BEI
An International Technical Society

汕頭大學
SHANTOU UNIVERSITY

2026

BEI-Asia Pacific International Conference

On Frontiers In Bridge Engineering

PROGRAM BOOK



SHANTOU, CHINA

Welcome to BEI-Shantou 2026

The Bridge Engineering Institute (BEI) is an international technical society dedicated to advancing knowledge and innovation in bridge engineering and related fields. Through international conferences and academic exchanges, BEI promotes collaboration among researchers, engineers, and practitioners worldwide.

Shantou Univ. (STU), established in 1981 with the approval of the State Council of China, is a comprehensive Univ. jointly supported by the Ministry of Education, Guangdong Province, and the Li Ka Shing Foundation. Located in Shantou, a coastal city in Guangdong, China, STU is committed to academic excellence, research innovation, and international collaboration. With a strong emphasis on interdisciplinary education and global engagement, the Univ. provides an excellent environment for academic exchange and research cooperation.

The BEI-Asia Pacific International Conference on Frontiers in Bridge Engineering will bring together international researchers and practitioners to share state-of-the-art knowledge and discuss emerging challenges in bridge engineering through plenary and parallel sessions. We warmly welcome all participants to Shantou Univ. and look forward to a productive and inspiring conference.

Organized by

*Shantou Univ. China (*汕头大学*)*

Bridge Engineering Institute (BEI), An International Technical Society

Supported by

Department of Civil Engineering and Smart Cities, Shantou Univ.

(汕头大学土木与智慧建设工程系)

Advances in Wind Engineering（AWE）

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Smart Construction and Sustainable Cities

Advances in Bridge Engineering（ABE）

中国公路学报

广东省钢结构协会钢桥分会

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Zhenming Chen/陈振明（中建钢构）
Airong Liu/刘爱荣（广州大学）

Conference Information

Important dates

Abstract submission: by October 31, 2026. Acceptance of Abstracts: rolling-basis

Name badges

Only registered attendees with name badges will be permitted to attend the conference.

Catering & Dining

Food during the conference will be provided at Academic House (AH), Shantou Univ. Main Campus. On the evening of Nov. 14, 2026, participants will be invited to conference banquet at AH, where they can enjoy authentic local cuisine and Yinge Dance (英歌舞).

Local Culture & Experiences

Chaoshan region is renowned for its rich culinary traditions, famous landmarks and unique cultural heritage. Participants are encouraged to explore those in their own way.

Conference Program Overview		
Registration: Friday, Nov. 13, 2026		
12:00-23:00	Registration	Lobby, Academic House (AH), Shantou Univ., Shantou, China 汕头大学学术交流中心（AH 酒店）一楼大厅
17:00-20:30	Dinner	AH hotel, Third Floor/AH 酒店三楼
Day 1: Saturday, Nov. 14, 2026		
08:30-08:50	Opening Session	Lecture Hall inside Library, Shantou Univ. Main Campus, No. 243 Daxue Road, Shantou, China/汕头大学（桑浦山校区）图书馆报告厅
08:50-10:20	Plenary Session	
10:20-10:45	Group Photo & Coffee Break	Library Entrance / 图书馆大门南侧步梯
10:45-11:45	Plenary Session	Lecture Hall inside Library 汕头大学（桑浦山校区）图书馆报告厅
12:00-13:00	Lunch	AH hotel, Third Floor, AH 酒店三楼
13:45-15:45	Plenary Session	Lecture Hall inside Library/汕头大学（桑浦山校区）图书馆报告厅
15:45-16:00	Coffee Break	
16:00-18:00	Plenary Session	Lecture Hall inside Library/汕头大学（桑浦山校区）图书馆报告厅
18:20-20:00	Banquet	Ground floor of Multiple Function Hall, beside AH. See signpost AH 酒店隔壁(西侧)一楼多功能厅，有路标指示
Day 2: Sunday, Nov. 15, 2026		
08:30-11:55	4 Parallel Sessions	Lecture Hall & Room inside Library/图书馆报告厅和隔壁三个会议室
12:15-13:15	Lunch	AH hotel, Third Floor/AH 酒店三楼
14:00-16:00	2 Parallel Sessions	Lecture Hall & Room inside Library/图书馆报告厅和隔壁三个会议室
16:00-16:15	Coffee Break	
16:15-16:45	Closing Ceremony	Lecture Hall inside Library/图书馆报告厅
18:00-20:00	Dinner	AH hotel, Third Floor/AH 酒店三楼

