

Time	10-Dec-25
8:30-17:30	Registration at Venus Grand Ballroom (Level 3/F)
	Venus Grand Ballroom (Level 3/F)
9:00-9:10	Opening Address by Prof Richard Liew
9:10-9:20	Photo-Taking
	Keynote Session - I (ICASS) at Venus Grand Ballroom (Level 3/F) Chair: Prof. Richard Stroetmann
9:20-9:55	"Progress through technology: recent developments in metal additive manufacturing for steel construction" by Professor Leroy Gardner, Imperial College London
9:55-10:30	"Concrete-filled steel tubular (CFST) structures: life-cycle-based analytical theory, standards and engineering applications" by Professor Lin-Hai Han, Tsinghua University
10:30-10:55	Coffee/Tea Break
	Keynote Session - II (ICASS) at Venus Grand Ballroom (Level 3/F) Chair: Prof. Tak-Ming Chan
10:55-11:30	"Advances in High Strength Steel Structures: Research, Specification, and Applications" by Professor Gang Shi, Tsinghua University
11:30-12:05	"Challenges in Connections of Large-Diameter Offshore Wind Structures" by Professor Milan Veljkovic, Delft University of Technology
12:30-13:30	Lunch
12:40-13:00	Lunch time talks by Sensorcraft Technology at Venus Grand Ballroom (Level 3/F)
13:10-13:30	Lunch time talks by China Harbour (Singapore) Engineering at Venus Grand Ballroom (Level 3/F)
	Keynote Session - III (ISICT) at Venus Grand Ballroom (Level 3/F) Chair: Prof. Hieng Ho Lau
13:30-14:05	"The Research and Practice of Modular Construction in China" by Professor Guoqiang Li, Tongji University
14:05-14:40	"Digital Intelligence as an Enabling Technology to Integrate Intelligence, Construction and Performance" by Professor Thomas Ng, City University of Hong Kong
14:40-15:15	"Enabling Industrialised Construction: Singapore's Integrated Approach to Industry Transformation" by Mr. Tan Chee Kiat, Building and Construction Authority
15:15-15:40	Coffee/Tea Break

	Keynote Session - IV (ICASS) at Venus Grand Ballroom (Level 3/F) Chair: Prof. Xin Meng
15:40-16:15	"Behaviour and design of next generation steel and steel-concrete composite structures for buildings and bridges" by Professor Brian Uy, University of New South Wales
16:15-16:50	"Addressing the geometric drivers of sustainability – illusion, revolution and celebration of performance-based minimalist structures" by Mr. Samuel Wang, a leading industrial expert from KTP Consultants Pte Ltd
16:50-17:25	"Effective use of S690 to S960 high strength steel in construction" by Professor Kwok Fai Chung, The Hong Kong Polytechnic University

Time	11-Dec-25						
8:30	Registration						
	Keynote Session - V (ICASS) at Venus Grand Ballroom (Level 3/F) Chair: Prof. Xin Meng						
9:00-9:35	"Structural behaviour of additively manufactured stainless steel tapered square hollow section stub columns" by Professor Ben Young, The Hong Kong Polytechnic University						
9:35-10:10	"Prospects of steel structure reuse" by Professor Y.C. Wang, University of Manchester						
10:10-10:30	Coffee/Tea Break						
	Advances and applications of metal additive manufacturing in construction - I Co-Chairs: Leroy Gardner, Mikihito Hirahata Venue: Venus I (Level 3/F)	Performance, Design, and Maintenance of Modern Concrete-Filled Steel Tubular Structures - I Co-Chairs: Chao Hou, Er-Feng Du Venue: Venus II (Level 3/F)	Modular Construction: Innovations and Applications - I Co-Chairs: Yan-Bo Wang, Zhenyu Huang Venue: Venus III (Level 3/F)	Honorary Session for Prof. Sl Chan - I Co-Chairs: Shiwei Liu, Yaopeng Liu Venue: Mercury I (Level 5/F)	Seismic Performance of Steel Structures - I Co-Chairs: Huatian Zhao, Jing Luo Venue: Mercury II (Level 5/F)	Cold-Formed Steel Structures Co-Chairs: Yuanqi Li, Bin Wang Venue: Mercury III (Level 5/F)	Advanced Materials and Composite Structures - I Co-Chairs: Yonghui Wang, Jiabao Yan Venue: Jupiter III (Level 3/F)
10:30 - 10:45	Room preparation	Room preparation	Room preparation	Study on the Fragment Response of Insulated Laminated Glass Systems with Different Supports under Blast Impact Xiao-Hang Guo, Yao-Peng Liu, Tsz-Kin Au Yeung, Siu-Lai Chan	Full-scale shaking table test on seismic resilient rocking steel frame systems Yu-Ao Lin, Liang-Jiu Jia, Ping Xiang, Gregory MacRae, Charles Clifton	Bayesian Neural Network-Driven Sensitivity Analysis for Shear Predictions of Beam-End Bolted Connection in Cold-Formed Steel Structures Yan Thu Huynh, Cao Hung Pham, Hoang Vu Le	Mechanical behaviors of Q355B steel over a wide range of temperatures and strain rates Yonghui Wang, Zhaohui Zhou
