu, Southwest Petroleum University** On the Design and Mechanical Properties of Novel Modular Discrete Auxetic Honeycomb Meta-Structures
14:25-14:40	**Speaker: Kuijian Yang, Sun Yat-sen University** Novel Modular Impact-Resistant Metamaterials Inspired by Burr Puzzles and Bamboos
14:40-14:55	**Speaker: Shaowei Zhu, Chongqing University** Mechanical Metamaterials Inspired by Rubik's Cubes
14:55-15:10	**Speaker: Chuan Qiao, Sichuan University** Self-Locked Energy-Absorbing Systems Designed with Concave-Convex Features
15:10-15:25	**Speaker: Meiling Zhang, Changchun University of Technology** Design of Metamaterials Based on Three-Bar-Three-Cable Tensegrity Unit
15:25-15:40	**Speaker: Fangliang Guo, Chongqing University** Significantly Enhancing Fracture Toughness and Liquid Oxygen Compatibility in Epoxy Nanocomposites for Cryogenic Tanks via Simultaneous Introduction of Graphene Oxide and Polyurethane
15:40-15:55	**Speaker: Yanjing Wang / Shujian Yao, Central South University** Theoretical and experimental study of a compact energy absorption structure
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Yongjun Zhou, Chang'an University & Yuan Jing, Chang'an University	
16:15-16:30	**Speaker: Yuan Jing, Chang'an University** Damage Evaluation of PC Box Girder Bridge Subjected to Overheight Vehicle Impact
16:30-16:45	**Speaker: Marco Ceresara, University of Padova** Optimization and Effectiveness of Load-Level Isolation System (LLIS) for Steel Pallet Racks
16:45-17:00	**Speaker: Chenkai Jiao / Yongjun Zhou, Chang'an University** Study on Negative Bending Moment Dynamic Load Allowance for Small and Medium Span Continuous Girder Highway Bridges under Natural Traffic Flow
17:00-17:15	**Speaker: Yuxin Xue / Yongjun Zhou, Chang'an University** Deflection Dynamic Load Allowance of Taxiway Bridge Considering Landing Gear Buffering Principle
17:15-17:30	**Speaker: Baoxiang Bai / Jingfeng Zhang, Chang'an University** Dynamic Characteristics of RC Beams Subjected to Repeated Impact
17:30-17:45	**Speaker: Qian Luo / Jingfeng Zhang, Chang'an University** Study on the Damage Characteristics and Collision Resistance Calculation Method of Double-Column Bridge Piers under Barge Impact
17:45-18:00	**Speaker: Yang Li / Jingfeng Zhang, Chang'an University** Damage Characteristics and Residual Load-Bearing Performances of RC Beams Under Multiple lmpacts
18:00-18:15	**Speaker: Yikun Liu / Jingfeng Zhang, Chang'an University** Impact and Post-Impact Performance of RC Beams Strengthened by Near-Surface Mounted CFRP
18:15-18:30	**Speaker: Yongsheng Xu, Beijing Information Science and Technology University** The Static and Dynamic Stability Analysis of Graphene Origami Metamaterial Plates
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Hongmian Room 4207, 2F, Building 4 (4 号楼二楼红棉厅) MS34: Intelligent Structural Maintenance and Smart Disaster Prevention MS43: Advances in Civil Infrastructures Incorporated with High-Performance Materials	
Session 1, Co-Chairs: Francis T.K. Au, The University of Hong Kong & Dong Yang, Guangzhou University	
13:30-13:50	***Invited speaker: Hai Fang, Nanjing Tech University** Numerical Simulation and Analytical Study of Ship-Bridge Collision Based on Fluid-Structure Interaction
13:50-14:10	***Invited speaker: Francis T.K. Au, The University of Hong Kong** Responses of Precast Segmental Bridge Column with Resettable Sliding Joints under Lateral Loading
14:10-14:25	**Speaker: Jing Zhang, Jinan University** Stress Monitoring Method of Steel Strand Based on Ultrasonic Guide Wave Notch Frequency Characteristics
14:25-14:40	**Speaker: Yanjia Wang, The University of Hong Kong** Temperature-Induced Bridge Responses by Physics-Informed Neural Network
14:40-14:55	**Speaker: Dong Yang, Guangzhou University** Micro-Crack Localization for Steel Strands Using NVAM
14:55-15:10	**Speaker: Ye Yuan, The University of Hong Kong** Active Learning Enhanced Bayesian Modal Identification and Structural Model Updating
15:10-15:25	**Speaker: Yingqi Liu, Wuhan University of Technology** Thoughts of Seismic-Proof Concept in Chinese Ancient Timber Buildings from the Perspective of Dujiang Weir Hydraulic Project
15:25-15:40	**Speaker: Shuang Zhao, Chongqing University of Science and Technology** Design Wind Loads for Transmission Towers with Cantilever Cross-Arms Based on the Effective Static Load Distribution Method
15:40-15:55	**Speaker: Pei He, The Hong Kong Polytechnic University** Experimental and Numerical Investigation into Debonding Resistance of CHS Wrapped Composite X-Joints
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Lili Hu, Shanghai Jiao Tong University & Hongwei Lin, Beijing Jiaotong University	
16:15-16:35	***Invited speaker: An Chen, Beijing Jiaotong University** Mechanical and Thermal Properties of Insulated Concrete Sandwich Panel with GFRP Connectors
16:35-16:55	***Invited speaker: Lili Wu, China University of Mining & Technology-Beijing** Experimental and Numerical Analyses of the Shear-Slip Behavior of S22294 Stainless Steel Studs
16:55-17:10	**Speaker: Yanzhi Wang / Jing Sun, Beijing Jiaotong University** Influence of Interfacial Treatments and Test Methods on UHPC-NC Interfacial Bonding Properties: Splitting Tensile and Direct Tensile Tests
17:10-17:25	**Speaker: Shuai Li, The University of Hong Kong** Structural Behaviour of FRP-ECC-HSC Composite Stub Columns
17:25-17:40	**Speaker: Hongwei Lin, Beijing Jiaotong University** Interfacial Behavior of FRP Profile-Concrete Bolt Connection with/without Lateral Confinement
17:40-17:55	**Speaker: Siqi Lin / Di Yang, Beijing University of Technology** Semi-analytical capacity model of axially loaded circular CFST columns with arbitrary defects considering local buckling
17:55-18:10	**Speaker: Jiangnan Zhang, Tsinghua University** Experimental Investigation on Performance of Pultruded Planks Laminated Structures for Wind Turbine Blades
18:10-18:25	**Speaker: Peifeng Tian / Tak-Ming CHAN, The Hong Kong Polytechnic University** Seismic Behaviour of High-Rise Modular Buildings with Reinforced Concrete Structural Walls
18:25-18:40	**Speaker: Xifeng Yan, Xi'an University of Architecture and Technology** Behaviour and Design of Eccentrically Loaded Concrete-Filled Rectangular Ferritic Stainless Steel Tubular Slender Columns
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Chaozhou Room 4301, 3F, Building 4 (4 号楼三楼潮州厅) MS35: SMA-Based Engineering Structures for Seismic Resilience Enhancement	
Session 1, Co-Chairs: Guohua Xing, Chang'an University & Wenzhi Zheng, Guangzhou University	
13:30-13:50	***Invited speaker: Hui Qian, Henan Polytechnic University / Zhengzhou University** Development and Investigations of Innovative Superelastic Ni-Ti SMA Ribbed Bars for Reinforced Concrete Applications
13:50-14:10	***Invited speaker: Canxing Qiu, Beijing University of Technology** Performance-Based Seismic Design of Self-Centering Frames with SMA Dampers
14:10-14:25	**Speaker: Yanhui Liu, Guangzhou University** A New Developed Tuned Liquid Column Gas Damper for Vertical Vibration Control: Theoretical and Experimental Study
14:25-14:40	**Speaker: Sasa Cao, Guangzhou University** Experimental and Numerical Investigations of a Friction Damper with Confined Shape Memory Alloy Bars
14:40-14:55	**Speaker: Peng Zhuang, Beijing University of Civil Engineering and Architecture** Experimental and Numerical Studies of a Vertical Isolator Incorporating Disc Spring Negative Stiffness Devices
14:55-15:10	**Speaker: Zhaoqun Chang, Chang'an university** Cyclic Behavior and Seismic Control Performance of SMA Friction Damper
15:10-15:25	**Speaker: Jiahao Huang, China State Construction Engineering (Hong Kong) Limited** Advancing Seismic Resilience: Innovations in the Shape Memory Alloy-Based Self-Centering Systems for Modular Hospitals
15:25-15:40	**Speaker: Shaodong Jiang, Beijing University of Technology** Negative Stiffness Enhanced Tuned Mass Damper (NS-TMD) for Seismic Induced Response Mitigation of Isolated Bridges
15:40-15:55	**Speaker: Yicen Liu, The Hong Kong Polytechnic University** An Experimental Study on Mechanical Properties and Shape Memory Effect of Fe-SMAs Following Thermal-mechanical Training
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Canxing Qiu, Beijing University of Technology & Sasa Cao, Guangzhou University	
16:15-16:35	***Invited speaker: Guohua Xing, Chang'an University** Seismic Performance of Multistory Frames with Novel Self-Centering Friction SMA Dampers
16:35-16:55	***Invited speaker: Jian Zhong, Hefei University of Technology** Efficient Seismic Fragility Assessment Method for Frictional Isolated Bridge Constrained by Shape Memory Alloy Cables under Pulse-Like Ground Motions
16:55-17:10	**Speaker: Zhenhua Zhang, Henan Polytechnic University** Seismic Design and Vulnerability Assessment of Double Column Piers Reinforced with SMA-Based Damper Enhanced by Pendulum-Based Inerter
17:10-17:25	**Speaker: Huihui Dong, Beijing University of Technology** Experimental Investigation on Hysteresis Behaviour of Large-Size SMA-BRB and Its Application in Steel Frames
17:25-17:40	**Speaker: Ruisheng Ma, Beijing University of Technology** Inerter-Based Particle Dampers for Structural Vibration Control
17:40-17:55	**Speaker: Wenzhi Zheng, Guangzhou University** Superelastic Adaptive Pendulum Isolator for Seismic Resilience Enhancement of Bridges
17:55-18:10	**Speaker: Zhipeng Chen, The Hong Kong Polytechnic University** Large-Dimensional SMA-Based Buckling Restrained Plates and Their Application in Beam-To-Column Joint
18:10-18:25	**Speaker: Siqi Wang, Wuhan Institute of Technology** Development and Application of the Low Temperature Resistance Polyurethane Elastomer Bridge Bearings
18:25-18:40	**Speaker: Yuxiao Wang, Tongji University** Seismic Analysis of an Ultra-High-Resilience Concrete Reinforced Cable-Stayed Bridge with Shape Memory Alloy Damping Plate Bearings
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Zhuhai Room 4302, 3F, Building 4 (4 号楼三楼珠海厅) MS36: Structural Strengthening and Repair with Novel Construction Materials SS09:Advancing Modular Construction: Innovations, Design, Construction and Sustainability	
Session 1, Co-Chairs: Jing Yu, The University of Hong Kong & Peng Wang, Shenzhen University	
13:30-13:50	***Invited speaker: Chang Wu, Southeast University** Experimental and Numerical Investigations on Punching Shear Behavior of ECC Locally Enhanced RC Slab-Column Connections
13:50-14:10	***Invited speaker: Li Li, Northwest A&F University** Interface Bonding Property of Alkali Activated Repair Material With Existing Concrete
14:10-14:30	***Invited speaker: Xiangsheng Liu / Jing Yu, The University of Nottingham / The University of Hong Kong** Strengthening of RC columns/beams with High-Tensile-Strength Strain-Hardening Cementitious Composite (HTS-SHCC)
14:30-14:45	**Speaker: JinJing Liao, Dongguan University of Technology** An Analysis-Oriented Stress-Strain Model for FRP-Confined UHPC strengthened with PE fibers
14:45-15:00	**Speaker: Zhenghao, Li, The Hong Kong University of Science and Technology** Experimental Study on Plate-End Cover Separation Failure of CFRP-SHCC Strengthened
15:00-15:15	**Speaker: Mingwen Xu, Southeast University** Flexural Behavior of Corroded Reinforced Concrete Structures Repaired with Engineered Cementitious Composites (ECC)
15:15-15:30	**Speaker: Jiang Yiyang, Zhejiang University** Analysis of GNSS RTK Monitoring Errors in Bridge Environments and Elimination of Multipath Observation Errors Utilizing Continuous Wavelet Transform Method
15:30-15:45	**Speaker: Xiaoming Wang / Yizhe Shi / Lu Deng, Chang'an University** Dimensional Quality Inspection and Virtual Trial Assembly of Prefabricated Steel Components Based on Point Cloud Data
15:45-16:00	
16:00-16:15	Coffee Break
Session 2, Co-Chairs: Zhenyu Huang, Shenzhen University & Enfeng Deng, Zhengzhou University	
16:15-16:35	***Invited speaker: Zhenyu Huang, Shenzhen University** Grouted Steel Tube Sleeve Connection for Modular Integrated Construction: Static and Hysteretic Performance
16:35-16:55	***Invited speaker: Enfeng Deng, Zhengzhou University** Seismic Performance of an Innovative Self-Centering and Repairable Connection for Modular Steel Construction
16:55-17:15	***Invited speaker: Yujie Yu, Central South University** Vibration Performance of Cold-Formed Steel Floor Systems in a Light-Weight Modular Steel Building
17:15-17:30	**Speaker: Hongwei Ma / Xiong Wei, South China University of Technology / China Guangzhou International Economic & Technical Cooperation company** Performance Based Seismic Design of Steel Modular Integrated Construction
17:30-17:45	**Speaker: Ying Zhong / Yi Zhang, China State Construction Engineering (Hong Kong) Limited** Embracing Uncertainty: Delivering Green, Adaptive, and Sustainable Modular Healthcare Facilities in Hong Kong and the Rest of Greater Bay Area
17:45-18:00	**Speaker: Lijie Chen, The University of Hong Kong** Balancing Sustainability, Durability, Cost and Mechanical Performances of Prefabricated Modular Construction in Circular Economy Using Low Carbon Concrete
18:00-18:15	**Speaker: Jiahao Peng / Chao Hou, Southern University of Science and Technology** Experimental Study on a Novel Self-Locking Inter-Module Connection with Spring-Loaded Plunger Latches: Under Shear
18:15-18:30	**Speaker: Fengwei Shi, Shandong University of Science and Technology** Seismic Behavior of Steel Modular Buildings with Simplified Models of Inter-Module Connections
18:30-18:45	**Speaker: Junyi Lian / Wenyuan Zhang, Harbin Institute of Technology** Axial Behavior of an Innovative Inter-Module Connection for Modular Steel Construction
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Heyuan Room 4305, 3F, Building 4 (4 号楼三楼河源厅) MS37: Advances in Vehicle-Bridge Interaction Dynamics	
Session 1, Co-Chairs: Zhilu Wang, Chongqing University & Wenyu He, Hefei University of Technology	
13:30-13:50	***Invited speaker: Ling Yu, Jinan University** Multidomain Dictionary Learning for Moving Force Identification by Integrating Time-Frequency Representations
13:50-14:10	***Invited speaker: Xinqun Zhu, University of Technology Sydney** Time-Frequency Analysis of Vehicle-Bridge Interaction Systems Using Multi-Synchrosqueezing Transform
14:10-14:25	**Speaker: Zhilu Wang, Chongqing University** Enhanced Identification of Bridge Dynamic Parameters Based on Vehicle Response
14:25-14:40	**Speaker: Juan Chen, Nanjing University of Aeronautics and Astronautics** Analysis of Coupled Vibration and Comfort Evaluation of Prefabricated Steel-Concrete Composite Taxiway Bridge
14:40-14:55	**Speaker: Huile Li, Southeast University** Dynamic Characteristics and Corrosion Fatigue Performance of Flexible Cables in Railway Bridges under Moving Vehicle Load
14:55-15:10	**Speaker: Cheng Wang / Kang Gao, Southeast University** Investigating Multi-Damage Indirect Detection Methods of Breathing Cracks in Plate-Like Bridges: An Experimental and Numerical Study
15:10-15:25	**Speaker: Wenjia Lu / Yuncheng He, Guangzhou University** C-Type Piezoelectric Energy Harvesters for Bidirectional Vibrations without Fixed Stain Concentration
15:25-15:40	**Speaker: Chen Lei / Z.L. Wang, Chongqing University** Cancellation of Resonance for Elastically Supported Beams Subjected to Successive Moving Loads: Optimal Design Condition for Bridges
15:40-15:55	**Speaker: Zhen Yang, Southeast University** Finite Element–Based Data-Driven Method to Detect Multiple Damages of 1D Beam Model and 2D Slab Model of Bridges
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Xuan Kong, Hunan University & Huile Li, Southeast University	
16:15-16:35	***Invited speaker: Tianli Huang, Central South University** Time-Varying Characteristics Analysis of Bridge under Moving Vehicle Using High-Resolution Time-Frequency Methods
16:35-16:50	**Speaker: Wenyu He, Hefei University of Technology** Moving Load Induced Dynamic Response Analysis of Bridge Considering the Uncertain Parameters with the Spatial Dependency
16:50-17:05	**Speaker: Yufeng Shen / Jian Guo, Southwest Jiaotong University** Vortex-Induced Vibration Automatic Identification Framework of Sea-Crossing Bridge Based on Deep Learning
17:05-17:20	**Speaker: Jun Wu, China Three Gorges University** Simulation and Analysis of the Optimization of Section Geometry Parameters for H-Shaped Steel Beams with Corrugated Webs
17:20-17:35	**Speaker: Yewon PARK / Jong Su Jeon, Hanyang University** Lumped Plasticity Model Parameters for Cyclic Response Prediction of Corroded Reinforced Concrete Columns
17:35-18:50	**Speaker: Shuo Wang, Hunan University** Bridge Influence Surface Identification Using a Surface Fitting Method
18:50-18:05	**Speaker: Yifan Wang, Tongji University** Vortex-induced vibration control of 51 rectangular cylinder with an attached active splitter plate based on open-loop control method
18:05-18:20	**Speaker: Xiumeng Bu, Changsha University of Science & Technology** Effects of Control Time Delay on High-Speed Maglev Vehicle-Bridge-Wind System
18:20-18:35	**Speaker: Yuhang He, Southeast University** Theoretical and Experimental Study on Rotating Hybrid Excitation Eddy Current Damper (RHE-ECD)
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Huizhou Room 4306, 3F, Building 4 (4 号楼三楼惠州厅) MS40: Resilience-Based Seismic Evaluation of Bridges Subjected to Cross/near-fault Excitations MS46: Impact-Resistant Structural Design	
Session 1, Co-Chairs: Xu Chen, Tongji University & Peng Yu, Guangxi University	
13:30-13:50	***Invited speaker: Peng Yu, Guangxi University** Investigation of Dynamic Response of Full-Scale RC Beams under High-Energy Impact
13:50-14:10	***Invited speaker: Xu Chen, Tongji University** Seismic Performance Assessment and Design Procedure of Base-Isolated Bridges with Lead-Rubber-Bearing and Negative Stiffness Springs (LRB-NS)
14:10-14:25	**Speaker: Zhaoyong Ren, Guangxi University** A Hierarchical Multiscale Framework for Predicting the Tensile Behavior of Cement-Based Materials
14:25-14:40	**Speaker: Weijing Yun, Guangxi University** Research on the Progressive Collapse Performance of Round Steel Tube Column-Box Beam Steel Frame Substructure and Beam-Column Conversion Structure Design
14:40-14:55	**Speaker: Xianglin Zheng, Central South University** Seismic response prediction and fragility assessment of high-speed railway bridges using machine learning technology
14:55-15:10	**Speaker: Yuan Long / Jianxun Zhang, Xi'an Jiaotong University** Crashworthiness of Foam-filled X-Shape Sandwich Beam under Lateral Impact Loading
15:10-15:25	**Speaker: Jiajia Li / Jianxun Zhang, Xi'an Jiaotong University** Impact Behavior of Ceramic/Metal Materials
15:25-15:40	**Speaker: Yingjing Liang / Yijie Liu, Guangzhou University** Dynamic Properties of Triply Periodic Minimal Surface Cellular Structures
15:40-15:55	**Speaker: Qinglong Sun / Xiaowei Ma, Beijing Normal University** An Analytical Model for Deformation and Internal Force Analysis of Multitower Suspension Bridges
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Yingjing Liang, Guangzhou University & Junfeng Jia, Beijing University of Technology	
16:15-16:35	***Invited Speaker: Wang Wei, Southwest Jiaotong University** Seismic Resilience-Design of Girder Bridges Subjected to Cross/Near-Fault Excitations
16:35-16:55	***Invited speaker: Ashraf El Damatty, The University of Western Ontario** Behavior of Steel Wind Towers During Transmission Line Cascade Failures from Downbursts
16:55-17:10	**Speaker: Peng Wang, Shenzhen University** An Innovative Fiber Approach for Overcoming Shear Brittleness of RC Beam through the Implementation of Reinforced Polymer-Rubber Support Composite (FRP-RSC) System
17:10-17:25	**Speaker: Binqi Xiao, Central South University** Effect of seismic isolation parameters on component damage and running safety performance of high-speed railway bridge-track system under near-fault earthquakes
17:25-17:40	**Speaker: Renkang Hu, Central South University** A Novel Horizontal Bidirectional Hybrid Damping System for Multi-Level Vibration Control of Long-Span Bridges
17:40-17:55	**Speaker: Fukun Xia, Swinburne University of Technology** Design Optimization of Safety Roller Barriers
17:55-18:10	**Speaker: Dong In Park / Do Kyun Kim, Seoul National University** Evaluating the Impact of Ship Collisions on Prestressed Concrete Columns in Floating Offshore Wind Turbines
18:10-18:25	
18:25-18:40	
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Shaoguan Room 4303, 3F, Building 4 (4 号楼三楼韶关厅) MS41: Unfolding the Future: Exploring Deployable Structures for Sustainable Solutions SS17: Bayesian System Identification and Structural Health Monitoring of Engineering Structures: Algorithms, Machine Learning Methods and Applications	
Session 1, Co-Chairs: Jianguo Cai, Southeast University & Qian Zhang, Southeast University	
13:30-13:50	***Invited speaker: Marco Meloni, Southeast University** Kirigami Canopies for Enhancing Outdoor Comfort through Shading and Light Modulation
13:50-14:10	***Invited speaker: Ning Wei, Jiangnan University** Impact-Induced Interlayer Bonding for Mechanical Enhancement of Multilayer Graphene Membranes
14:10-14:25	**Speaker: Yeqing Gu, Southeast University** Modular Planar Antenna Structure Design Based on Scissor Structure
14:25-14:40	**Speaker: Qin Hu, Huazhong University of Science and Technology** Structural Damage Identification Based on Sparse Bayesian Learning with Variational Inference and Improved PSO Algorithm
14:40-14:55	**Speaker: Rui Hu / Yanchun Ni, Tongji University** Dynamic Properties Investigation of a Cable-Stayed Bridge Using a Bayesian Method
14:55-15:10	**Speaker: Yongxin Yang / Huchen Yang, Tongji University / University of Wisconsin-Madison** Blockage Effects in Wind Tunnel Testing of Bridge Segment Models
15:10-15:25	**Speaker: Jiayang Shen / Songye Zhu, The Hong Kong Polytechnic University** Energy Harvesting Potential of Actively Controlled Electromagnetic Damper
15:25-15:40	**Speaker: Shanhao Wu / Yichen Zhu, Southeast University** Fast Bayesian Operational Modal Analysis Considering Environmental Effects
15:40-15:55	**Speaker: Xiao Liang, Southeast University** Two-level multi-objective stacking sequence optimization for deployable composite booms based on NSGA-II
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Heung-Fai Lam, City University of Hong Kong & Jun Hu, Wuhan University of Technology	
16:15-16:35	***Invited speaker: Jun Hu, Wuhan University of Technology** A Comprehensive Domain Transformer Based on Spatial Reduction Attention and Dynamic Convolution for Fault Diagnosis in Rotating Machinery
16:35-16:55	***Invited speaker: Jiahua Yang, Guangxi University** Quantifying Non-Uniqueness in Structural Identification and Damage Detection Following a Bayesian Approach
16:55-17:15	***Invited speaker: Heung Fai Lam, City University of Hong Kong** Finite Element Model Updating of a Long-Span Bridge and Its Validation by Displacement Influence Line
17:15-17:30	**Speaker: Zhengyi Fu, City University of Hong Kong** Spurious Modes Identification by Frequency Domain Decomposition
17:30-17:45	**Speaker: Zezhou Zhao, Harbin Institute of Technology** Model Updating of a Large Scale Bridge Based on Two-Stage Bayesian Formula and MCMC Algorithm
17:45-18:00	**Speaker: Zuo Zhu, University of Exeter** Operational Modal Analysis of a Bridge by a Bayesian Method
18:00-18:15	**Speaker: Xianghao Meng / Yong Huang, Harbin Institute of Technology** Adaptive Meta-Learning Simulation Approach for Bayesian Updating of Structural Dynamic Models
18:15-18:30	**Speaker: Ke Huang / Lei Wang, Changsha University of Science and Technology** Real-Time Sensor Fault Validation for System Identification Without the Need for Training Data
18:30-18:45	
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Maoming Room 2102, 1F, Building 2 (2 号楼一楼茂名厅) SS01: Mechanical Behaviors and Applications of Advanced Materials and Structures	
Session 1, Co-Chairs: Jiajia Mao, Beijing University of Technology & Xiangying Guo, Beijing University of Technology	
13:30-13:50	***Invited speaker: Tianxue Ma, Beijing Jiaotong University** Simultaneous Control of Elastic and Acoustic Waves in Three-Dimensional Single-Phase Metamaterials
13:50-14:10	***Invited speaker: Jia Lou, Ningbo University** Longitudinal Wave Manipulation and Free Vibration of Acoustic Metamaterial Rods
14:10-14:25	**Speaker: Sun Ming, Zhengzhou University** Limit State Equation and Failure Pressure Prediction Model of Pipeline with Complex Loading
14:25-14:40	**Speaker: Jianshe Xu, University of Shanghai for Science and Technology** Mechanical Behavior of Top-Chord-Free Vierendeel-Truss Composite Slabs
14:40-14:55	**Speaker: Helong Wu, Zhejiang University of Technology** Examination of Beam Theories for Buckling and Free Vibration of Functionally Graded Porous Beams
14:55-15:10	**Speaker: Zhanzhou Ma / Tiejun Liu, Inner Mongolia University of Technology** Surface Effect on Functionally Graded Piezoelectric Coating Indented by Cylindrical Indenter
15:10-15:25	**Speaker: Xinyu Zhou / Jing Liu, Huazhong Agricultural University** Thermoelastic Contact Behavior of Functionally Graded Piezoelectric Materials under the Action of Cylindrical Indenters
15:25-15:40	**Speaker: Yunan Zhu / Xiangying Guo, Beijing University of Technology** Research on the Vibration Absorption Effect and Energy Dissipation Characteristics of Tuned Particle Dampers
15:40-15:55	**Speaker: Lingfeng Gao / Jing Liu, Huazhong Agricultural University** Finite Element Analysis of Thermoelastic Instability in Two-Dimensional Functionally Graded Coated Brake Disc
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Jing Liu, Huazhong Agricultural University & Dongjia Yan, University of Science and Technology Beijing	
16:15-16:35	***Invited speaker: Dongjia Yan, University of Science and Technology Beijing** Bio-Inspired Soft 3D Network Metamaterials and Mechanical Behaviors
16:35-16:50	**Speaker: Youheng Dong, Hohai University** Vibration Characteristics of Spinning Cylindrical Shells under Various Boundary Conditions
16:50-17:05	**Speaker: Dongshuo Yang, Beijing University of Technology** Bio-Inspired Nonlinear Locally Resonant Metamaterial Sandwich Panels for Low-Frequency Vibration Reduction Theoretical and Experimental Analysis
17:05-17:20	**Speaker: Zhengyang Li, University of Science and Technology Beijing** Vibration Isolation and Mitigation by the Self-Adaptive Metamaterial
17:20-17:35	**Speaker: Shutong Huang / Xiaoli Jia, China University of Petroleum (Beijing)** Study on Multidirectional Hybrid Effect and Failure Mechanisms of Carbon/Basalt Fiber Doube-Helicoidal Composite Laminates
17:35-17:50	**Speaker: Zeguang Wei / Jiajia Mao, Beijing University of Technology** Prediction of Geometric Characteristics of Curved Beams under Compressive Loading
17:50-18:05	**Speaker: Luo Bo / Jize Zhang, Hong Kong University of Science and Technology** Adaptive Virtual Modeling Aided Stochastic Free Vibration Analysis of the Perovskite Solar Cell
18:05-18:20	**Speaker: Tian Nan / Xiangying Guo, Beijing University of Technology** Application of Nonlinear Tire Models to Analyse Aircraft Nose Landing Gear Shimmy
18:20-18:35	**Speaker: Zeyuan Zhang / Jiajia Mao, Beijing University of Technology** Free Vibration of Cracked Preshaped Curved Beams with Different Curvatures
19:00 Dinner (Buffet)	