Nov. 14, 2026, Plenary Session (Lecture Hall inside Library, Shantou Univ. Main Campus) 2026年11月14日 汕头大学桑浦山校区图书馆报告厅，全天大会报告			
Time **时间**	**Contents** **报告内容**		**Chairs** **主持人**
08:30-08:50	Opening Ceremony	BEI Chairman address, Yail Jimmy Kim,10 mins	Zhiwen Zhu/ 祝志文
		STU Univ. Leader address, 10 mins	
08:50-09:20	Caijun Shi 史才军	Use of UHPC in Bridge Engineering	Yail Jimmy Kim
09:20-09:50	Harry Tripp Shenton	Bridge Structural Health Monitoring in the U.S.: One Case – A 15 Year Journey	V. Vimonsatit 李东升
09:50-10:20	Y. Edward Zhou	Some Reflections on Fatigue Performance of Steel Bridges	
10:20-10:45	Group Photo & Coffee Break (集体合影&茶歇)		
10:45-11:15	Hao Wang 王浩	Data-driven intelligent prediction and efficient control of wind effects on bridges	刘震卿 封周权
11:15-11:45	Qingkuang Liu /刘庆宽	Aerodynamic forces, wind-induced vibration characteristics and control measures for Stay Cables	
12:00-13:00	Lunch(午餐)/ Academic House Hotel, Third Floor		
13:45-14:15	ISSAM Harik	Structural Performance, Testing, and Deployment of Fiber Reinforced Polymer (FRP) Composites in Bridge Infrastructure	朱力 李寿英
14:15-14:45	Yan Han 韩艳	Nonlinear Flutter of Ultra-Long-Span Bridges under Extreme Winds: Evolution Mechanisms and Key Technologies for Resilience Enhancement	
14:45-15:15	Pengru Deng/邓鹏儒	Concrete Crack Detection-Measurement-Tracking via Enhanced Foundation Model and VIL Fusion	黄天立 刘慕广
15:15-15:45	Mingshui Li 李明水	Flutter Instability of Airfoil and Bridge Decks in Turbulent Flow	
15:45-16:00	Coffee Break (茶歇)		
16:00 -16:30	Wangxing Ding /丁望星	Design Innovations of the Danjiangkou Reservoir Bridge, a Ground-Anchored Cable-Stayed Bridge with a main span of 760m	党新志 李庚英
16:30-17:00	Biao Wei 魏标	Prevention and Control of Seismic Damage to the Train-track-bridge System of High-speed Railways under Near-fault Earthquakes	
17:00-17:30	Wei Zeng 曾炜	Construction the world longest suspension bridge with main span of 2180m	朱志辉 曹国辉
17:30-18:00	Yongcheng Ji/ 纪泳丞	Mechanisms of Microbial Mineralization Repair and Performance Enhancement of Solid Waste Concrete in Cold Regions	
18:20-20:00	Banquet with Yingge Dance （英歌舞表演、晚宴）		

November 15, 2026, Parallel Session 2026年11月15日 分会场报告	
Session A1: Wind Engineering and Bridge Structural Performance **(Lecture Hall inside Library/汕头大学桑浦山校区图书馆报告厅)**	
Co-Chairs: Qi Zhou(周奇), Shantou Univ. **Sasa Cao(曹飒飒), Guangzhou Univ.**	
08:30-08:50	Long-Term Field Measurements on the Dynamic Responses of Cable-Supported Photovoltaic Structures (Invited) ***Shouying Li, Saifei Fu, Fuqi Li, and Zhengqing Chen***
08:50-09:10	TLS-STformer: Integrating Trend-Level-Shock Decomposition and Asymmetric Spatio-Temporal Attention for Wind Power Forecasting (Invited) ***Bo Xiang and Zhenqing Liu***
09:10-09:25	Full-Scale Measurement of Wind-Induced Displacements and Modal Identification of a Super High-Rise Building Using Ground-Based Interferometric Radar ***Shangyu Hu and Yicheng Li***
09:25-09:40	Effects of Atmospheric Stability and Rotor Ground Clearance on Wind Turbine Wake Characteristics ***Jie Peng and Zhenqing Liu***
09:40-9:55	Wind-Farm Power and Fatigue-Load Optimization through Yaw Control Considering Wake Effects ***Yucheng Ni, Zhenqing Liu, and Yize Wang***
10:10-10:30	Coffee Break (茶歇)
Session A2: Bridge Monitoring and Structural Dynamics **(Lecture Hall inside Library/汕头大学桑浦山校区图书馆报告厅)**	
Co-Chairs: Xiaoyu Luo(罗晓瑜), Chang'an Univ. **Jiezhong Huang(黄杰忠), Shantou Univ.**	
10:30-10:50	Time-Varying Characteristics Analysis and Damage Detection for Bridges under a Moving Vehicle Using High-Resolution Time-Frequency Methods (Invited) ***Tianli Huang, Lei Tang, Xuqiang Shang, Ningbo Wang, and Weixin Ren***
10:50-11:10	Spectrum Decrement Methods for Bridge Modal Damping Identification from Free-Decay Responses (Invited) ***Zhouquan Feng, Jiren Zhang, Shuangfa Shi, and Xugang Hua***
11:10-11:30	Full-Field Dynamic Reconstruction and Deflection Field Identification of Bridges Using System Equivalent Model Mixing (Invited) ***Huisheng Zhang, Kejie Jiang, Qiang Han, and Xiuli Du***
11:30-11:45	Modal Parameter Identification and Damage Feature Identifiability of a Long-Span Suspension Bridge under Spatial Sensor Loss ***Zijian Wang, Jing Gao, and Mingsai Xu***
11:45-12:00	Physics-Guided Temperature-Conditioned Normalizing Flow for Bridge Anomaly Detection under Environmental Variability ***Zhengjie He, Tianli Huang, Xiaojun Wei, Yafei Wang, and Xuqiang Shang***
12:15-13:15	Lunch (午餐)