10:45 - 11:00	Predictive equations for wire arc additive manufacturing of thin-walled steel elements Nicolas Hadjipantelis	Experimental Study on High-Strength Spiral-Confined High-Strength Concrete-Filled High-Strength Square Steel Tubular Short Columns under Bi-axial Eccentric Compression Zhijian Yang, Hao Chen, Mo Liu	Structural Robustness of Multi-Storey Composite Modular Buildings Gaurav Swami, Huu-Tai Thai	Efficient Nonlinear Analysis of Glass Panes under Variable Lateral Loads with Physics-Informed Deep Operator Networks Wenjing Ouyang, Wen-Feng Chen, Si-wei Liu	Seismic Performance Assessment of Hybrid High-strength Steel Structure Tengfei Li, Jieqiang Guo	Modified Design Equations for Eccentrically Loaded CFS Channel Sections with Plain Webs, Unstiffened and Edge-Stiffened Web Holes Renzhe Ma, Zhiyuan Fang, Xianglun Xi, Krishanu Ray, James Lim	Out-of-plane behavior of sinusoidal corrugated steel plates under low velocity impact loading Huaxiao Gao, Ximei Zhai, Yonghui Wang
11:00 - 11:15	A machine learning framework for mechanical property prediction of WAAM carbon steel structures using process and wire parameters Jun Ye, Rukue Yang, Yunyi Liu, Jiayuan Liang	Axial compression and local buckling analyses of UHTCC-encased steel tubular columns with transversal PBL stiffeners Yun-Long Chen, Jing-Zhong Tong, Qing-Hua Li, Shi-Lang Xu	Development and Evaluation of a Novel Wind- and Seismic-resistant Structural System for High-rise Steel-concrete Composite Modular Buildings Si Fu, Jiayi Wang	Efficient Beam-Column Element for Geometrically-Nonlinear Analysis of 3D-Printed Free-form Members Anrui Liang, Liang Chen, Siwei Liu	Monopile Offshore Wind Turbine Structure With Hybrid Energy-Dissipation Mechanisms: A Proof-of-Concept Study Minghong Teng, Ke Ke, Yang Li, Huanyang Zhang, Xu Zhang He	Development and analysis of cold-formed steel truss pedestrian bridge Shridhar Mangelkar, Zhiyuan Fang, Mahmood Khodadadi	Accelerated weathering tests on PCM-incorporated concrete Tharika Kahandawa Arachchi, Olivia Mirza, Fidelis Mashiri, Sameera Wijesiri Pathirana, Xiang Li
11:15 - 11:30	Low-Cycle Fatigue Behavior of the Wire and Arc Additive Manufactured Specimens Le Wang, Kaiming Liu, Xudong Qian	Behaviour of FRC and UHPFRC-encased CFST long columns under concentric loading Youxin Mo, Panwei Du, Kang Hai Tan	Experimental Study on Tensile Performance of Self-Positioning Grouted Connection Joints in Modular Steel Structures Deyuan Tian, Zuohua Li	Numerical analysis on the fire performance of concrete-filled double-skin tubular stub column with inner corrugated steel pipe Qian Li, Er-feng Du, Gan-Ping Shu, Lei Zhang	Low-Cycle Fatigue Behavior of Laser-Clad 316L Stainless Steel under Large Plastic Strains Kaiping Jiang, Yue Yuan, Chun-Lin Wang	Shaking Table Test and Numerical Simulation on Seismic Performance of a Six-story CFS Frame-Framing Shear Wall Structure Yuanqi Li, Fuwei Wu	Deflection and CMOD Response of Recycled PET Fibre-reinforced Concrete Beams for the Concrete Structural Application Muhammad Ali, Olivia Mirza, Christophe Camille, Fidelis Mashiri
11:30 - 11:45	Effects of deposition rate on mechanical properties of wire arc additively manufactured stainless steel elements Jie Wang, Nicolas Hadjipantelis, Sian Evans	Progress in Inter-Module Connections with Pegged Tenons for Composite Modular Buildings with CFST Columns Qi Qi, Chao Hou, Jiahao Peng	Experimental Study on Shear Behaviour of a Self-Locking Inter-Module Connection with Spring-Loaded Plunger Latches Jiahao Peng, Chao Hou	Performance-Based Evaluation of Seismic Damage and Environmental Impacts in Conventional and Novel Steel Structures Subjected to Near-Fault Ground Motions Boyan Ping	Effect of strain amplitude on cyclic fatigue and ductile performance of Q690 high-strength steel Mingkai Zhang, Yan-Bo Wang, Guo-Qiang Li	Research on Compressive Mechanical Properties and Design Methods of Open-Edge Cold-Formed Square Thin-Walled Steel Columns Haiying Wan, Anying Chen, Shilong Yan, Zhiheng Yang	Extension of Eurocode 4 Approaches for Rectangular Concrete Filled Steel Tubes using S690 Steel Shan Li, Yang Yang, J.Y.Richard Liew, Sze Dai Pang
