Wednesday, Oct 15th

08:30-08:45	**Opening Ceremony (Prof. Gongtian Shen, Chair of WCAE 2025)**			
Session 1: Keynote presentation Chair: Prof. Shifeng Liu (President of ISAE)				
08:45-09:15	**Keynote presentation (1) Dr. Jason. Dong MISTRAS Group, Inc. USA "Advanced Acoustic Emission: Enhancing Classical Methods with Waveform Streaming"**			
09:15-09:45	**Keynote presentation (2) Prof. Gongtian Shen China Special Equipment Inspection and Research Institute, China "Development of ISO 12716 Non-destructive testing — Acoustic emission testing — Vocabulary"**			
09:45-10:05	**Photo & Coffee break**			
Session 2: Allen Green Award Chair: Prof. Guanghai Li (China Special Equipment Inspection and Research Institute, China), Dr. Cherdpong Jomdecha (King Mongkut's University of Technology Thonburi, Thailand)				
10:05-10:20	PP 15-16	C. Jomdecha, **K. Thongprasert**, P. Ariyamaythasawat, R. Saechua, C. Jirarungsatian, R. Matthanu	King Mongkut's University of Technology Thonburi, Thailand	Development of compact acoustic emission system for long term structural health monitoring
10:20-10:35	PP 15-2	**Bowen Duan**	Northeast Petroleum University, China	Lamb-wave acoustic emission source localization method for carbon fiber composites based on modal sound speed arrival time
10:35-10:50	PP 15-3	Kangwei Wang, **Zhiyuan Sang**,Tingsong Qian, Nachuan Yang, Dian Shu, Yushi Zhu	Soochow Univeristy, China	Wheel defect detection based on sequential modelling network and feature selection with optimized Relief-F method
10:50-11:05	PP 15-4	**Chaowen Zhang**, Xin Zhang, Yi Shen, Pengfei Dong	Harbin Institute of Technology, China	Rail Damage Detection Method Under Interference Based on Convolutional Sparse Coding and Improved Particle Swarm Optimization
11:05-11:20	PP 15-5	**Qingchun Hu**, Naiping Li, Heng Cao	Curtin University, Australia	Error Distribution in Acoustic Emission Source Localization for Sensor Network
11:20-11:35	PP 15-6	**Jiazhong Cui**, Xin Zhang, Yi Shen, Pengfei Dong	Harbin Institute of Technology, China	An Improved Rail Damage Detection Method Based on Adaptive Total Variation and Inverse Spectral Kurtosis Feature
11:35-11:50	PP 15-7	**Changdong Guo**, Jianwen Wang, Denghong Xiao, Tian He, Hesheng Chen	Beihang University, China	A CNN-Based Single-Sensor Acoustic Emission Source Localization Method Its Performance Optimization
11:50-12:05	PP 15-8	**Hao Yang**, Weilei Mu	Ocean University of China, China	A novel depth quantification index for cracks in thin plates based on modal acoustic emission
12:10-14:00	**Lunch**			
Session 3: Keynote presentation Chair: Prof. Gongtian Shen (China Special Equipment Inspection and Research Institute, China)				
14:00-14:30	**Keynote presentation (3) Dr. Cherdpong Jomdecha King Mongkut's University of Technology Thonburi, Thailand "The Progress of Acoustic Emission Testing Technology in Southeast Asia"**			
14:30-15:00	**Keynote presentation (4) Mr. Sergey Elizarov "INTERUNIS-IT" LLC, Russia "The progress of acoustic emission testing technology in Russia"**			
Session 4: Allen Green Award Chair: Dr. Jason. Dong (MISTRAS Group, Inc. USA), Mr. Fengjing Xu (Beijing Wusheng Technology Co., China)				