Session A3: Bridge Seismic Performance and Vibration Control (Lecture Hall inside Library/汕头大学桑浦山校区图书馆报告厅)	
Co-Chairs: Elistratov Vladimir Nikolaevich, Saint Petersburg State Univ. of Arch. and Civil Eng. Tinmitonde Severin, Shenzhen Univ.	
14:00-14:20	Seismic Risk Assessment Method for Regional High-Speed Railway Bridge Networks (Invited) ***Zhihui Zhu, Jiahao Wang, and Shijie Zhao***
14:20-14:40	Shake Table Tests of Gravity Well-Inspired Double Friction Pendulum Systems under Bi-Directional Ground Motions (Invited) ***Sasa Cao, Xiaolong Sheng, and Osman E. Ozbulut***
14:40-15:00	Seismic Fragility Analysis of Cable-Stayed Bridges with Fluid Viscous Dampers Considering Device Failure States and Uncertain Performance Evolution (Invited) ***Shangtao Hu, Menggang Yang, and Hong Hao***
15:00-15:15	Smartphone-Based Large-Displacement Measurement and Time-Domain Reconstruction in Bridge Seismic Tests: Insights into Bearing-Motion Observability ***Weirui Chen and Sasa Cao***
15:15-15:30	Seismic Performance of Shear Keys in Skewed Bridges: Full-Scale Pseudo-Static Tests ***Wenqian Wu and Suiwen Wu***
15:30-15:45	Study on Hysteretic Behavior of Self-Centering Friction Energy Dissipation Brace with Non-Prestressed Disc Springs ***Junkai Lu, Ziming Wang, Zhiqiang Li, Wenpeng Li***
16:00-16:15	Coffee Break (茶歇)

Session B1: Bridge Structures, Materials and Foundations (Beijing Hall (2nd close to Lecture Hall) /汕头大学桑浦山校区图书馆报告厅内二楼北京厅)	
Co-Chairs: Ming Li(李明), Southwest Jiaotong Univ. Weilin Li(李威霖), Guangxi Univ.	
08:30-08:50	Jointly Consideration the Stress-Strain Curve of Concrete and Nonlinear Creep of Concrete in Concrete Creep Theories ***Vladimir Elistratov*** (Invited)
08:50-09:10	Analysis of the Influence of Pile–Soil Interaction on the Mechanical Behavior of Long-Span Continuous Rigid-Frame Bridges with V-Shaped Piers ***Yuxiong Liang, Hong Chen, Meizhen Fu, and Xin Qian***
09:10-09:25	Key Technologies for Safe Shield Tunnelling and Intelligent Construction in Water-Rich Karst Regions ***Yanning Wang, Xinhao Min, and Shuilong Shen***
09:25-09:40	Carbide Slag and Waste Glass-Derived C–S–H Seeds for Low-Cement Calcined Coal Gangue–Limestone Binders ***Tiantian Xu and Jin Jiang***
09:40-09:55	*Hybrid Regression for Seismic Response Prediction of Cable-Stayed Bridges Using Pulse Decomposition, FEM, and Feature Fusion* ***Zhuoyue Shen, Ser Tong Quek, and Zhiwen Zhu***
09:55-10:10	Development of a Sandwich-Structured Shape Memory Alloy Honeycomb Damper ***Shengquan Yan, Luwei Liu, and Sasa Cao***
10:10-10:30	Coffee Break (茶歇)

Session B2: Bridge Aerodynamics and Structural Behaviors (Beijing Hall (2nd close to Lecture Hall) /汕头大学桑浦山校区图书馆报告厅内二楼北京厅)	
Co-Chairs: Nanhai Zhu(朱南海), Jiangxi Univ. of Science and Technology Ze Xiang(向泽), Shaoyang Univ.	
10:30-10:50	Aerodynamic Assessment of the Tsing Lung Bridge for Wind-Resistant Design ***Ming Li and Mingshui Li*** (Invited)
10:50-11:10	Aerodynamic Admittance for Buffeting Analysis of Bridge Decks: A Combined Experimental–Numerical and Field Validation Study(Invited) ***Weilin Li, Jianning Wang, Yonghui An, Huawei Niu, and Xugang Hua***
11:10-11:25	A Tesla-Valve-Inspired Noise Barrier for Bridge Decks: Suppressing Vortex-Induced Vibration While Retaining Acoustic Shielding ***Wei Zheng, Jianming Hao, Jiuliang Li, and Feng Wang***
11:25-11:40	Experimental Real-Time Hybrid Simulation of High-Damping Rubber Bearings in Isolated Bridges at Low Temperatures ***Yuqing Tan***
11:40-11:55	Appraisal of Split Pylon Cable-Supported Bridges Subjected to Gravity Loads ***Wenchao Li, Helen Fairclough, Matthew Gilbert, and Andrew Tyas***
12:15-13:15	Lunch (午餐)
Session B3: Advanced Concrete Materials and Composite Structures (Beijing Hall (2nd close to Lecture Hall) /汕头大学桑浦山校区图书馆报告厅内二楼北京厅)	
Co-Chairs: Tao Yuan(袁涛), Hunan Railway Professional Technology College Shangtao Hu(胡尚韬), Guangzhou Univ.	
14:00-14:20	Bond-Slip Behavior of Deformed Steel Bars in Geopolymer Ultra-High-Performance Concrete (Invited) ***Zhao Yan and Suiwen Wu***
14:20-14:40	A Tandem Narrow-Band Aeroelastic Model for Investigating Multimodal Vortex-Induced Vibrations of Long-Span Bridges ***Qi Zhou, Gang Liu, and Jian Zhou***
14:40-14:55	Bond Behavior between Carbon Fabric Reinforced Cementitious Matrix (FRCM) Composites with Added Short Fibers and Concrete Substrates ***Min Zhang***
14:55-15:10	Molecular Dynamics Investigation on Internal Interfacial Bonding and Failure of Polyurethane Concrete under a Wide Temperature Range for Rapid Bridge Deck Repair ***Wenyu Jiang, Quansheng Sun, and Yuxiang Guan***
15:10-15:25	Interfacial Slip and Partial-Composite Flexural Behavior of Large-Corrugation EPCFA-CSP Bridge Deck Panels with an Unreinforced EPCFA Layer ***Wenyu Jiang, Quansheng Sun, and Yuxiang Guan***
15:25-15:40	Study on Axial Compression Performance of LC3 Concrete-filled Short Columns with Steel Core Cold-ribbed Square Steel Tube ***Yipeng Du***
15:40-15:55	Axial Compressive Behavior of PBL-Stiffened Double-Skin UHPC Composite Walls ***Haitao Wang and Yongjian Liu***
16:00-16:15	Coffee Break (茶歇)