11:45 - 12:00	Advances in SS316L/IN718 Functionally Graded Materials Fabricated by Laser Directed Energy Deposition Lu Yan, Martin Mensinger	Investigation on the interface of concrete-filled steel tubular (CFST) structures based on roughness and geometric deviation Yingqian Guo, Danyang Ma	Geometric imperfection and axial compression performance of Lightweight Modular Columns Based on Laser Scanning Sijian Chen, Yichuan Zhang, Yujie Yu	Shaking table tests of full-scale modular steel structure based on seismic isolation Ganping Shu	Seismic performance of resilient jacket-type offshore wind turbine structure Wuhua Xie, Ke Ke, Xuhang Zhou, Yi Ru, Yuhang Wang, Xuizhang He	Recommendations for Reuse of Cold-formed Steel Channel Sections Circular Technologies in Construction Ragul Umajay, Sivaganes Shervaraj, Tak-Ming Chan, Ahmed Y Elghazouli	Impact responses of steel-concrete-steel sandwich panels with interlocked angle connectors: Experimental and numerical studies Zhaohui Zhou, Yonghui Wang
12:00 - 12:15	Novel Topology Optimization Design of Steel Joints by Ground Structure Method and Bi-directional Evolutionary Structural Optimization Method Lu Yang, Man-Tai Chen, Ou Zhao, Leroy Gardner	Performance and design of concrete-filled sleeve-connected stainless steel tubular stub column under axial compression Tao Wang, Xin Yu, Ee Loon Tan	Experimental investigation on seismic performance of plasticity-controllable beam-column energy-dissipating connections Haidong Wang, Zuohua Li	Seismic Retrofit Design of a Masonry Structure for the Vanke School of Public Health at Tsinghua University Lijun Wang, Ming WANG, Wenyan He, Jinpeng Tan, Bing Xia	Mesoscale fracture mechanism of a novel high-strength high-ductility steel Bo-chuan Jiang, Zhao-xia Qu, Liang-jiu Jia		Out-of-plane stability of CFST parabolic arches Yue Geng
12:15-13:00	Lunch						
12:25-12:45	Lunch time talks by PeakKong Special Steel at Venus I (Level 3/F)						
12:25-12:45	Lunch time talks by Journal of Energy Infrastructure at Venus II (Level 3/F)						
	Metallic and Bimetallic Structures for Long-life Service Co-Chairs: Huiyong Ban, Hai-Ting Li Venue: Venus I (Level 3/F)	Advances in Energy Infrastructure Co-Chairs: Fei Xu, Xiaowei Deng Venue: Venus II (Level 3/F)	High-Fidelity Nonlinear Simulation of Steel Structures in Extreme Limit States - I Co-Chairs: Jun-Zhi Liu, Cao Hong Pham Venue: Venus III (Level 3/F)	Anchor Fastening: Innovations, Challenges, and Best Practices Co-Chairs: Daniel Leoi, Jesse Lee Venue: Mercury I (Level 5/F)	Advanced Materials and Composite Structures - II Co-Chairs: Meini Su, Mingxiang Xiong Venue: Mercury II (Level 5/F)	Performance, Design, and Maintenance of Modern Concrete-Filled Steel Tubular Structures - II Co-Chairs: Xing Wei, Liang Zeng Venue: Mercury III (Level 5/F)	Modular Construction: Innovations and Applications - II Co-Chairs: Zuohua Li, Jiahao Peng Venue: Jupiter III (Level 3/F)
13:00 - 13:15	Design Methods for Titanium-clad Bimetallic Steel Box Section Stub Columns Huiyong Ban, Chenyang Huang, Yongjiu Shi	Experimental study on cyclic compression-bending-torsion performance of prestressed concrete filled steel tubular lattice tower Pouria Ayough, Yu-Hang Wang, Yu-Sen Liu	A uniaxial material model for the friction spring-based self-centering device Ruibin Zhang, Wei Wang, Min Sun	Shear Strengthening using Post-Installed Bonded Systems Amol Singh, Raymond WS Chong	Static Performance of the One-Sided Assembly High Strength Blind Bolt Shear Connectors in Sustainable Composite Structures Alireza Mohammadi Naei, Fidelis Mashiri, Olivia Mirza, Maryam Hosseini	The effects of internal configurations of steel sections on the lateral impact performance of SRCFST members Wei Xian, Fan Deng, Wen-Da Wang	Seismic performance and resilience enhancement of the connection for modular steel construction En-Feng Deng, Xue-Jie Liu, Wei Li, You-Peng Du
13:15 - 13:30	Cyclic tests on stainless-clad bimetallic steels after fire exposure Peng Dai, Xiaofeng Yang, Huiyong Ban	Experimental investigation of stress concentration reduction in optimized cast steel tubular joints Zi-Ming Tang, Ju Chen, Fei Xu	Residual stresses in structural steel sections: review of models and practical implementation in FE simulations Zichang Yang	Recent Developments in Concrete Fastening Systems in Australia: Research, Industry Needs, and Design Standards Jesse Lee, Emad God, Tilak Pokharel, Anita Amirsardari, Alireza Mohyeddin	Experimental and numerical studies on impact resistance of SCS sandwich panel with hybrid energy absorbers Jingyi Lu, Yonghui Wang	Axial compressive behavior of CFST columns with circumferential gap strengthened with pressure gluing Hong Jiang, Yong Ye, Ze-lin Ren	Flexural performance of modular lightweight composite floor system Xuejie Liu, Zhihua Chen, Jiadi Liu, Enfeng Deng