15:00-15:15	PP 15-9	**Qiying Li**, Xuefeng Geng, Qiang Zeng, Yunze He	Hunan University, China	Improved Measurement Monitoring Method of Self-Excited Electromagnetic Acoustic Emission Signals from Power Electronic Devices
15:15-15:30	PP 15-10	**Chang Yang**, Wei Li, Peng Jiang, Bowen Duan	Northeast Petroleum University, China	Qualitative quantitative damage assessment of composite pressure vessels on the basis of acoustic emission parameters
15:30-15:45	PP 15-11	**Yifan Su**, Lianhua Ma, Wei Zhou	Hebei University, China	Cryogenic damage behavior of carbon fiber reinforced polymer composite laminates via fiber-optic acoustic emission
15:45-16:00	PP 15-12	**Yonghui Chen**, Qiufeng Li, Xuefeng Teng, Ying Xiong, Xiao'an Hu	Nanchang Hangkong University, China	Identification of Damage in CMC Materials Using Modal Acoustic Emission
Session 5: AE instrument and new developments Chair: Prof. Peng Wei (Institute of Semiconductors, CAS, China), Prof. Xiaobo Rui (Tianjin University, China)				
16:00-16:15	PP 15-13	**Xiaoqi Leng**, jiehui Xie, H.Liang, Cheng Wen	Huizhou DayaBay technological development, China	Research on the Application of Acoustic Emission Technology in On-site Verification of Safety Valves
16:15-16:30	PP 15-14	**V.Barat**, A. Marchenkov, S. Ushanov, N. Lavrik, S. Elizarov, E. Lepsheev	INTERUNIS-IT, Russia	Detection of Intergranular Corrosion of Austenitic Steels by Acoustic Emission Method
16:30-16:45	PP 15-15	Sergey Elisarov, **Vera Barat**	INTERUNIS-IT LLC, Russia	AE Application for the Air Leakage Control Onboard of Spaceship
16:45-17:00	PP 15-16	C. Jomdecha, **K. Thongprasert**, P. Ariyamaythasawat, R. Saechua, C. Jirarungsatian, R. Matthanu	King Mongkut's University of Technology Thonburi, Thailand	Development of compact acoustic emission system for long term structural health monitoring
17:00-17:15	**Coffee break**			
17:15-17:45	**Exhibition & Poster presentation** Exhibition: QingCheng AE institute (Guangzhou) Co., Ltd Beijing Crahesion Science & Trade Co. Ltd INTERUNIS-IT LLC Beijing Wusheng Technology Co., Ltd Shandong Double-test Security Information Technology Research Institute Co., Ltd. **Poster presentation**			
17:45-18:30	**ISAE business meeting (Prof. Gongtian Shen, Prof. Shifeng Liu)**			
18:30-19:00	**Acoustic Emission Committee Meeting of ChSNDT (Prof. Zhanwen Wu)**			
19:00-21:00	**Banquet**			

Thursday, Oct 16th

08:30-08:35	**Welcoming address (Prof. Gongtian Shen, Chair of WCAE 2025)**			
Session 6: Keynote presentation Chair: Prof. Wei Zhou (Hebei University, China)				
08:35-09:05	**Keynote presentation (5) Prof. Peng Wei Institute of Semiconductors, CAS, China "Fiber AE sensors in High Temperature"**			
09:05-09:35	**Keynote presentation (6) Prof. Xiaobo Rui Tianjin University, China "Acoustic Emission Source Localization Technology Applications for Complex Structures in the Aerospace Field"**			
Session 7: AE behavior of materials Chair: Mr. Sergey Elizarov ("INTERUNIS-IT" LLC, Russia) Prof. Zhanwen Wu (China Special Equipment Inspection and Research Institute, China)				
09:35-09:50	PP 16-1	**Peiying Li**	Dalian Minzu University, China	Deep Learning-Based Recognition of Acoustic Emission Signals for Low-Velocity Impact Damage in CFRP Laminates