Session C1: Bridge Construction and Modelling (Guangzhou Hall (2nd close to Lecture Hall) /汕头大学桑浦山校区图书馆报告厅内二楼广州厅)	
Co-Chairs: Yuxiong Liang(梁玉雄), East China Jiaotong Univ. Tao Jiang(姜涛), Shantou Univ.	
08:30-08:50	Evolution and Prospects of Structural Forms and Construction Technologies for Bridge Pylons (Invited) ***Hongbo Peng and Yongjian Liu***
08:50-09:05	Structural Behavior of a Roller-Type Main Cable Saddle for Long-Span Suspension Bridges ***Wei Zhao, Yongjian Liu, and Leyong Wei***
09:05-09:20	Research on Large-Deformation Reconstruction Theory for Monitoring the Deformation of Main Cables in Long-Span Suspension Bridges ***Tao Jiang and Dongsheng Li***
09:20-09:35	Multi-Defect Segmentation of Bridge Concrete Surfaces Using SAM3 with Fine-Tuning ***Chao Ding and Shengtao Zhao***
09:35-09:50	A Digital Twin Framework for Nonlinear Dynamic Response Modelling and Intelligent Monitoring of Cable Structures ***Jiewei Chen and Ying Yu***
10:10-10:30	Coffee Break (茶歇)
Session C2: Structural Dynamics and Parameter Identification (Guangzhou Hall (2nd close to Lecture Hall) /汕头大学桑浦山校区图书馆报告厅内二楼广州厅)	
Co-Chairs: Yanhua Deng(邓燕华), Guangdong Songshan Vocational and Technical College Alin Xiao(肖阿林), Hunan Institute of Technology	
10:30-10:50	Effect of Closure Sequence on the Mechanical Behavior of the Pile Cap in a Continuous Hybrid-Girder Bridge with V-Shaped Piers and a Shared Pile Cap for Separated Decks ***Yuxiong Liang, Shuaitao Pi, Meizhen Fu, Hong Chen, and Jianhai Yan***
10:50-11:05	Experimental Investigation of Mode Competition in Bending-Torsion-Coupled Vortex-Induced Vibration of A Semi-closed Box Girder ***Jian Zhou, Rui Bao, Qiyang Wang and Qi Zhou***
11:05-11:20	Vortex-Induced Vibration Mitigation and Aerodynamic Characteristics of Wind Bracing Members in Decorative Bridge Arches ***Qin Tang and Zhiwen Zhu***
11:20-11:35	Real-time Identification of Bridge Foundation Scour Using Structural Monitoring Data via Bayesian Inversion and Physics Informed Neural Networks ***Zijie Lin and Dongsheng Li***
11:35-11:50	Analysis and Discussion of The Mechanism Underlying Scatter in Structural Damping Ratio Identification ***Churen Yan, Yanpei Gao, Peng Guo, and Dongsheng Li***
12:15-13:15	Lunch (午餐)