13:30 - 13:45	Residual stress and fatigue capacity of rib-to-deck welded joints with bimetallic steel deck used in OSD Xiaowei Liao, Hanlin Wei, Zhongyuan Zhang, Le Wang	Fatigue performance of I-beam-to-CHS column welded joints Yun Zhao, Xuhang Zhou, Yu Ke, Fei Xu	A Lumped Damage Mechanics Approach for Aging Tubular Structures in Harsh Conditions Scarlet Montilla Barrios, Ricardo Picón, Nestor Guerrero, Wei Li, Julio Fdez-López	The importance of visual inspection as effective way of compliance of anchor channel installation Junarto Ifah, Jack Chong, Gary Connah	Flexural behaviours of concrete-filled steel tubes at cold-region low temperatures Jia-Bao Yan	Finite Element Analysis of High-performance Concrete-filled Square Steel Tubular Columns Under Cyclic Loading Zengmei Qiu	Investigation on shear behaviour of a swift-constructed demountable continuous shear connector for achieving construction circularity Jiachen Guo, Peng Chen, Tak-Ming Chan
13:45 - 14:00	Post-Fire Testing of Structural Hollow Section Stub Columns: Stressed vs Unstressed Specimens Cheng-Lang Liu, Chen-Yu Li, Cheng-Jian Xiao, Hai-Ting Li	Stress concentration factors of I-beam-to-CHS column welded and cast connections under in-plane bending Lei Zhang, Yu Ke, Fei Xu	Numerical study of shear connector behavior in demountable steel-concrete composite beams Ke Ke, Tian Pang, Xuizhang He, Xuhang Zhou	The Importance in Pre-Qualifying Fit-for-Purpose Anchor Channels Jack Chong, Junarto Ifah, Gary Connah	Numerical Study on the Square Steel Tube-Wood-Concrete Square Section under Eccentric Compression Load Guochang Li, Xuefang Zhang, Xiao Li, Haoning Zhang	Development of a High-Performance Fully Precast Composite System: Towards Next-Generation Industrialised Construction Goaming Zhu, Nuoxin Wu, Kang Hai Tan	Finite element analysis of multiple beams connected by grouting in modular steel-concrete composite buildings He Zhao, Jieqiang Guo, Dongyi Ma
14:00 - 14:15	High Strength Stainless Steel in Construction-Review and Outlook Boshan Chen, Youtian Wang, Letian Hai, Zhaoyang Xi, Yuanqing Wang	Fatigue performance of S690 welded T-joints under in-plane bending actions Wei Chen, Kwok-fai Chung	Stress-strain Relation and Fracture Behaviour of Friction Stir Welded Aluminium Alloys Yuanwen Ouyang, Pengcheng He, Beibei Li, Yue Yang, Jingfeng Wang, Yuanqing Wang, Shuai Mo	Design of Single Post-Installed Screw Anchor using a Nomogram Model Liew Tai Ng, Daniel Laoi, Jesse Lee, Adeline Ling Ying Ng, SS Ajeesh	Structural Behaviour of Novel Semi-circular Stiffened Concrete-filled Steel Tubular Stub Columns Shuai Li, Tak-Ming Chan, Ben Young	Performance and design of rectangular trussed concrete-filled steel tubular (CFST) hybrid structures Zhan-Shao Liang, Lin-Hai Han, Ming Xiao	Development of Disassembled Modular Steel Structures: DfMA-Driven Approach, Performance Optimization, Analysis and Application Zhenyu Huang, Yu Zhou, Xianchuan Chen
14:15 - 14:30			Effect of Thermal Creep on Circular Hollow Section Welded T-Joint under in-plane Bending Load Seri Kassamani, Elie Hantouche	A Unified Simplified Model for Buildings: Enabling Cost-Effective Structural Analysis of High-Rise Structures Jingjing Wang, Yuqiang Zheng	Research on the Cyclic Behavior of Stainless Steel under Large Strain Amplitudes Dianhan Wu, Jianyu Yao, Baofeng Zheng, Ganping Shu, Laizhu Jiang	Temperature field of concrete-filled tubular (CFT) members under ISO-834 fire exposure Yang Zhu, Ruyl Wang, Shijun Li, Xiaoyang Mao	GraphRAG for Construction 4.0: Toward Automated Assessment of Digital Maturity Orsolya Heidenwolf
14:30-14:50	Coffee/Tea Break						
	Seismic Performance of Steel Structures - II Co-Chairs: Yujie Yu, Chuntao Zhang Venue: Venus I (Level 3/F)	Stainless Steel Structures Co-Chairs: Ganping Shu, Baofeng Zheng Venue: Venus II (Level 3/F)	Structural Health Monitoring of Steel and Composite Structures Co-Chairs: Yuguang Fu, Jian Guo Venue: Venus III (Level 3/F)	Advances in Research and Design of High-Performance Steel Structures Co-Chairs: Xiang Yun, Yuchen Song Venue: Mercury I (Level 5/F)	Sustainable Steel Structure in Seismic Regions Co-Chairs: Yao Cui, Yang Xiang Venue: Mercury II (Level 5/F)	Experimental Study on Steel Structures Co-Chairs: Jurgen Becque, Hitashi Moriyoama Venue: Mercury III (Level 5/F)	Cold-Formed Steel - I Co-Chairs: James Lim, Andi Su Venue: Jupiter III (Level 3/F)