09:50-10:05	PP 16-2	**Sa Yang**, Qingyuan Guo, Yong Guo, Xuan Wang	Tianjin Special Equipment Inspection Institute, China	Investigating Damage Evolution in Nanocellulose-Modified CFRPs Using AE SEM
10:05-10:20	PP 16-3	**Wei Zhou**, Pengfei Zhang, Ran Liu, Zunxiang Wang, Shuo Liu, Shuai Qiao	Hebei University, China	Experimental numerical investigation of mechanical failure acteristics of CFRP lap bar by acoustic emission micro-CT
10:20-10:35	PP 16-4	**Leijiang Yao**, Lyu Peng, Bin Li	Northwestern Polytechnical University, China	Unsupervised Supervised Pattern Recognition of AE Data from Stress Rupture of CSIC
10:35-10:50	**Coffee break**			
Session 8: AE in pressure equipment / storage tank / aviation and aerospace equipment Chair: Mr. Sergey Elizarov ("INTERUNIS-IT" LLC, Russia) Prof. Zhanwen Wu (China Special Equipment Inspection and Research Institute, China)				
10:50-11:05	PP 16-5	**Wenbiao Xia**, Yin Zhang, Yanbin Zhang, Haoze Wang, Mingyang Yang	Changzhou University, China	Damage pattern recognition method for composite gas cylinder hydrostatic test based on adaptive VMD multi-scale time-frequency feature fusion
11:05-11:20	PP 16-6	**Feng Yang**, Jianwei Liang, Wei Li, Peng Jiang, Yuhan Dong	Northeast Petroleum University, China	Classification of Corrosion-Induced Acoustic Emission Signals in Oil Tank Bottom Plates Using Fiber-Optic Sensors via Multi-Channel Convolutional Block Attention Module
11:20-11:35	PP 16-7	Xuemei Wang, Sanyan Huang, **Shuo Wen**, Longjun Dong	Central South University, China	Study on acoustic test method of gas well annulus leakage
11:35-11:50	PP 16-8	**Zhengya Guo**, Xuepeng Zheng, Jiangtao Yan, Jiahao Zhang, Cuie Jin, Quan Wei	Shanghai Spaceflight Precision Machinery Institute, China	Effects of Grid-Stiffened Structures on Acoustic Emission Testing for Thin-Walled Components
11:50-12:05	PP 17-15	**Wasil Riaz**, Zenghua Liu, Xiaoran Wang	Beijing University of technology, China	Effect of strain excitation on MAE signals in Q235 steel using MODWT
12:05-12:20	PP 16-10	**Lixin Xu**, Xiaobo Rui, Lei Qi, Yu Zhang	Tianjin University, China	Study on Leakage Localization Method for Metal Plate Structures Based on Distributed Sensing Networks
12:20-14:00	**Lunch**			
14:00-18:00	**Visit activities**			

Friday, Oct 17th

08:30-08:35	**Welcoming address (Prof. Shifeng Liu, President of ISAE)**			
Session 9: Keynote presentation Chair: Dr. Lianhua Ma (Dongguan University of Technology, China)				
08:35-09:05	**Keynote presentation (7) Prof. Xin Zhang Harbin Institute of Technology, China "Acoustic Emission-Based Damage Detection in Railway Transportation: Studies and Implementations"**			
09:05-09:35	**Keynote presentation (8) Mr. Mai Anh Tai AITECH Joint Stock Company, Vietnam "The External/Onstream Inspection Using Acoustic Emission Testing and Advanced NDT Methods to Replacement of Internal Inspections in Vietnam"**			
Session 10: AE in rock and concrete Chair: Prof. Xin Zhang (Harbin Institute of Technology, China) Mr. Mai Anh Tai (AITECH Joint Stock Company, Vietnam)				
09:35-09:50	PP 17-4	Jiehui Xie, **Weiping Wu**, Lin Han, Shifeng Liu	QingCheng AE Institute, China	Research engineering application of acoustic emission source localization technology based on deep learning
09:50-10:05	PP 17-13	JX Lv, **XQ Zhu**, HW Yuan, P Wei	Beihang University, China	Performance of Fiber-Optic Ring Acoustic Emission Sensors in the Petroleum Environment