Session D1: Structural Engineering and Innovative Technologies (Shantou Hall (2nd close to Lecture Hall) /汕头大学桑浦山校区图书馆报告厅内二楼汕头厅)	
Co-Chairs: Junkai Lu(鲁军凯), Northeast Forestry Univ. Peng Yu(喻鹏), Dongguan Univ. of Science and Technology	
08:30-08:50	Numerical Study on Wind Environment Characteristics at a Long-Span Continuous Rigid-Frame Bridge Site in Mountainous Terrain (Invited) ***Yixian Li, Jianming Hao, and Jiawu Li***
08:50-09:05	A Finite Particle Method Framework with Embedded Meshes and Cohesive Elements for SFRC Fracture Analysis: Numerical and Experimental Studies ***Hongjie Chen, Xiaolin Duan, and Ying Yu***
09:05-09:20	Sustainable Valorization of Dredged Sludge into Flowable Backfill: Engineering Performance and Strength-Normalized GWP/Cost of Alkali-Activated OPC–GGBS–FA Binders ***Renyi Gao and Tiande Wen***
09:20-09:35	Viability of Fiber-Reinforced Geopolymer Mortar as a Protective Layer for Coal Gangue Concrete Piles in Cold Regions: Balancing Materials, Applications, and Sustainability ***Shenghao Jin and Yongcheng Ji***
09:35-09:50	Parameter Optimization and Empirical Design Formulas for Vertical Tuned Liquid Column Gas Dampers in Large-Span Structures ***Zhilian Zhang, Kaifang Liu, Zhiwen Zhu, and Yanhui Liu***
10:10-10:30	Coffee Break (茶歇)
Session D2: Structural Damage Identification and Bridge Connections (Shantou Hall (2nd close to Lecture Hall) /汕头大学桑浦山校区图书馆报告厅内二楼汕头厅)	
Co-Chairs: Yichao Xu(徐一超), Jiangsu Transportation Research Institute Group Sixin Chen (陈斯信), Shantou Univ.	
10:30-10:50	Optimization of Conductive Network and Snow-Melting Performance of Reduced Graphene Oxide-Carbon Fiber-Steel Fiber Ternary Conductive Concrete for Cold-Region Pavements (Invited) ***Chenyuan Chiu, Shuya Zhu, Jiaqi Zou, Weidong Chen, and Haopeng Li***
10:50-11:15	Corrugated Steel Tube Socket Connections for Accelerated Bridge Construction: Mechanical Interlocking and Load Transfer (Invited) ***Linlin Zhang and Yongcheng Ji***
11:15-11:30	Structural Damage Identification via Extended Kalman Filtering with Joint Tikhonov and Enhanced Sparse Regularization ***Jiezhong Huang and Jiale Chen***
11:30-11:45	Experimental Study on the Overall Stability of Axially Loaded Steel Members under Different End Constraints ***Chenyuan Chiu, Chunmiao Liang, Yiting Wang, Zhenrong Li, Jiawei Lin, and Donggang Yan***
11:45-12:00	Sequential Coordinated Lightweight Optimization of Offshore Wind Turbine Jackets and Transition Pieces ***Wenbin Feng and Zhenqing Liu***
12:15-13:15	Lunch (午餐)

Plenary Speakers Short Bio.



Prof. Caijun Shi, Ph.D.

Hunan Univ., China

Speech Title: *Use of UHPC in Bridge Engineering*

Prof. Shi is the Chair Professor in the College of Civil Engineering at Hunan Univ. and has served as Co-Chairman of the Asian Concrete Federation (ACF) since 2023. In 2025, he was elected as the Member of the Chinese Academy of Engineering and a Fellow of the Canadian Academy of Engineering. From 2024 to 2026, he ranked as No. 1 globally in the field of Building & Construction on Stanford Univ.'s World's Top 2% Scientists list. Professor Shi has long dedicated his research to green, high-performance cement and concrete materials, as well as carbon-mineralized, low-carbon, and carbon-negative construction materials. He has published over 750 high-impact academic papers, authored or co-authored 16 books in Chinese and Elish, co-edited 11 international conference proceedings, and holds more than 50 granted patents in the United States and China. He is also the founding Editor-in-Chief of *Journal of Sustainable Cement-Based Materials*.



Prof. Harry Tripp Shenton, Ph.D.

Univ. of Delaware, USA

Speech Title: *Bridge Structural Health Monitoring in the U.S.: One Case – A 15 Year Journey*

Harry "Tripp" Shenton, Ph.D. is a professor in the Department of Civil, Construction, and Environmental Engineering at the Univ. of Delaware. He holds bachelor's and master's degrees from the Univ. of Delaware and a Ph.D. from The Johns Hopkins Univ. He previously served as Chair of UD's Department of Civil and Environmental Engineering and the Associate Dean for Undergraduate Education in the College of Engineering at UD. Shenton's area of research expertise is in structural health monitoring, condition assessment, and preservation of civil infrastructure, with particular emphasis on bridges. He has received external funding from NSF, FHWA, NIST, NCHRP, DOE, the Delaware Department of Transportation, and industry. He has led the effort to develop and implement permanent health monitoring systems on new and existing bridges and conducted research that has resulted in the development of specialized sensors and sensor systems for in-service monitoring of bridges. His research in bridge preservation has focused on maintenance and repair of small movement bridge joints, the long-term performance of unpainted weathering steel, sealants, and load rating bridges without plans. He is a member of ASCE and ISHMII. He is the Academic Director of the Northeast Bridge Preservation Partnership, a member of the FHWA Bridge Preservation Expert Task Group, and past-Chair of the ASCE/SEI Technical Activities Division Executive Committee.



Prof. ISSAM Harik, Ph.D.

Univ. of Kentucky, USA

Speech Title: *Structural Performance, Testing, and Deployment of Fiber Reinforced Polymer (FRP) Composites in Bridge Infrastructure*

Dr. Issam Elias Harik is the Raymond-Blythe Professor of Civil Engineering, Univ. of Kentucky in Lexington, KY. His research interests are in the areas of fiber reinforced polymer composite components and structures, structural evaluation and retrofit of bridges, and hazard management of highway structures. Since joining the Univ. of Kentucky in August 1982, he has directed or co-directed the research of 125 funded projects, authored or co-authored more than 110 refereed Journal articles and 160 refereed conference articles, and more than 100 other technical publications including chapters in books. He has directed or is currently directing the research of more than 55 Post Docs, visiting professors, and scholars, 160 graduate students, 60 undergraduate students, and 25 high school students. He currently serves as a member of 9 societies. He has organized, co-organized, and chaired national and international conferences and workshops.



Edward Zhou, Ph.D.