14:50 - 15:05	Tests of Built-Up Steel Bolted T-Stub under Monotonic and Cyclic Loading Haomin Wang, Fangxin Hu, Zhan Wang	Experimental study on seismic performance of stainless steel circular hollow section beam-columns Zhanpeng Chen, Ganping Shu, Hengli Fu, Baofeng Zheng	Assessment Methods for Fatigue Life in Bridge Structures: State-of-the-Art and Future Trends. Saman Karimi, Olivia Mirza, Fidelis Mashiri, Christophe Camille, Anil Khattri	Buckling Behaviour and Intelligent Design for Prestressed Stayed I-section Steel Columns Kaidong Wu, Xinyu Zhou, Zhe Xing	Progressive collapse analysis method for large-span steel structures considering the effect of localized corrosion of bars. Wenhao Liu, Bin Zeng, Chang Wu, Chun-Lin Wang	Experimental evaluation of stress-strain relations in compression for short-age CQ-U1 lunar regolith simulant geopolymer WeiBo Lu, Yu Shi, Xuanyi Xue	Experimental Study for Rural Residences with Hinged Frames and Cold-formed Thin-walled Stiffened Walls Zhihua Chen, Zixuan Wang, Ting Zhou
15:05 - 15:20	Improved Hysteresis Model for Steel Plate Dampers Zongjing Li, Julong Yang, Yinchao Zhang	Lateral-torsional buckling of through-fastened stainless steel roof purlin subjected to up-lift loads Dan Liang, Shenggang Fan, Ganping Shu, Baofeng Zheng, Wenlei Hou	Bridge Self-Powered Monitoring System Based on Hybridized Triboelectric-Electromagnetic Nanogenerator Yuxuan Zhou, He Zhang	Austenitic stainless steel circular tubular T-joints under brace axial compression: Numerical simulation and design Yancheng Cai, Ben Young	In-plane flexibility of the flooring system in modular integrated building: Modelling approach and a single-story structural demonstration Yu-Kun Liu, Yang Xiang, Yan-Bo Wang, Guo-Qiang Li	Experimental Study on the Non-buckling Corrugated Steel Sheet Walls with Improved Seismic Performance Huajian Jin, Guoqiang Li, Feifei Sun, Dazhu Hu	Experimental study on flexural behavior of cold-formed steel-concrete composite trusses Honglang Li, Yu Shi, Jinyang Xu

Time	12-Dec-25						
8:30-17:30	Registration						
	Keynote Session - VI (ICASS) at Venus Grand Ballroom (Level 3/F) Chair: Prof. Wai-Meng Quach						
9:00-9:35	"Advances in the Application of Fracture Mechanics to Seismic Steel Connections" by Professor Amit Kanvinde, University of California, Davis						
9:35-10:10	"Design of steel joints by advanced FEM: modelling, assessment of results, reliability and code specification" by Professor Luis da Silva, University of Coimbra, Portugal						
10:10-10:30	Coffee/Tea Break						
	Honorary Session for Prof. SL Chan - II Co-Chairs: Siwei Liu, Yaopeng Liu Venue: Venus I (Level 3/F)	Advanced Materials and Composite Structures - III Co-Chairs: Jiabao Yan, Beibei Li Venue: Venus II (Level 3/F)	Modular Construction: Innovations and Applications - III Co-Chairs: Mahadeva Mahendran, Baofeng Zheng Venue: Venus III (Level 3/F)	High-Fidelity Nonlinear Simulation of Steel Structures in Extreme Limit States - II Co-Chairs: Shiye Wang, Biao Song Venue: Mercury I (Level 5/F)	Advanced Analysis and Design Strategies for Progressive Collapse Mitigation Co-Chairs: Bo Yang, Shan Li Venue: Mercury I (Level 5/F)	Next Generation Connections - I Co-Chairs: Ying Sun, Le Wang Venue: Mercury III (Level 5/F)	Stability Co-Chairs: Jui-Lin Peng, Fangxin Hu Venue: Jupiter III (Level 3/F)
10:30 - 10:45	Room preparation	Room preparation	Room preparation	An Efficient Frame Element Model for Braced Column Base Connections Arth H. Belvi, Sudipta Dash, Aritra Chatterjee, Amit M. Kanvinde	Experimental study on MSB inter-modular joint under interior cluster-column removal Yumei Zhang, Junshan Liu, Dongfang Wang, Minghui Liu, Bo Yang	Concept Development and Performance Evaluation of Damage-free Self-centering Steel Columns Incorporating Shape Memory Alloy Bolts Bin Wang, Songye Zhu	Conditional GAN-Based Generative Design of Mechanical Metamaterials for Tunable Energy Dissipation through Pre-Stressing Ling-Qi Wang, Jing-Zhong Tong, Jiajia Shen
