WCAE-2023 Schedule

Sofis Jinyuan Hotel		
Tue., Nov. 14th		
14:00～17:00	Registration of WCAE-2023	Lobby
18:30～20:30	Welcome Reception for WCAE-2023	BoYue Restaurant 1st floor 一层博悦茶餐厅
Wed., Nov. 15th		
Morning sessions, GUO SE conference room on the 2nd floor 二层国色厅		
9:00～9:30	Welcoming address	G.T. Shen
9:30～10:00	**Keynote presentation (Prof. G. Qi)**	
10:00～10:30	Photo & Coffee break	
10:30～11:45	5 technical presentations, 15 min each, PP 15-1 to PP 15-5	S.F. Liu, G.H. Li
12:00～13:30	Lunch	BoYue Restaurant 1st floor 一层博悦茶餐厅
Afternoon sessions, GUO SE conference room on the 2nd floor 二层国色厅		
13:30～14:00	**Keynote presentation (Prof. L.J. Dong)**	W. Li, F.J. Xu
14:00～14:30	**Invited presentation (Mr. S. Elizarov)**	
14:30～15:45	5 technical presentations, 15 min each, PP 15-6 to PP 15-10	
15:45～16:00	Coffee break	
16:00～16:30	**Exhibition & Poster presentation** No. PP 15-10 to PP 15-21	
16:30～17:30	**ISAE business meeting**	G.T. Shen, G. Qi
18:00～21:00	**Gala Dinner**	TIAN XIANG conference room on the 2nd floor 二层天香厅
Thu., Nov. 16th		
Morning sessions, GUO SE conference room on the 2nd floor 二层国色厅		
9:00～9:05	Welcoming address	G. Qi, L.J. Dong
9:05～9:35	**Keynote presentation (Prof. G.T. Shen)**	
9:35～10:05	**Invited presentation (Prof. P. Wei)**	
10:05～10:35	2 technical presentations, 15 min each, PP 16-1 to PP 16-2	
10:35～10:50	Coffee break	
10:50～11:50	4 technical presentations, 15 min each, PP 16-3 to PP 16-6	
12:00～13:30	Lunch	BoYue Restaurant 1st floor 一层博悦茶餐厅
Afternoon		
14:00～18:00	Visit activities	Gather in the lobby

Fri., Nov. 17th		
Morning sessions, GUO SE conference room on the 2nd floor 二层国色厅		
9:00～9:05	Welcoming address	Z.W. Wu, A.K. Das
9:05～9:35	**Keynote presentation (Prof. W. Zhou)**	
9:35～10:20	3 technical presentations, 15 min each, PP 17-1 to PP 17-3	
10:20～10:35	Coffee break	
10:35～11:05	2 technical presentations, 15 min each, PP 17-4 to PP 17-5	
11:10～11:30	**Closing address**	G.T. Shen
12:00～13:30	Lunch	BoYue Restaurant 1st floor 一层博悦茶餐厅

Technical Programs

9:00-9:30   Welcoming address

SESSION 1: Chair: Prof. Gongtian Shen(China Special Equipment Inspection and Research Institute, China)

9:30-10:00   **Keynote presentation**

                          G. Qi

                          University of Memphis, USA

                          "Evaluation and Numerical Simulation of Ballistic Armor Plates Using Acousto-Ultrasonics"

10:00-10:30   **Photo & Coffee break**

SESSION 2: Chair: Prof. Shifeng Liu (QingCheng AE Institute(Guangzhou) Co.,Ltd, China), Prof. Guanghai Li (China Special Equipment Inspection and Research Institute, China)

10:30   PP 15-1   <u>Weilei Mu</u>, Jiachen Liu

                          Ocean University of China, China

                          "Modeling and analysis of acoustic emission generated by fatigue cracking"

10:45   PP 15-2   <u>Peng Jiang</u>, Peng Liu, Yongliang Yu, Liwei Jiang

                          Northeast Petroleum University, China

                          "Identification of NOL-Ring Composite Materials' Damage Mechanism Based on the STOA-VMD Algorithm"

11:00   PP 15-3   <u>Xiaohui Liang</u> , Maoping Wen, Tao Fu, Xin Tian

                          China Academy of Engineering Physics, China

                          "Crack initiation damage determination of PBX explosive based on acoustic emission wave normalized Fourier spectrum distance measure"