Associate Vice President and Bridge Instrumentation & Evaluation Lead, AECOM North America, USA

Speech Title: *Some Reflections on Fatigue Performance of Steel Bridges*

Dr. Ed Zhou is Associate Vice President and Bridge Instrumentation & Evaluation Lead in North America of AECOM. He has over 30 years of experience in multiple aspects throughout the bridge life cycle including analysis, design, inspection, load rating, problem diagnosis, fatigue and fracture assessment, structural testing/monitoring, as well as retrofit, rehabilitation, and replacement design. He earned his B.S. from Beijing Jiaotong Univ. and M.S. and Ph.D. from Lehigh Univ., all in civil engineering. Dr. Zhou served as a past Chairman of ASCE Fatigue & Fracture Committee and a member of Committee 'Bridge and Structures Management' and Committee 'Testing and Evaluation of Transportation Structures' of the Transportation Research Board (TRB) of the National Academies of Sciences, Engineering, and Medicine. He played a key role in development of multiple national standards and guidelines: a TRB task force member for updating Section 8: Load Testing of AASHTO's The Manual for Bridge Evaluation in 2023; co-author of TRB Circular E-C257 'Primer for Bridge Load Testing'; expert panel member of NCHRP Synthesis 571 'Load Rating of Bridges and Culverts with Missing or Incomplete As-Built Information'; and co-PI of NCHRP Report 721 'Fatigue Evaluation of Steel Bridges', which updated Section 7 of AASHTO's The Manual for Bridge Evaluation in 2015. As an adjunct faculty of Johns Hopkins Univ. during 2000-2015, Dr. Zhou taught graduate-level courses 'Bridge Design Project', 'Fatigue and Fracture in Steel Bridges', and 'Bridge Design and Evaluation'.



Prof. Hao Wang, Ph.D.

Southeast Univ., China

Speech Title: *Data-driven intelligent prediction and efficient control of wind effects on bridges*

Dr. Hao Wang is a Chair Professor at Southeast Univ. He earned his BSc in Civil Engineering (2001) and MSc in Bridge Engineering (2004) from Central South Univ., and his Ph.D. in Engineering Disaster Prevention and Mitigation from Southeast Univ. in 2007. Elevated to Full Professor in 2015, he became a Distinguished Professor of the Changjiang Scholars Program in 2020. Currently, he serves as Editor-in-Chief of the Journal of Southeast Univ. and director of the Wind-Induced Vibration and Control Committee of the Chinese Society for Vibration Engineering. His research focuses on bridge aerodynamics, structural health monitoring, and structural vibration control. As principal investigator, he has led a number of research projects, including key projects funded by the National Natural Science Foundation of China (NSFC) and the National Key Research and Development Program. He has published over 150 academic papers (100+ SCIE-indexed). Notably, his research outcomes have been successfully implemented in several kilometer-level cable-supported bridges spanning the Yangtze River, such as the Sutong Yangze River Bridge, Zhangjinggao Yangze River Bridge, and Wufengshan Yangze River Bridge. His achievements have won two Second-Class National Science and Technology Progress Awards of China, three First-Class Jiangsu Science and Technology Progress Awards, and the IAWE Junior Award.



Prof. Qingkuan Liu, Ph.D.

Shijiazhuang Tiedao Univ., China

Speech Title: *Aerodynamic forces, wind-induced vibration characteristics and control measures for Stay Cables*

Dr. Qingkuan Liu is a professor and Director of both the Wind Engineering Research Center and the Hebei Provincial Engineering Innovation Center for Wind Engineering and Wind Energy Utilization. He received his Ph.D. from Kyoto Univ. and holds prestigious honors including National Hundred-Thousand-Ten Thousand Talent, State Council Special Allowance Expert, and New Century Excellent Talent of the Ministry of Education. His research focuses on wind loads and wind-induced vibrations of long-span bridges, super-tall buildings, and large-span spatial structures. He has published over 200 papers, been granted more than 50 invention patents, and conducted wind-resistant studies for over 350 engineering projects worldwide. He has received three First Prizes of the Hebei Provincial Science and Technology Progress Award, and his team was honored as an Advanced Collective for contributions to the Beijing 2022 Winter Olympics. In 2026, he was awarded the National May Day Labor Medal.



Prof. Yan Han, Ph.D.

Changsha Univ. of Science & Technology, China

Speech Title: *Nonlinear Flutter of Ultra-Long-Span Bridges under Extreme Winds: Evolution Mechanisms and Key Technologies for Resilience Enhancement*

Dr. Yan Han is a professor and doctoral supervisor at Changsha Univ. of Science and Technology, and serves as the Dean of the College of Excellence Engineers and the Deputy Director of the State Key Laboratory of Power Grid Disaster Prevention and Mitigation. She holds the titles of Changjiang Scholar Distinguished Professor, and is a recipient of the National Outstanding Youth Science Fund, the China Youth Science and Technology Award, the Hunan Provincial Outstanding Youth Science Foundation, and the Hunan Provincial Leading Talent in Science and Technology Innovation. Prof. Han has led 7 projects of the National Natural Science Foundation of China and over 30 industry-funded R&D projects. She has published more than 200 papers (including over 100 SCI-indexed papers), authored 2 monographs, and been granted over 30 Chinese invention patents, 3 US patents, and more than 10 software copyrights. She received the Second Prize of the National Science and Technology Progress Award (ranked 2nd) and 6 provincial/ministerial science and technology awards. Her main research interests include bridge wind-induced vibration and intelligent control, wind-vehicle-bridge coupled vibration, and intelligent infrastructure operation and maintenance. Prof. Han also serves on several professional committees, including the Wind Engineering and Industrial Aerodynamics Committee of the Chinese Society of Aerodynamics.