10:45 - 11:00	Improved Finite-Element-Based Stress Analysis Method for Isotropic Steel and Orthotropic Timber Members Under Complex Loading Conditions Haien Xue, Xiao-Ling Zhao, Si-Wei Liu	Research on the Failure Mode of Cantilever FRP Tube Concrete-Encased Steel Members under Lateral Impact Loading Haixia Zhang, Huan Chen, Guodong Wei	Modular Construction and Intelligent Technologies: A New Horizon for Building Zhaoxin Hou, Zhaoxiang Liu, Chao Gong, Sumei Zhang, Jinlin Chen	Nonlinear Simulation of a Self-Centering Steel Structure in Post-Earthquake Fires Ting Lou	Experimental Investigation on Progressive Collapse of 3D Steel Frame-Composite Slab Subassemblies De-Yang Kong, Chen-Yu Miao, Richard Liew	Experimental study on shear behavior of innovative demountable H-section steel shear connectors Zhangdi Ren, Junfeng Jia	A differential equation for the design of thin-walled steel against local buckling Jurgen Becque, Rupert Annison
11:00 - 11:15	Mechanical Performance of Neosinocalamus affinis-Based Bamboo Scrimber under Tension and Compression Zi-Zhang Gu, Liang Chen, Si-Wei Liu	In-Plane Cyclic Behavior of Composite Bimetallic Steel Plate Shear Walls/UHPC Filled Juntao Guo, Zhichao Lai	Research on a Novel Three-Directional Slip Friction Joint with dual-slot hole for Elevator Installation in Existing Buildings Chao Gong, Zhaoxiang Liu, Zhaoxin Hou, Sumei Zhang, Yu Tao	A Stochastic Incremental Loading Method for Progressive Collapse Analysis of Steel Trusses Aritra Chatterjee	Experimental Evaluation of Progressive Collapse Resistance in 3D Composite Slab Frames with Rigid Beam-Column Connection Chen Yu Miao, De Yang Kong, Shan Li, J.Y. Richard Liew	Advancing circularity in construction: Test and analysis of a ductile demountable interlocking shear connection in diaphragm systems Peng Chen, Jiachen Guo, Tak-Ming Chan	Studies on Formwork Support Failures During Building Construction in Taiwan Jui-Lin Peng, Chung-Sheng Wang, Chi-Ling Pan
11:15 - 11:30	Structural Design of the First 3D-Printed Metal Steel Structure in Asia by Second-order Direct Analysis Liang Chen, An-Rui Liang, Si-Wei Liu, Siu-Lai Chan	An experimental study of the saturation rate of recyclable brick waste aggregate Aderemi Aderogba, Olivia Mirza, Christophe Camille, Brian Falzon, Saman Karimi	An Innovative Volumetric Modular Joint by Beam-to-Beam Bolted-connection Yun-peng Yan, Lei Mao, Yan-Bo Wang, Guo-Qiang Li	A Multi-Stage ANN Framework for Fatigue Crack Estimation in Welded Plate Joints with Improved Generalization via Transfer Learning Zhexin Liu, Xudong Qian, Jun Li	Reduced-order modelling of steel fin-plate connections with composite slab in the scenario of progressive collapse Yi-Fan Lyu, J. Y. Richard Liew, Shan Li	Deformation and Residual Stress of Multi-pass Butt-Welded Joints by High-strength Steel for Bridge StructuresMikihito Hirohata	Stability and Design of Laterally Unrestrained Stainless Steel I-section Beam-Columns under Moment Gradients Chunyan Qian, Fiona Walport, Leray Gardner
11:30 - 11:45	Low-cycle Fatigue Behavior and Constitutive Model of Laser-Arc Hybrid Welded High-Strength Steel Joints Ziyi Zeng, De-Hong HUANG, Siwe Liu, Yaopeng Liu, Siu-Lai Chan	Load-Bearing Capacity of High-Strength CFST Columns Considering the Triaxial Behavior of Concrete Yan-Bo Wang, Qi Song, Guo-Qiang Li	The effectiveness of machine learning approaches in predicting arrival precast components Thi Qui Nguyen, Chin Yeap Goh	Reinforcement Methods for Fatigue Cracks of rib-to-deck welded joints in Orthotropic Steel Bridge Deck Jun Li, Yongtao Zhang, Xudong Qian	Numerical Simulation of 3D Reinforced Concrete Steel (RCS) Hybrid Frame System Subjected to Dynamic Column Loss Yang Dong, Shan Li, J.Y. Richard Liew	Mechanical behaviour of high strength S690 steel laser-arc hybrid welded sections Keyang Ning, Kwok-Fai Chung, Ho-Cheung Ho, Yichuan Wang	GMNIA-based design of steel pitched portal frames Hou Un Chan, Fiona Walport, Leray Gardner
11:45 - 12:00	Minimum Residual Displacement Method of Prof SL Chan – A breakthrough in postbuckling path following Arul Jayachandran S	Impact responses of steel-concrete-steel-gradient aluminum foam energy absorbing panels: Experimental and numerical studies Junyi Chen, Yonghui Wang	Block AMGPCG Algorithm for Accelerating Large-Scale Sparse System Solutions in Steel Modular Structure Simulation Jiafei Ning, Zuohua Li, Jun Teng	Enhancing the inverse calibration consistency for simulating the cyclic behavior of steel beam-column using fiber elements Shiye Wang, Xudong Qian	Progressive collapse performance of CFST column-steel beam joints with a novel kinked connection component (KCC) Long Zheng, Yu-Chen Zhang, Wen-Da Wang	Static Testing Study of Bolted Steel-Bamboo Scrimber-Steel Connection Single-Layer Reticulated Shell Lintao Ma, Shixing Zhao, Ming Zhang, Zhixiang Yu	Theoretical Derivation of Elastic Local Buckling Strength of H-Shaped Section Columns Considering Coupled Effects of Plate Elements Yoshihiro Kawaguchi, Rorsina Osman, Kasuke Sato