November 10, 2024, Afternoon Parallel Sessions (13:30-18:45) Jieyang Room 2103, 1F, Building 2 (2 号楼一楼揭阳厅) SS02: Decarbonising Building Structures Using Renewable Materials	
Session 1, Co-Chairs: Yan Zhuge, University of South Australia & Cristoforo Demartino, Roma Tre University	
13:30-13:50	***Invited speaker: Yan Zhuge, University of South Australia** An Innovative Capsule for Self-healing Cementitious Materials Using Waste-derived Sludge
13:50-14:10	***Invited speaker: Cristoforo Demartino, Roma Tre University** Seismic Retrofitting Optimization of RC Buildings Using Cross-Laminated Timber Panels and Accounting for Aesthetic-Based Criteria
14:10-14:25	**Speaker: Do Kyun Kim, Seoul National University** Next-Generation Structural Insights: Advanced Empirical Models for Compressive Strength of Deflected Plates
14:25-14:40	**Speaker: Fulin Qu, University of New South Wales** Claystone Volcanic Ash-Enhanced Construction Materials for Sustainable Waste Management and Decarbonization
14:40-14:55	**Speaker: Juhyeon Park, Seoul National University/Do Kyun Kim, Seoul National University** Investigation of Edge Detection Algorithms for Automated Line Heating Process Applications
14:55-15:10	**Speaker: Dong In Kim / Do Kyun Kim, Seoul National University** Structural Integrity Evaluation Based on Engineering Critical Assessment: IMO Type–C Liquid CO2 Tank
15:10-15:25	**Speaker: Jiaxu Shen / Zilan Zhong, Beijing University of Technology** A Reinforcement Strategy for Masonry Walls via Corrosion Protection Liner and High-Polymer Cementitious Composite Material
15:25-15:40	**Speaker: Xu Xi / Yuewu Wang, Beijing University of Technology** Vibration Control of AFG Beam with Moving Load in Thermal Environment
15:40-15:55	**Speaker: Shaolei Dai, Zhejiang University** In-Situ Non-Destructive Structural Property Evaluation of Full-Scale Engineered Mass Bamboo Components
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Benoit Gilbert, Griffith University & Thong Pham, University of South Australia	
16:15-16:35	***Invited speaker: Benoit Gilbert, Griffith University** Recent Australian Research on Converting Southern Blue Gum Logs Grown for Pulpwood into High Value Engineering Wood Products
16:35-16:55	***Invited speaker: Thong Pham, University of South Australia** Impact Behaviour of Precast Segmental Geopolymer Concrete Beams: Experimental Test and Analytical Model
16:55-17:10	**Speaker: Lijun Hou, Hohai University** Seismic Behavior of Corroded Reinforced Concrete Columns Strengthened with Combined FRP Rebar and Textile Reinforced Ultrahigh Toughness Cementitious Composite Jackets
17:10-17:25	**Speaker: Mengdie Chen / Jongsu Jeon, Hanyang University** Advanced Methodologies for Mitigating Corrosion-Induced Data Drift in Machine Learning Models for Seismic Risk Assessment of Deteriorated Bridges
17:25-17:40	**Speaker: Yi Eun Kim, Seoul National University/ Do Kyun Kim, Seoul National University** Development of Design Formula and Analysis of Ultimate Strength Behaviour of Curved Plates Considering Welding Residual Stress
17:40-17:55	**Speaker: Hossein Sanaei Ataabadi, University of South Australia** An Innovative Capsule for Self-healing Cementitious Materials Using Waste-derived Sludge
17:55-18:10	**Speaker: Zihan Liu / Lu Yang, Beijing University of Technology** Research on the Compressive Performance of Stainless Steel CHS Columns Considering Random Corrosion in Welded Zone
18:10-18:25	**Speaker: Zexin Feng, Tianjin University** Vibration-Based Identification of Tension Force of Straight Cables with Unknown Boundary Conditions Based on Effective Vibration Length
19:00 Dinner (Buffet)	