Prof. Mingshui Li, Ph.D.

Southwest Jiaotong Univ., China

Speech Title: *Flutter Instability of Airfoil and Bridge Decks in Turbulent Flow*

Dr. Mingshui Li is a professor in the School of Civil Engineering at Southwest Jiaotong Univ. He holds a Ph.D. from Southwest Jiaotong Univ. He previously served as a research professor or consultant engineer at China Aerodynamics R&D Centre, COWI AS and Danish Maritime Institute. His area of research expertise is in wind resistance performance of long-span bridges, wind loads on buildings, bluff body aerodynamics, turbulence. He has published more than 150 journal papers. He has undertaken a large amount of wind engineering research and consulting projects related to long-span bridges, buildings and structures, photovoltaic structure, low-altitude economy. In recent years, his interest has mainly focused on the theories and wind tunnel test technologies related to the unsteady aerodynamic loads of airfoil and bluff bodies in turbulent flow, flutter instability in turbulence. He served as the Chairman of Asia-pacific conference on wind engineering and past execute member of IAWE, is members of several Chinese societies related wind action.



Mr. Wangxing Ding

Hubei Communications Planning and Design Institute, China

Speech Title: *Design Innovations of the Danjiangkou Reservoir Bridge, a Ground-Anchored Cable-Stayed Bridge with a main span of 760m*

Mr. Wangxing Ding, the Chief Engineer of Hubei Communications Planning and Design Institute. Over the years, he has participated in or being in charge of the study, design, and technical review of more than ten long-span bridge over Yangtze River, including the Yichang Bridge(suspension bridge, main span 960m), the Wuhan Yangluo Bridge(suspension bridge, main span 1280m), the Jingyue Bridge(cable-stayed bridge, main span 816m), the E'dong Bridge(cable-stayed bridge, main span 936m), the Shishou Bridge (cable-stayed bridge, main span 820m), the Danjiangkou Reservoir Grand Bridge(cable-stayed bridge, main span 760m),and the backstay-free curved cable-stayed bridge at Xiaonan Interchange, as well as the Myanmar-Laos Friendship Bridge in Myanmar. His research focuses on long-span bridges, composite structure and bridge using UHPC, with recognized numerous national-level and provincial-level achievements and honors on bridge engineering, including but not limited to: 2 First-class Prizes of Hubei Provincial Science and Technology Progress, 3 First-class Prizes of the Science and Technology Award of China Highway and Transportation Society, 2 Silver Awards of National Excellent Engineering Design Award, and 5 First-class Prizes of Provincial and Ministerial Excellent Engineering Design Award. He has received the Golden Bridge Award of the Ministry of Transportation of China, and has also been honored as Young and Middle-aged Expert with Outstanding Contributions in Hubei Province, Hubei Provincial Model Workers, Outstanding Workers in National Highway Science and Technology, outstanding Highway Survey and Designer.



Prof. Pengru Deng, Ph.D.

Central South Univ., China

Speech Title: *Concrete Crack Detection-Measurement-Tracking via Enhanced Foundation Model and VIL Fusion*

Dr. Pengru Deng is a Full Professor at the School of Civil Engineering, Central South Univ., China, and an awardee of the National Science Fund for Distinguished Young Scholars. He earned his Doctoral degree in Bridge Engineering and Fracture Mechanics from Hokkaido Univ. in 2017, where has developed an efficient fatigue analysis method for reinforced concrete (RC) bridge deck based on fracture mechanics. From October 2017 to March 2018, he was a Postdoctoral Research Fellow in the Faculty of Engineering at Hokkaido Univ.. Before joining Central South Univ. in Nov. 2022, he served as assistant professor, lecturer, and researcher in a sequence at Hokkaido Univ. from April 2018 to October 2022. His research interests encompass traditional areas such as fatigue and durability of RCs and fracture mechanics of advanced composites, including high-performance fiber-reinforced concrete (UHPFRC). He also engages in interdisciplinary research, including structural defect detection using computer vision and artificial intelligence. He has authored over 60 high-impact journal articles and conference papers in the fields of structural engineering and computational mechanics.



Prof. Biao Wei, Ph.D.

Central South Univ., China

Speech Title: *Prevention and Control of Seismic Damage to the Train-track-bridge System of High-speed Railways under Near-fault Earthquakes*

Prof. Biao Wei graduated from Tongji Univ., and now is a professor at the School of Civil Engineering, Central South Univ., China. He is the Deputy Director of the Department of Bridge Engineering, and was supported by the Outstanding Youth Project of Hunan Provincial Natural Science Foundation, and the National Key R&D Program, and the guiding teacher of the National Bridge Design Competition Special Prize. His research interests include bridge seismic isolation, dynamic friction theory under earthquakes, seismic testing technology, seismic vulnerability and risk assessment of train-track-bridge systems with artificial intelligence. He published over 200 academic papers, 7 textbooks and monographs, authorized over 30 patents, and received over 10 provincial and ministerial level awards. He is listed as the top 2% scientists in the world jointly announced by Stanford Univ. and Elsevier.