12:00 - 12:15	Advanced Design of Steel Connections and Joints Using Component-Based Finite Element Method (CBFEM) and Parametric Design Approach Yuyang Wang, Atisha Gupta, Li Li	Experimental Study on the Behaviour of Shear Connectors Using BubbleDeck Push-Out Tests Ee Loon Tan, Simran Sapkota	Harnessing the Power of 3D Concrete Printing for Modular Building Construction Ben Ng Jun Liang, Richard Liew Jat-Yuen, Du Hongjian	Thermal Creep Behavior in Structural Steel: Explicit vs. Implicit Approach Abdul Kader El Hamoui, Elie Hantouche	Numerical Modeling of Rock Avalanche-Bridge Interaction Using a Coupled DEM-FEM ApproachLiping Guo Siming He		Web buckling resistance of high-strength aluminium alloy hollow sections under two-flange loading Yecheng Dai, Yuanqiang Wang, Xinhang Zhi, Mingze Wu, Beibei Li, Shuai Mo
12:15-13:00	Lunch						
	High-Fidelity Nonlinear Simulation of Steel Structures in Extreme Limit States - III Co-Chairs: Mahendrakumar Madhavan, Liang-Jiu Jia Venue: Venus I (Level 3/F)	Next Generation Connections - II Co-Chairs: Helena Gervasio, Stephen Hicks Venue: Venus II (Level 3/F)	Composite Structures - I Co-Chairs: Jingzhong Tong, Jashnaw Pancheti Venue: Venus III (Level 3/F)	Structural Performance Under Fire - I Co-Chairs: Letian Hai, Ke Jiang Venue: Mercury I (Level 5/F)	Cold-Formed Steel - II Co-Chairs: Zhiyuan Fang, Yifan Zhou Venue: Mercury II (Level 5/F)	Advanced Numerical Analysis Co-Chairs: Karoly Jarmai, Deyang Kong Venue: Mercury III (Level 5/F)	
13:00 - 13:15	Deformation and failure of rectangular plate under wedge impact Xiangbiao Wang, Ling Zhu, Xudong Qian	Tests on Pullout-by-Shear Behaviour of Power-Actuated Fasteners (PAF) Connecting High-Strength Steel Sheet to Mild Steel Plate Thuc Anh Le	Innovative Sea-Gate Solutions for Coastal Defense Against Rising Sea Levels and Climate Change Tien Yang Clarence Cheong, Jat Yuen, Richard Liew, Sze Dai Pang, Xudong Qian	Integrating Graph Neural Networks into Performance-Based Structural Fire Design Yuchen Wang, Asif Usmani, Anwar Orabi, Zhuojun Nan, Wei Ji	Investigation of full-scale LSF truss floor-ceiling systems under ambient and fire conditions Gihan Ranasinghe, Mahen Mahendran, Anthony Ariyanayagam, San Tung Vy	Intelligent generative design of steel-framed village houses Ting Zhou, Peiyu Wang, Zhengkai Zhang, Haojie Tang	
13:15 - 13:30	Interactions between Welding Induced Residual Stress Field and Variable Amplitude Fatigue Induced Crack Tip Stress Field Zhiyuan Liu, Xudong Qian, Le Wang	Behaviour and Design of Angle Cleat Hybrid Steel Beam-Column Connections at Elevated Temperatures Chunyan Qian, Luke Lapira, Katherine Cashell	Compressive Stress Control of Steel – Concrete Flexural Members Mantas Atutis	Lateral Expansion as a Supplementary Measure of Post-Fire Susceptibility to Brittle Cracking for S355I2+N Structural Steel Mariusz Maslak, Michal Pazdanowski, Marek Staniewicz, Paulina Zajdel	Cyclic Performance of Screw Fasteners in Cold-Formed Steel Stud-to-Plywood Sheathing Connections Karmugilan Pancharmoorthy, Mahendrakumar Madhavan	Minimum cost design of an orthogonally stiffened box column Karoly Jarmai	
13:30 - 13:45	Numerical Modelling of CFST Beam-Column Joints with External Diaphragms for Seismic Applications Sivraj Shanmugam, Dipti Ranjan Sahoo	Numerical Investigations on a Directly Reusable Column Base Connection Subjected to Combined Axial and Lateral Loads Aswin Kumar Jayabalan, Sivaganes Selvaraj, Tak-Ming Chan	Numerical Study on the Effect of Horizontal Reinforcement on the Seismic Behaviour of Steel-Concrete Composite Shear Walls with One-Sided Profiled Steel Sheeting Hari Om Tnarakar, S R Satish Kumar	AI Powered Hybrid Simulation for modelling global structural behavior in fire without compromising local responses Wei Ji, Guo-Qiang Li, Usmani Asif, Liming Jiang	Numerical Model of Cyclic Response of Cold-Formed Steel Modular Moment Frames with Bolted Connections and Built-Up Members Zehui Xiang, Lingfeng Yin	Interaction effects of stress triaxiality and Lode angle parameter on ductile fracture mechanism Jingsheng Zhou, Leray Gardner	