November 11, 2024, Afternoon Parallel Sessions (13:30-18:45) Qingyuan Room 4103, 1F, Building 4 (4 号楼一楼清远厅) SS03: Building Information Modelling (BIM) and Engineering Structures SS04: Design Strategies for Improving the Dynamic Performance of Offshore Wind Turbine Systems	
Session 1, Co-Chairs: Ke Li, China State Construction Technical Center & Chen Liu, China State Construction Technical Center	
13:30-13:50	***Invited speaker: Chen Liu, China State Construction Technical Center** A BIM Storage Method Based on Distributed Multi-Modal Database System Serving for Data Collaborative Application of Buildings
13:50-14:10	***Invited speaker: Hao Ding, The Hong Kong Polytechnic University** Heave Motion Control of Very Large Floating Structures Using Non-Submerged Tuned Liquid Column Dampers
14:10-14:25	**Speaker: Meng Wang, Beijing University of Technology** Seismic Performance of Offshore Wind Turbine with Amplifying Damping Transfer System
14:25-14:40	**Speaker: Zhipeng Zhao/Minjun Wu, Tongji university** Stability Criterion and Design Database of Negative Stiffness-Equipped Nonlinear Structure Using Intelligent Machine Learning Tool
14:40-14:55	**Speaker: Zijing Wan / Liang Feng, Chongqing University** Optimizing Rebar arrangement in Prefabricated Components Using Multi-Agent Transfer Reinforcement Learning
14:55-15:10	**Speaker: Lihao Chen /Ruifu Zhang, Tongji University** Vibration Control of an Offshore Wind Turbine Tower Using a Tuned Liquid Inerter System
15:10-15:25	**Speaker: Jian Zhang / Jinting Wang, Tsinghua University** Semi-Active Response Control of Monopile-Supported Offshore Wind Turbines under Multi-Hazard Loads at Scoured Sites
15:25-15:40	**Speaker: Wang Jingjing, Beijing University of Technology** Theories and methods of carbon emission measurement of urban buildings at the city and block scales
15:40-15:55	**Speaker: Meiwen Tan, Zhejiang University** Treatments of compatibility condition in Buckling Analysis of Hencky Bar-Chain beam based on matrix transformation and Lagrange multiplier methods
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Jinting Wang, Tsinghua University & Hao Ding, The Hong Kong Polytechnic University	
16:15-16:30	**Speaker: Simin Zou, Central South University** A Novel Experimental Method for Aerodynamics of Vehicle-Bridge System
16:30-16:45	**Speaker: Junjie Zeng, University of South Australia** 3D Printed Functionally Graded Concrete Plates: Concept and Bending Tests
16:45-17:00	**Speaker: Zenghui Liu / Jianbing Chen, Tongji University** A Comprehensive Assessment of Different Coupled Dynamic Models for Floating Offshore Wind Turbine Structures
17:00-17:15	**Speaker: Jiayi Zheng / Wei Lu, Harbin Institute of Technology (Shenzhen)** Evaluation Method for Torsional Performance of In-Service High-Rise Buildings Based on Measured Torsional Displacement Ratio
17:15-17:30	**Speaker: Guangpo Zhao, China Southwest Architectural Design and Research Institute Corp. Ltd** 2D-3D Integrated BIM Structural Design Method and Software Realization
17:30-17:45	**Speaker: Tianze Chen / Dongsheng Li, Chongqing University** Reverse Modeling of Indoor Scenes: From Point Cloud Scanning to BIM Reconstruction
17:45-18:00	**Speaker: Zhiruoyu Wang, The university of Queensland** Parametric Analysis of Convex and Concave Diagrid Structures: Interaction of Building Envelope and Floor Systems
18:00-18:15	**Speaker: Jiahao Hu, Chongqing University** Intelligent Design of Shear Wall Structures Based on BIM and Multi-Objective Genetic Algorithm
18:15-18:30	**Speaker: Hyewon SHIN, Hanyang University** Seismic Performance Assessment of Hollow Reinforced Concrete Columns Using Lumped Plasticity Model
19:00 Dinner (Buffet)	