10:05-10:20	PP 17-11	**Manwika Kongpuang**, Ni-Asri Cheputeh, Panukorn Krusuansombat,Mayorkinos Papaelias	Department of Mining Materials Engineering, Prince of Songkla University, Thailand	AE-Based Structural Health Monitoring of Turnout Frog: A Field Study
10:20-10:35	**Coffee break**			
Session 11: AE in structural health monitoring Chair: Prof. Xin. Zhang (Harbin Institute of Technology, China) Mr. Mai Anh Tai (AITECH Joint Stock Company, Vietnam)				
10:35-10:50	PP 17-14	Shuting Liu, Jiehui Xie, Shifeng Liu, **Yating Liu**	QingCheng AE Institute, China	Research on the Application of AI in Acoustic Emission Waveform Data Pattern Recognition
10:50-11:05	PP 17-5	**Wenxu Sun**, Hisafumi Asaue, Tomoki Shiotani	Kyoto University, Japan	Study on Residual Axial Force Measurement in Bolts Using Electromagnetic Excitated Acoustic Emission
11:05-11:20	PP 17-6	**Ushanov Sergei**, Barat Vera, Elizarov Sergei, Lepsheev Egor	INTERUNIS-IT LLC, Russia	Intelligent Data Analysis in Structural Health Monitoring Systems: A Case Study of a Dragline Excavator
11:20-11:35	PP 17-7	Zhenlong Hu, Ruiqi Zhou, **Xinxin Luo**, Ying Xiong, Junjiao Zhang, Qiufeng Li	Nanchang Hangkong University, China	Research on Dynamic Monitoring Evaluation of Thermal Fatigue Damage in 20 Steel Based on Acoustic Emission Technology
11:35-11:50	PP 17-8	**Hui Li**, Longting Zhang, Ning Zhang	Northwest AampF University, China	Damage Detection of Concrete Structures with Bonded Joints Based on Acoustic Emission Technology
12:00-14:00	**Lunch**			
Session 12: AE in railway transportation /condition monitoring /other fields Chair: Prof. Shifeng Liu (President of ISAE)				
14:00-14:15	PP 17-9	**Shuzhi Song**, Yifei Chen	Northeast Forestry University, China	Transformer-based Dual-channel Acoustic Emission Detection via DTW Sparse fusing for Rail Damage
14:15-14:30	PP 17-10	**Yuchen Yuan**, Xin Zhang, Yi Shen	Harbin institute of Technology, China	Adaptive EMD Denoising with Meier Spectral Slope Feature for Rail Damage Detection
14:30-14:45	PP 17-12	**Haifeng Liang** Yan Cui, Jiehui Xie, Rujuan Jiang, Shifeng Liu, Weiming Gai	QingCheng AE Institute, China	Research on the application of Internet of Things acoustic emission technology in online monitoring of broken wires in bridge suspender steel cables
14:45-15:00	PP 17-16	**W.L. Mu**	Ocean University of China, China	Modal acoustic emission signal processing method and its applications
15:00-15:15	PP 17-1	**Shengyu Ji**, Longjun Dong	Central South University, China	Internal damage and response mechanism of rock mass under multi-stage blasting
15:15-15:30	PP 17-2	**Shenglan Li**, Longjun Dong, Jiachuang Wang	Central South University, China	Multi-Index Fusion Early Warning for Rock Mass Instability
15:30-15:45	PP 17-3	**Longbin Yang**, Longjun Dong, Yihan Zhang	Central South University, China	Velocity-Free acoustic emission source localization for complex structures using any-angle pathfinding algorithm
15:45-16:00	PP 17-17	**Zhongwei Pei**, Longjun Dong	Central South University, China	Abnormal empty region identification in rock mass with CNN-based tomography method
16:00-16:20	**Closing Ceremony (Prof. Shifeng Liu, President of ISAE)**			