13:45 - 14:00	Ductile Fracture Initiation Locus of Base Metal, Similar and Dissimilar Weldments Fabricated using E250, E350, E450 Tamilvanan Nambirajan, Ashok Kumar Perka, Kanwer Singh Arara, Vivek Rai, P C Ashwin Kumar	Strengthened Thread-Anchored Blind Bolt Connection Yang Xiang, Bo Yang, Guo-Qiang Li	Second-generation of Eurocode 4 – Key changes Stephen Hicks	Practical performance based structural fire engineering for steel-framed composite structures Yuchen Wang, Asif Usmani, Ramakanth Domada, Jiayu Hu, Eddy Khoury	Axial Compression Behavior of Advanced High Strength Steel C-Shape Columns Tianyong Deng, Lingfeng Yin	Design Framework for Clad Single-Span Steel Portal Frames Xiaobo Zhu, Fiona Walport, Leray Gardner	
14:00 - 14:15	Intelligent Damage Inversion of Steel-Concrete Bridge Piers Based on Point Cloud Data Fusion Jiahui Tong, Yongding Tian, Zhixiang Yu	Deformation compatibility-based mechanical model for the full-range behavior of bolted T-stubs Tao Ma, Shen Yan, Xianzhong Zhao	Flexural Behaviour of Steel-Concrete Composite Beams using High-Strength Steel and Concrete Partheeban Natesh, Arul Jayachandran	An experimental investigation of fire behaviour of screw shear connections between oriented strand board and cold-formed steel sections Zhuoran Feng, Zhongchang Wang, Lee Cunningham	Experimental investigation on bolted apex connector for single-channel c/s portal frames Naveen S, V Ranganadh Vannempalli, Hareesh Sirigiri, Mahendrakumar Madhavan	Lateral Impact Performance of High Strength Steel Posts for Rockfall Flexible Barriers Yuntao Jin, Yao-Peng Liu	
14:15 - 14:30	Seismic Demands on Buckling-restrained Braced Frames with Different Post-Yield Stiffness Subrajyoti Jena, Dipti Ranjan Sahoo	Investigation on Slab-Column Connection for Novel Composite Columns with High-Strength Steel Core Constantin Schwendner, Martin Mensinger, Shaghayegh Ameri, Jochen Zehfuß	Effect of Loading Location on GFRP C-Sections: FE Modelling, LTB Behaviour, and Design Assessment Prabhat Kumar Singh, Sourabh Shukla, Avik Samanta	Post-fire mechanical properties of corroded steel under different cooling methods Chenrui Tian, Jian Jiang, Zongxing Zhang, Yaoliang Lu, Lin Yuan, Wei Chen, Jihong Ye	Reusability Analysis for Cold-Formed Unequal-Leg Lipped Angle Steel Columns Ragul Umaraj, Sivaganes Selvaraj	Health Assessment and Reinforcement Design of Main Frame for Horse Riding Statue Luo Feng, Zhao Caiqi, Wang Gang	
14:30 - 14:45	ROME: A Reduced-Order Modal Expansion Method for Efficient Modal Identification from High-Dimensional Measurements Yufeng Weng, Justin Ker-Wei Yeoh, Ser-Tang Quek	Anti-progressive collapse performance of novel T-stub connections Bao Meng, Qing Yuan	Reference Temperature Determination of Q355 Structural Steel Considering Constraint Effects and Low-Temperature Conditions Tang Sun, Yuanqiang Wang, Yongjiu Shi				
	Advances and applications of metal additive manufacturing in construction - II Co-Chairs: Xin Meng, Ruichi Zhang Venue: Venus I (Level 3/F)	Performance, Design, and Maintenance of Modern Concrete-Filled Steel Tubular Structures - III Co-Chairs: Balthasar Novak, Chunyan Qian Venue: Venus II (Level 3/F)	Composite Structures - II Co-Chairs: Yang Yang, Jia Yan Venue: Venus III (Level 3/F)	Structural Performance Under Fire - II Co-Chairs: Shan Li, Yang Yang Venue: Mercury I (Level 5/F)	Cold-Formed Steel - III Co-Chairs: Jun Li, Cheng Chen Venue: Mercury II (Level 5/F)	Corrosion Co-Chairs: Mikihito Hirohata, Evan Wei Wen Cheok Venue: Mercury III (Level 5/F)	
14:55 - 15:10	Experimental Constitutive Behaviour of Wire Laser Additively Manufactured Steel Fuming Yang, Si-Wei Liu, Ahmed Y. Elghazouli	Stiffness Estimation for Concrete-Filled Steel Tube (CFST) Structures Based on Local Flexibility Sheng-Zhe Guo, Chun-Chuan Hou	Collapse resistant performance and bearing capacity prediction of composite beam- CFST column connection Haokun Liu	Study on the I-shape steel beams subjected to combined fire and impact loading Yuxu Guo, Feng Xi, Bo Yang	Experimental investigation on light steel frames with single- and double-sided X-bracing Nikolas Ringas, Marios Stergiopoulos, R. Mark Lawson, Yuner Huang	Experimental study on mechanical properties of butt welds of Q690 high strength steel in marine corrosive environment Huanhuan Wei	