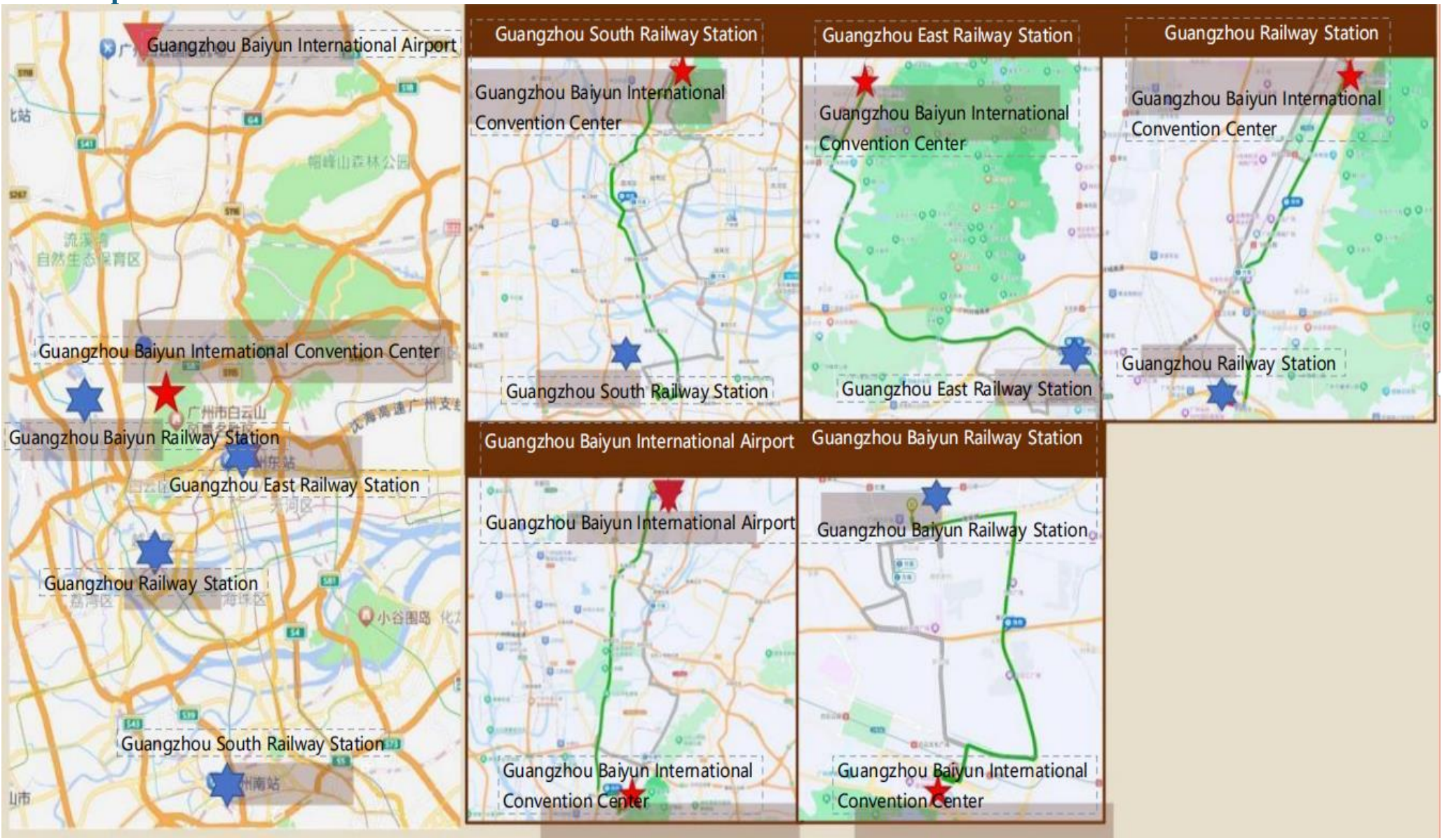
November 11, 2024, Afternoon Parallel Sessions (13:30-18:45) **Zhaoqing Room 4102, 1F, Building 4 (4 号楼一楼肇庆厅)** SS05: Energy Absorption of Advanced Materials and Structures SS08: Machine Learning -Based Structural Analysis and Optimization SS12: Advanced Concrete Technology and Composite Structures SS13: Damage Identification under Changing Environmental and Operational Conditions in Structural Health Monitoring	
Session 1, Co-Chairs: Shiqiang Li, Taiyuan University of Technology & Dongsheng Li, Shantou University	
13:30-13:50	***Invited speaker: Yuan Chen, Southern University of Science and Technology** Mechanical Characterisation and Energy Absorption of CFRP Meta-Composites
13:50-14:10	***Invited speaker: Tao Jiang, Shantou University** A New Method for Shape Sensing of Structural Large Deformations
14:10-14:25	**Speaker: Shiqiang Li, Taiyuan University of Technology** Design and Mechanical Properties of Hybrid Lattice Structures
14:25-14:40	**Speaker: Ngoc Sanha, RMIT University** Energy Absorption of the Polycarbonate Bio-Inspired Structures
14:40-14:55	**Speaker: Gaowa Xu, Jiangsu University of Science and Technology** Seismic Response Analysis of Precast Concrete Frames with Combined Rotational Friction and Flexural Yielding Metallic Dampers
14:55-15:10	**Speaker: Wei Qiang, Southern University of Science and Technology** Energy Absorption Performance of a 3D-Printed Origami Metamaterial Based on the Kresling Pattern
15:10-15:25	**Speaker: Peng Guo / Dongsheng Li, Shantou University** Nonlinear Manifold Learning Method for Damage Identification in Variable Environments
15:25-15:40	**Speaker: Jian Jiang / Zhifang Zhang, Guangzhou University** A Novel Theory for Stiffness Degradation and Fatigue Life Prediction of FRP Composites Subjected to Varied Environmental Temperatures and Loading Stresses
15:40-15:55	**Speaker: Lei Tang, Central South University** Damage Detection for Bridges under a Moving Vehicle Based on Generalized S-Local Maximum Reassignment Transform
15:55-16:10	Coffee Break
Session 2, Co-Chairs: Sawekchai Tangaramvong, Chulalongkorn University & Mianheng Lai, Guangzhou University	
16:10-16:30	***Invited speaker: Sawekchai Tangaramvong, Chulalongkorn University** Machine Learning-Based Prediction of Seismic Response of Nonlinear Steel Structures
16:30-16:50	***Invited speaker: Qihan Wang, University of New South Wales** Machine Learning-Assisted Static Reliability Analysis for Engineering Structures with Imprecise Random Field
16:50-17:10	***Invited speaker: Mianheng Lai, Guangzhou University** Compressive Behavior of FRP-PVC Confined Low Carbon Footprint Concrete
17:10-17:25	**Speaker: Wenxiong Li, South China Agricultural University** Active Learning Surrogate Model Method for Structural Reliability Analysis
17:25-17:40	**Speaker: Xuge Dong / Hongshuai Lei, Beijing Institute of Technology** A Novel Buckling Optimization Method with Decoupling Strategy for Implicit Curved
17:40-17:55	**Speaker: Arnut Sutha, Chulalongkorn University** Reliability-based design optimization of large-scale truss structures, using combination line sampling method with bayesian inference with subset simulation and slime mold algorithm optimization approach
17:55-18:10	**Speaker: Piyawat Boonlertnirun, Chulalongkorn University** Surrogate-Assisted Model for Predicting Ultimate Compression Capacity Using CLPSO in Concrete-Filled Double Skin Steel Tube Columns
18:10-18:25	**Speaker: Sihang Xiao / Hongshuai Lei, Beijing Institute of Technology** Mechanical and Heat Transfer Performances of Cellular Metallic Foams at High Temperatures
18:25-18:40	**Speaker: Sijie Yuan / Jiezhong Huang, Shantou University** A Novel Nonlinear PCA Method for Structural Damage Detection under Nonlinear Environmental or Operational Influences
18:40-18:55	**Speaker: Junxing Li, The University of New South Wales** Stochastic Maximum Wildland Fire Load Analysis for Engineering Structures Using Physical Models Integrated with Machine Learning Techniques
19:00 Dinner (Buffet)	