Mr. Wei Zeng

CCC Second Harbor Engineering Company, Ltd, China

Speech Title: *Construction the world longest suspension bridge with main span of 2180m*

Mr. Wei Zeng, is the Chief Engineer of the Contract building the main span of the Shiziyang Link, carried out by the CCC Second Harbor Engineering Company, Ltd. With over 20 years of experience in long-span bridge construction and management, he has dedicated to advancing bridge construction technology to world level. The Shiziyang Link, with a main span of 2,180 m, is currently the world's longest-span double-deck suspension bridge, setting five world records in main span length, number of traffic lanes, tower height, anchorage foundation and main cable dimension. He has also worked in several major bridge construction in China, including the Sutong Yangtze River Bridge (cable-stayed bridge, main span 1088m), the Shanghai–Suzhou–Nantong Yangtze River Bridge (cable-stayed bridge, main span 1092m), the Longtan Yangtze River Crossing (suspension bridge, main span 1560m), and the Shenzhen–Zhongshan Link(suspension bridge, main span 1666m). His innovations have addressed some technical challenges in large-span bridge construction, with received numerous awards, including Special and First-Class Prizes for Scientific and Technological Progress from China Communications Construction Group, and a Special Prize and a Third-Class Prize from the China Highway Construction Industry Association, as well as First-Class Prizes from the China Highway and Transportation Society and the China Institute of Navigation.



Prof. Yongcheng Ji, Ph.D.

Northeast Forestry Univ., China

Speech Title: *Mechanisms of Microbial Mineralization Repair and Performance Enhancement of Solid Waste Concrete in Cold Regions*

Dr. Yongcheng Ji holds a Ph.D. in Civil Engineering from the Univ. of Colorado (USA) and is a Full Professor in the Department of Civil Engineering at Northeast Forestry Univ. (China). His research aligns closely with the three core themes of the proposed project: (i) solid-waste resource utilization and low-carbon cementitious materials; (ii) the durability of FRP-strengthened concrete under coupled environmental and mechanical actions in cold regions; and (iii) intelligent technologies for transportation infrastructure. Dr. Ji has established a strong and internationally recognized research profile, with 99 peer-reviewed publications, 1,086 citations, an h-index of 19, and an i10-index of 34 (Google Scholar, May 2026). His long-standing collaborations with industrial partners in both China and the United States, together with his service on national expert committees, provide a well-defined pathway for translating research outcomes into engineering practice. His extensive experience in research supervision and higher education further demonstrates his capacity to both benefit from and contribute to an advanced research and training environment. His achievements have been recognized through his appointment as a High-Level Talent of Heilongjiang Province and his receipt of a national-level invention award (first-ranked recipient).



Transportation Guide



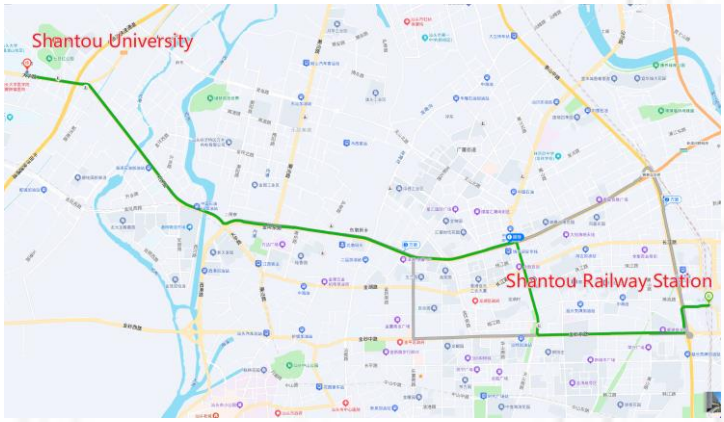
(1) Jieyang Chaoshan International Airport- Shantou Univ. Main Campus.

1. By Bus

Take the Shantou West Line Airport Shuttle Bus and get off at Shantou Univ. Main Campus. The journey takes approximately 40 minutes.

2. By Taxi

The journey is approximately 31 km and takes about 40 minutes.



(2) Shantou Railway Station – Shantou Univ. Main Campus.

1. By Bus

Take Bus No. 6 or 39 from Shantou Railway Station Bus Stop and get off at Shantou Univ. Main Campus. The journey is approximately 20 km and takes about 90 minutes.

2. By Taxi

The journey is approximately 18 km and takes about 30 minutes.



(3) Chaoshan Railway Station – Shantou Univ. Main Campus.

1. By Taxi

The journey is approximately 25 km and takes about 33 minutes.

Contact Us

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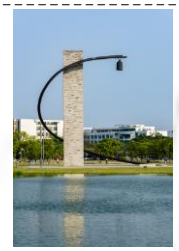
Conference Venue

Shantou Univ. & Conference Hotel



Shantou University



Truth Bell





Library of Shantou University





Academic House

Local Cuisine & Culture



Beef Hotpot



Marinated Assorted Platter



Chaoshan Raw Marinated Seafood



Chaoshan Rice Noodle Rolls



Chaoshan Heritage Rice Cakes



Chaoshan Gongfu tea



Yingge Dance



Chaoshan Deity Procession

Scenic Sites in Chaoshan



Shantou Small Park



Nan'ao Island



Xidi Park



Guangji Bridge



Paifang Street



Guangji Gate Tower



Hanshan Temple



Jieyang Jinxian Gate



Jieyang Ancient City



Jieyang Confucian Temple

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An International Technical Society

汕頭大學
SHANTOU UNIVERSITY

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Shantou University (汕头大学)
Bridge Engineering Institute

Supported by

Advances in Wind Engineering (AWE)
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