November 11, 2024, Afternoon Parallel Sessions (13:30-18:45) Yunfu Room 4101, 1F, Building 4 (4 号楼一楼云浮厅) SS06: Graphene Reinforced High-Performance and Multifunctional Composite Structures	
Session 1, Co-Chairs: Chuang Feng, Nanjing Technology University & Helong Wu, Zhejiang University of Technology	
13:30-13:50	***Invited speaker: Guilin She, Chongqing University** Nonlinear Aero-Thermo-Elastic Flutter Analysis of Graphene Platelets Reinforced Metal Foams Inclined Plates
13:50-14:10	***Invited speaker: Jinzhu Zhang, Nanjing Tech University** Research on Synergistic Enhancement of Thermoelectric Properties of Graphene Reinforced Cement Composites by Cu2Se and ZnO
14:10-14:30	***Invited speaker: Wei Gao, The University of New South Wales** Stochastic Modelling for Elastoplastic Behaviours of Auxetic Structures using Extended Support Vector Regression
14:30-14:45	**Speaker: Qi Cai, Hohai University** Topology Optimization of Trusses Considering Local Buckling Constraints of Bars
14:45-15:00	**Speaker: Shaoyu Zhao / Jie Yang, RMIT University** Graphene Origami-Based Metamaterial Composite Structures: From Atomistic Simulation to Continuum Modelling
15:00-15:15	**Speaker: Xinrui Xv / Chuang Feng, Nanjing Tech University** Machine Learning Approaches for Predicting 28-Day Flexural Strength of CNT-Reinforced Cement Composites
15:15-15:30	**Speaker: Zhenhao Yang / Helong Wu, Zhejiang University of Technology** Nonlinear Dynamic Response of Geometrically Imperfect Functionally Graded Graphene Nanocomposite Annular Plates
15:30-15:45	**Speaker: Liangteng Guo / Shaoyu Zhao, University of Queensland / RMIT University** Tunable Bandgaps in Graphene-Reinforced Phononic Crystals with Phase Change Materials
15:45-16:00	**Speaker: Jiamian Xv / Zhicheng Yang, Guangzhou University / Zhongkai University of Agriculture and Engineering** Electrically Induced Buckling and Postbuckling of Graphene Platelets Reinforced Dielectric Composite Beams
16:00-16:15	Coffee Break
Session 2, Chair: Zhicheng Yang, Zhongkai University of Agriculture and Engineering & Shuang Li, Harbin Institute of Technology	
16:15-16:35	***Invited speaker: Jiajia Mao, Beijing University of Technology** Static and Dynamic Behaviors of the Graphene Reinforced Piezoelectric Composite Structures
16:35-16:50	**Speaker: Jun Xu / Chuang Feng, Nanjing Tech University** Numerical Study of Damping Nonlinear Dynamics of FG-GNPRC Dielectric Beams with Internal Pores
16:50-17:05	**Speaker: ZAFIRA NUR EZZATI BT MUSTAFA, Toyohashi University of Technology** Displacement-Based Seismic Design of Coupled RC Shear Wall Buildings Using Energy Dissipation Dampers
17:05-17:20	**Speaker: Yucheng Fan / Chuang Feng, Nanjing Tech University** Graphene/Carbon Nanotube Reinforced Cement for Intelligent Road Monitoring and Vehicle Classification
17:20-17:35	**Speaker: Ying Lv / Lianhe Li, Inner Mongolia Normal University** Mechanical and Thermal Postbuckling of Functionally Graded Graphene Origami-Enabled Auxetic Metamaterials Plates
17:35-17:50	**Speaker: Jiajun, Cao / Guijie, Shi, Shanghai Jiao Tong University** Mechanisms of Energy Absorption of Small Bending Angles for Thin-Walled Beam under Punch Drop Impact
17:50-18:05	**Speaker: Gun Chan Lee / Jong Su Jeon, Hanyang University** Assessing the Influence of Lap Splices on the Seismic Response of Bridge Pier Walls
18:05-18:20	**Speaker: Xianwen Hu, Dongguan University of Technology** Nondestructive Testing for Debonding in FRP-Strengthened Steel Plates Using Nonlinear Guided Waves
18:20-18:35	
19:00 Dinner (Buffet)	

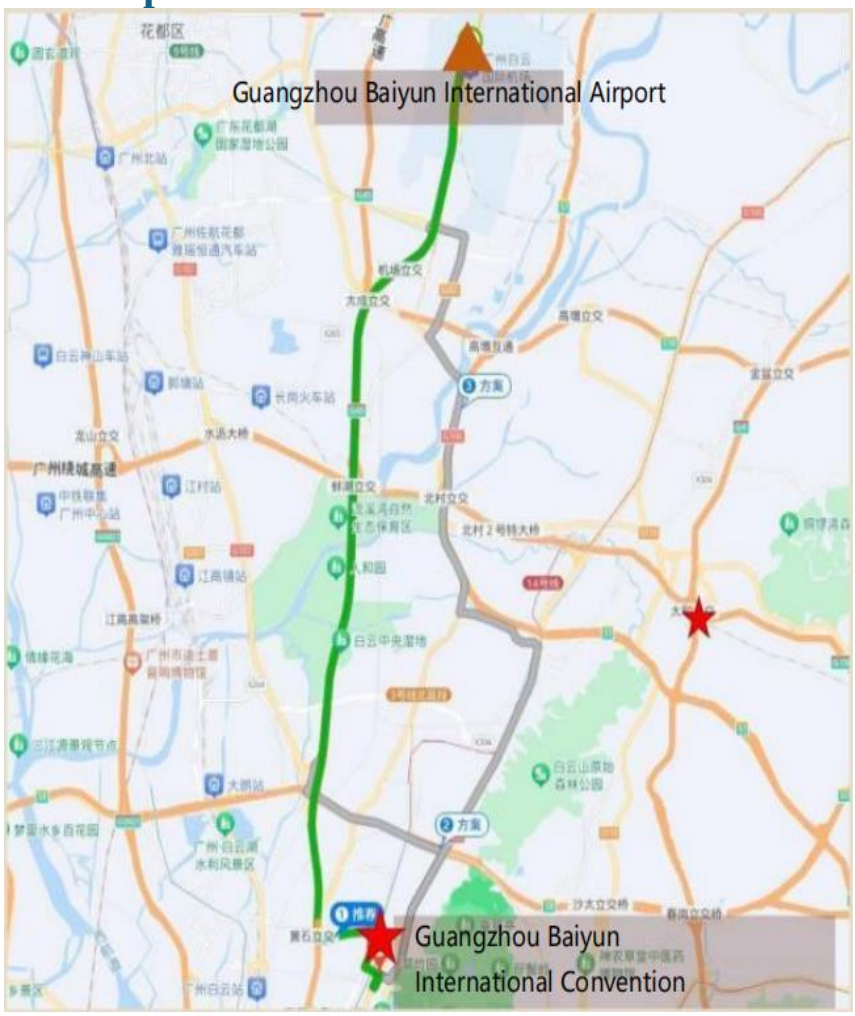
November 11, 2024, Afternoon Parallel Sessions (13:30-18:45) **Zhongshan Room 4202, 2F, Building 4 (4 号楼二楼中山厅)** SS07: Multi-Scale Dynamic Behavior and Design Principle of Fiber Composite Structures SS10: Nonlinear Dynamics of Engineering Structures SS16: Recycled Aggregate Concrete Structures and Components	
Session 1, Co-Chairs: Pengfei Wang, University of Science and Technology of China & Chaoran Liu, Beijing University of Technology	
13:30-13:50	***Invited speaker: Yimin Fan, Harbin Institute of Technology (Shenzhen)** Internal-Resonance-Based Vibration Energy Harvesting through Geometrical Nonlinearities
13:50-14:10	***Invited speaker: Xin Zhang, Southern University of Science and Technology** Mechanical and Self-Healing Properties of Multi-Functional Composite Materials Under Impact
14:10-14:25	**Speaker: Cheng Yuan / Wei Lu, Harbin Institute of Technology** Stress Variation Mechanism and Monitoring Methods for Large-Span Steel Structure Unloading Process
14:25-14:40	**Speaker: Yi Yang / Changning Liu, The Hong Kong Polytechnic University** Inerter for Vibration Control and Its Potential Application in Suspension System
14:40-14:55	**Speaker: Chaoran Liu, Beijing University of Technology** Low-Frequency Synchronous Vibration Mitigation and Energy Harvesting via Quasi-Zero-Stiffness Design and Targeted Energy Transfer
14:55-15:10	**Speaker: Abouzar Jafari, Tongji University** Toward Resilient Structural Walls Using Compliant Mechanisms: Numerical Feasibility Study
15:10-15:25	**Speaker: Yi Zhu / Wenhao Pan, Zhejiang University** Experimental Study of Rebar Anchorage Slip in Reinforced Concrete Structures
15:25-15:40	**Speaker: Md Newaz Sharif / Pengfei Wang, University of Science and Technology of China** Enhancing Dynamic Thermal Resilience in Carbon Fiber Reinforced Polymer Composites
15:40-15:55	
15:55-16:15	Coffee Break
Session2, Co-Chairs: Fuyuan Gong, Zhejiang University & Haiyan Zhang, South China University of Technologyy	
16:15-16:35	***Invited speaker: Yue Geng, Harbin Institute of Technology** Characteristic Compressive Strength of Recycled Aggregate Concrete and Its Partial Safety Factor for Composite Slabs Accounting for Uncertainty of Recycled Concrete Aggregates from Different Sources
16:35-16:55	***Invited speaker: Jian Guo Dai, City University of Hong Kong** Geopolymer Artificial Aggregate Concrete: Development and Functional Utilization
16:55-17:10	**Speaker: Huan Zhang, Harbin Institute of Technology** Long-Term Behavior of Steel-Recycled Aggregate Concrete Composite Beams
17:10-17:25	**Speaker: Hongru Zhang, Fuzhou University** Chloride-Induced Reinforcement Corrosion and Rust filling in Recycled Aggregate Concrete
17:25-17:40	**Speaker: Linyuan Shao, Zhejiang University** Experimental Study on Wind Load Characteristics of High-Support Photovoltaic Array Considering Roof Ancillary Structure
17:40-17:55	**Speaker: Bingcheng Chen / Yuxi Zhao, Zhejiang University** Long-Term Performance Analysis of RAC Beams Based on 10-Year Experimental Observation
17:55-18:10	**Speaker: Huansheng Huang / Haiyan Zhang, South China University of Technology** Physical Enhancement Method of Geopolymer Aggregate for Multifunctional UHPC Applications: A Novel and Efficient Strategy
18:10-18:25	**Speaker: Yeyun Wei**, **Tongji University** A Coupled Dynamic Constitutive Model for Q355 Steel
18:25-18:40	
19:00 Dinner (Buffet)	

November 11, 2024, Afternoon Parallel Sessions (13:30-18:45) Dongguan Room 4201, 2F, Building 4 (4 号楼二楼东莞厅) SS14: Shape Memory Alloy-Based Passive Seismic Protection Technologies for Resilient Structural Design SS15: Metallic and Bimetallic Structures for Long-Life Service	
Session 1, Co-Chairs: Fei Shi, Guangzhou University & Osman Ozbulut, University of Virginia	
13:30-13:50	***Invited speaker: Osman Ozbulut, University of Virginia** Development and Application of Shape Memory Alloy-Based Protection Systems
13:50-14:10	***Invited speaker: Eunsoo Choi, Hongik University** Prestressing and Self-Centering Effect of Mortar Beams due to Shape Memory Effect of Crimped NiTi SMA Fibers
14:10-14:25	**Speaker: Huiyong Ban, Tsinghua University** Numerical Simulation and Modelling for Residual Stresses within Stainless-Clad Bimetallic Steel Welded Box Sections
14:25-14:40	**Speaker: Fei Shi / Yun Zhou, Guangzhou University** Shake Table Testing on a Four-Story Steel Frame Building with Shape Memory Alloy Cable Braces
14:40-14:55	**Speaker: Yifei Hu, The Hong Kong Polytechnic University** Monotonic Behaviour of Stainless-clad Bimetallic Steel Welded Joints with Different Welding Details
14:55-15:10	**Speaker: Wenchen Lie / Yun Zhou, Guangzhou University** Development and Insight of a Dual-Stage Self-Centering Rocking System
15:10-15:25	**Speaker: Zongao Li / Hui Qian, Zhengzhou University** Experimental Study on Seismic Performance of Resilient Frame Structure Partially Replaced by Shape Memory Alloy and Engineered Cementitious Composites
15:25-15:40	**Speaker: Zhuo Zeng, Tsinghua University** Numerical Analysis and Design of Axially-Loaded Concrete-Filled Stainless-Clad Bimetallic Steel Tubular Slender Columns
15:40-15:55	**Speaker: Tao Zhong, Tongling University** Study on the mechanism of interface state affecting impact resistance of composite laminates
15:55-16:15	Coffee Break
Session 2, Co-Chairs: Huiyong Ban, Tsinghua University & Kwok-Fai Chung, The Hong Kong Polytechnic University	
16:15-16:35	***Invited speaker: Kwok-Fai Chung, The Hong Kong Polytechnic University** Behaviour of Stainless-Clad Bimetallic Steel Welded Joints under Cyclic Actions
16:35-16:55	***Invited speaker: Zhongxing Wang, Tianjin University** Experimental Study into the Shear Performance of Aluminium-Timber Composite Connections
16:55-17:10	**Speaker: Haiting Li, Shanghai Jiao Tong University** Web Crippling Behavior of Cold-Formed Duplex Stainless Steel Lipped Channels under ITF Loading: An Experimental Insight
17:10-17:25	**Speaker: Letian Hai, University of Science and Technology Beijing** Constitutive Modeling on Cyclic Behavior of Stainless-Clad Bimetallic Steel
17:25-17:40	**Speaker: Yangfan Wu / Pengfei Wang, University of Science and Technology of China** Helical optimization of composite fibers for synergistic ductility deformation and failure
17:40-17:55	**Speaker: Xiaofeng Yang, Tsinghua University** Research on Structure Behaviour of Stainless-Clad Bimetallic Steel Welded Tubular T-Joints
17:55-18:10	
18:10-18:25	
18:25-18:40	
19:00 Dinner (Buffet)	

1. Transportation Information



2.Transportation Guide



(1) Departing from Guangzhou Baiyun International Airport

1.Metro

Take Line 3 from Airport South (or North) Station to Jiahe Wanggang Station, then transfer to Line 2.

1) For the Guangzhou Baiyun International Convention Center,get off at Baiyun Cultural Square Station,Exit B.then walk to the convention center. The journey involves passing through 8 stations and takes approximately 45 minutes.

or 2) For the Guangzhou Baiyun International Conference Center, get off at Xiaogang Station,Exit A.then walk to the conference center.The journey involves passing through 7 stations and takes approximately 40 minutes.

2.Airport Shuttle Bus

Take Shuttle Bus Line 1 to the terminus. From there, you can transfer to a bus or take a taxi to reach your destination.

3.Taxi

A taxi ride from the airport takes approximately 45 to 90 minutes, with an estimated fare of 60 RMB.

(2) Departing from Guangzhou South Railway Station

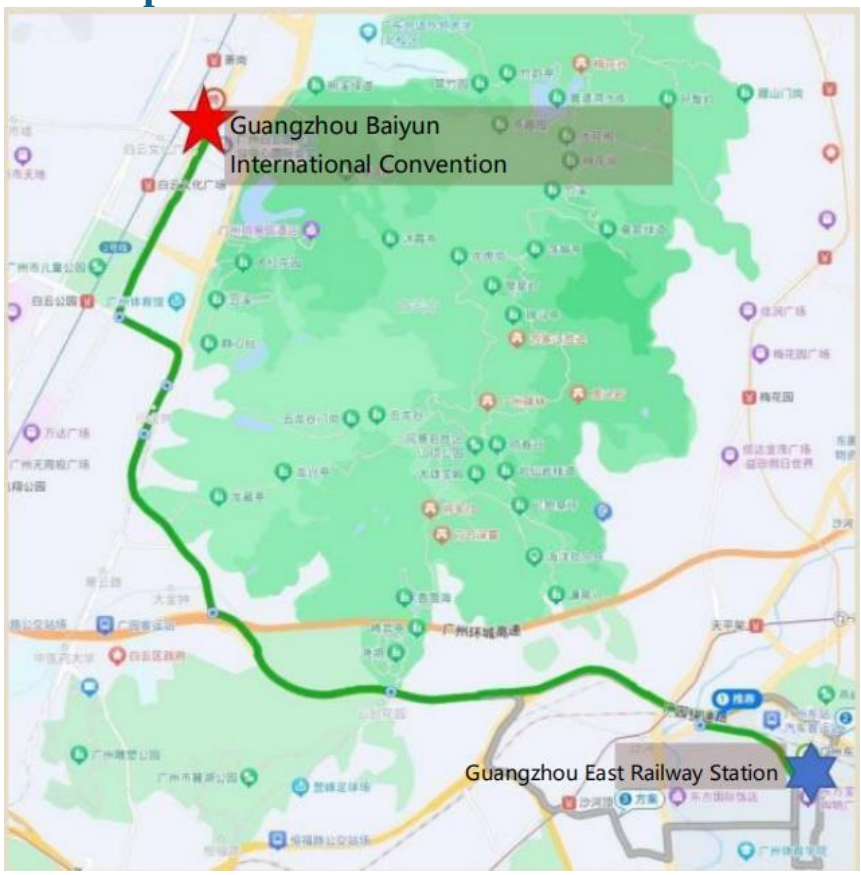
1.Metro

Take Line 2 from Guangzhou South Railway Station to Baiyun Cultural Square Station, Exit B, then walk to the Guangzhou Baiyun International Convention Center. The journey involves passing through 21 stations and takes approximately 48 minutes.

2.Taxi

A taxi ride to the Guangzhou Baiyun International Convention Center takes about 1 hour, with an estimated fare of 90 to 110 RMB.

2.Transportation Guide



(3) Departing from Guangzhou East Railway Station

1.Metro

Take Line 1 from Guangzhou East Railway Station to Gongyuanqian Station, then transfer to Line 2.

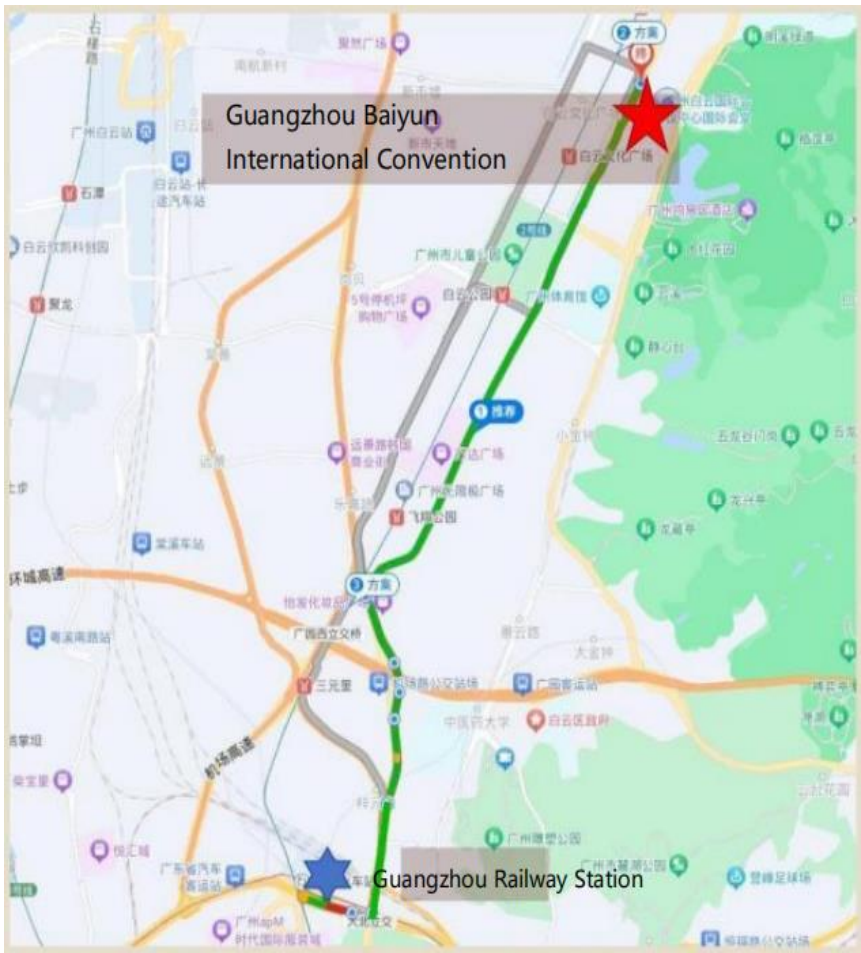
For the Guangzhou Baiyun International Convention Center, get off at Baiyun Cultural Square Station, Exit B. Then walk to the convention center. The journey involves passing through 14 stations and takes approximately 45 minutes.

2.Bus

Take Bus No. 841 from the Guangzhou East Railway Station Bus Terminal to station of Yunchengzhong Yi Lu.

3.Taxi

A taxi ride takes about 20 to 30 minutes, with an estimated fare of 30 to 40 RMB.



(4) Departing from Guangzhou Railway Station

1.Metro

Take Line 2 from Guangzhou Railway Station to Baiyun Cultural Square Station, Exit B. Then walk to the Guangzhou Baiyun International Convention Center. The journey involves passing through 4 stations and takes approximately 18 minutes.

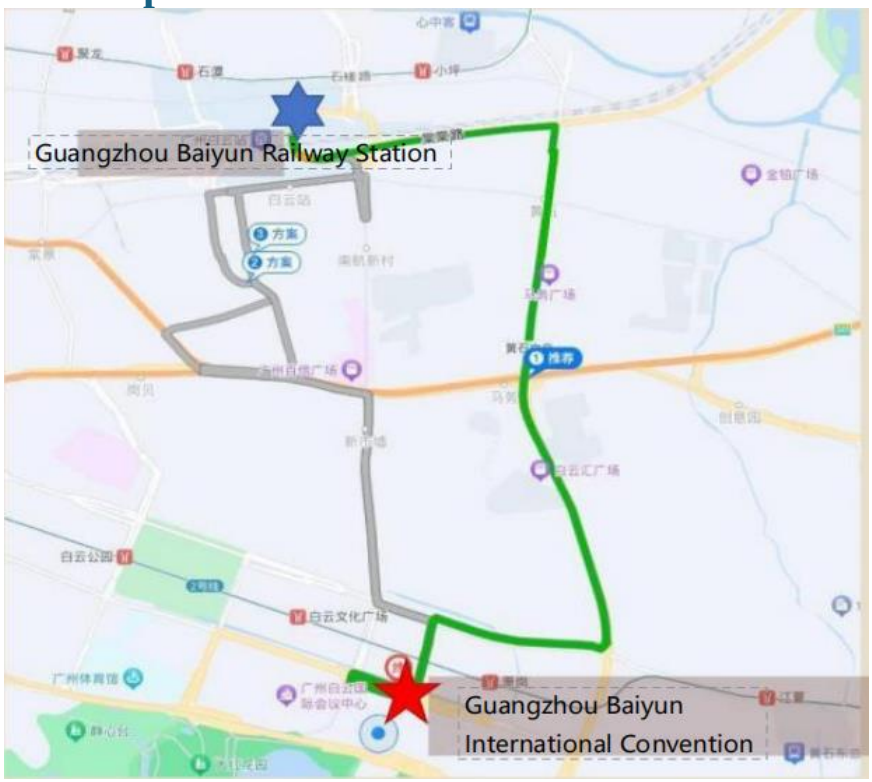
2.Bus

Take Bus No.265 from Yuexiu Park Station to Guangwai (Baiyunshan West Gate) Station.

3.Taxi

A taxi ride takes about 20 to 30 minutes, with an estimated fare of 20 to 30 RMB.

2.Transportation Guide



(5) Departing from Guangzhou Baiyun Railway Station

1.Metro

Take Line 8 from Shitan Station to Xicun Station, then transfer at Line 5 to Guangzhou Railway Station, and finally transfer to Line 2.

For the Guangzhou Baiyun International Convention Center, get off at Baiyun Cultural Square Station, Exit B. Then walk to the convention center. The journey involves passing through 10 stations and takes approximately 52 minutes.

2.Bus

Take Bus No. 421 from the Guangzhou Baiyun Railway Station Bus Terminal to Qifu Lu East Station.

3.Taxi

A taxi ride takes about 20 to 30 minutes, with an estimated fare of 20 to 30 RMB.

3.Transportation Guide-Convention Center

(1) Driving route

Self-drive/Internetcar navigation and positioning:
Building 1/North Tower of Lingnan Oriental Hotel;
Buinding 5/South Tower of Lingnan Oriental Hotel;
Buinding 3 (main entrance to the venue).

*Please check your navigation software for the latest route instructions.

(2) Metro and pedestrian routes

Baiyun Cultural Square Exit B→ Yun Cheng Bei Second Road → Turn left to Yun Cheng East Road → Turn right to enter Convention Centre West Plaza.

* Please check your navigation software for the latest route instructions.

3.Transportation Guide-Convention Center

(3) Bus routes

Buses can enter through Gate2 or Gate 3, pick up and drop off passengers at the West Plaza and park at the Bus parking, the route is as shown on the diagram.

* Please check your navigation software for the latest route instructions.

一. 整体交通区位概览


广州白云国际机场
广州白云国际会议中心
广州白云站
广州东站
广州火车站
广州南站
广州南站
广州白云国际会议中心
广州南站
广州东站
广州白云国际会议中心
广州火车站
广州白云国际机场
广州白云国际会议中心
广州白云站
广州白云站
广州白云国际会议中心

二. 交通指引

(1) 从广州白云国际机场出发

1.地铁

“机场南”站(3 号线)至"嘉禾望岗”站，转 2 号线。至 2 号线"白云文化广场"站 B 出口，途径 8 站，步行至白云国际会议中心，全程约 45 分钟。

或至 2 号线“萧岗”站 A 出口，途径 7 站，步行至白云国际会议中心国际会堂南门，全程约 40 分钟。

2.机场大巴

1 号线至旧机场北门或终点站，转乘公交车或打车。

3.出租车

从机场出发，车程约 45~90 分钟，车费约 60 元。

(2) 从广州南站出发

1.地铁

“广州南站"站(2 号线)至”白云文化广场"站 B 出口，途径 21 站，步行至白云国际会议中心，全程约 48 分钟。

2.出租车

车程约 1 小时，车费约 90~110 元。

二. 交通指引

(3)从广州东站出发

1.地铁

“广州东站”站(1 号线)至"公园前”站，转 2 号线。

2 号线“白云文化广场"站 B 出口，途径 14 站，步行至白云国际会议中心，全程约 45 分钟。

2.公交车

"广州火车东站总站"站乘坐 841 路，至"云城中一路“站。

3.出租车

车程约 20~30 分钟，车费约 30~40 元。

(4)从广州火车站出发

1.地铁

(2 号线)“广州站”至"白云文化广场”站 B 出口，途径 4 站，步行至白云国际会议中心，全程约 18 分钟。

2.公交车

越秀公园“站乘坐 265 路，至广外(白云山西门) “站。

3. 出租车

车程约 20~30 分钟，车费约 20~30 元。

二. 交通指引

(5) 从广州白云站出发

1.地铁

“石潭”站(8 号线)至“西村”站，转 5 号线至广州火车站”站，转 2 号线。

2 号线白云文化广场”站 B 出口，途径 10 站，步行至白云国际会议中心，全程约 52 分钟。

2.公交车

广州白云站公交总站"站乘坐 421 路，至“齐富路东“站。

3. 出租车

车程约 20~30 分钟，车费约 20~30 元。

三. 交通路线

(一)驾车路线

自驾车/网约车导航定位:1号楼/岭南东方酒店北座 5号楼/岭南东方酒店南座 3号楼(主要会场入口)。

*请参考导航软件最新路线提示行驶。

(二)地铁&行人路线

白云文化广场 B 出口→云城北二路→左转进入云城东路→右转在会议中心西广场进入。

*请参考导航软件最新路线提示行走。

三. 交通路线

(三)大巴车路线

大巴车从 2 号、3 号门进入于西广场上下客，停至大巴车停车场，行车路线如图所示。

*请参考导航软件最新路线提示行走。

Layout of Conference rooms/会议室位置分布

一层平面图

Layout of the First Floor (1F)

二层平面图

Layout of the Second Floor (2F)

三层平面图

Layout of the Third Floor (3F)

Contact Us

➢ Medical Team

Date	Name	Tel.	Room No.
NOV. 8~9	Zhipeng Yan/晏志鹏	13632224231	Room 303, Building 5 5 号楼 303 房
	Xuemei Chen(F)/陈雪梅(女)	17817125889	
NOV. 9~10	Yang Yang(F)/杨洋(女)	13246893172	
	Yan Xu(F)/徐燕(女)	18318331719	
NOV. 10~11	Baoqiang Huang/黄宝强	13316285850	
	Zhaohong Du(F)/杜兆宏(女)	18318331719	

➢ ICES 2024 Secretariat

Name	Tel.
Ruohong Zhao (F)/赵若红(女)	18620098524
Jialin Wang/王家琳	13922229528
Dan Xie (F)/谢丹(女)	18680586896
Yonghui Huang/黄永辉	15920383318
Yuncheng He/何运成	13312861586
Jianting Wen (F)/温健婷(女)	13928780687

Organized by

Engineering Structures Journal

Guangzhou University

Supported by

Research Center for Wind Engineering and Engineering Vibration, Guangzhou University

School of Civil Engineering and Transportation, Guangzhou University

Earthquake Engineering Research & Test Center, Guangzhou University