11:15   PP 15-4   <u>He Yan</u>, Xiuneng Li, Shu Xing

                          China Special Equipment Inspection and Research Institute, China

"Research on the Integrity Evaluation Method of Equipment Internal Components Based on Acoustic Emission Online Monitoring Technology"

11:30   PP 15-5   Xueqin Wang, Ying Zhang, Shilin Xu, Faqi Zhou, Yu Miao

Changzhou University, China

"Acoustic Emission Recognition Model for Pipeline Corrosion Damage Monitoring in Fluid-Induced Noise Environment"

12:00-13:30   Lunch

SESSION 3: Chair: Prof. Wei Li (Northeast Petroleum University, China), Mr. Fengjing Xu (Physical Acoustics Corpration Beijing office, China)

13:30-14:00   Keynote presentation

L.J. Dong

Central South University, China

"Rock multi-source acoustics and applications in underground engineering"

14:00-14:30   Invited presentation

S. Elizarov

INTERUNIS-IT LLC, Russia

"The overview of the INTERUNIS-IT product line and technologies "

14:30   PP 15-6   Zhongzheng Zhang, Cheng Ye, Xuefeng Fang, Qiang Cui, Jingshen Cong

Nanjing Boiler & Pressure Vessel Supervision and Inspection Research Institute, China

"Acoustic emission monitoring of slow strain tensile stress corrosion of 304 stainless steel"

14:45   PP 15-7   Yongna Shen

China Special Equipment Inspection and Research Institute, China

"Study on acoustic emission characteristics of 2.25Cr-1Mo steel at high temperature"

15:00   PP 15-8   Xin Jin , Yongna Shen, Gongtian Shen, Qiang Wang

China Jiliang University, China

"Study on the characteristics of acoustic emission signals during crack propagation of 2.25Cr-1Mo steel"

15:15   PP 15-9   <u>Chang Yang</u>

Northeast Petroleum University, China

"Research on acoustic emission acteristics of carbon fiber composites with high temperature tensile damage based on deep learning"

15:30   PP 15-10   <u>Longbin Yang</u>, Longjun Dong

Central South University, China

"Source localization in complex structure with multi-media"

15:30-15:50   **Coffee break**

16:00-16:30   **Exhibition & Poster presentation**

Exhibition: **QingCheng AE Institute(Guangzhou) Co.,Ltd**

INTERUNIS-IT LLC

Beijing Crahesion Science& Trade Co.Ltd (Vallen Systeme GMbH)

Physical Acoustics Corporation

Shandong Shuangtest Security Information Technology Industry Research Institute Co., Ltd.

Poster presentation:

PP 15-11   Yimeng Min, Guanghai Li

Beijing University of Chemical Technology, China

"Damage identification based on modal acoustic emission composites"

PP 15-12   Hongliang Zhang, Jingpin Jiao, Zhewen Chong

Beijing University of Technology, China

"Fatigue Study of Pressure Vessel Steel Q345R Based on Magneto Acoustic Emission"

PP 15-13   Zhihai Hu, Jiwang Zhang, Keqin Ding, Jianfang Zhou, Rongren Wang

Hohai University, China

"Experimental Study of Acoustic Emission Signal Characterization of Simulated Tank Floor Corrosion"

PP 15-14   Rongren Wang, Jiwang Zhang, Keqin Ding, Zhihai Hu, Xu Zhang

China Special Equipment Inspection and Research Institute, China

"Test bench pipeline valve internal leakage acoustic emission simulation experiment"

PP 15-15   Xinying Wang, Haojie Tian, Anqi Li, Shimin Li, Yang Yang

Changzhou University, China

"A Natural Gas Pipeline Leakage Detection Model Based on Acoustic Emission and Machine Learning"

PP 15-16   Yunfei Shao, Weiqiang Zhang

Tsinghua University, China

"Deep Semantic Learning for ASC"

PP 15-17   Zehao Wang, Rui Guo

Nanjing University of Science and Technology, China

"Signal analysis of the Melt-cast Explosive process based on Acoustic Emission technology"

PP 15-18   Lai Wei

Dalian Minzu University, China

"Analysis of Three-point Bending Acoustic Emission Characteristics of Carbon Fiber Reinforced Polymer Laminates"

PP 15-19   Yuanhang Wang, He Yan

China Special Equipment Inspection and Research Institute,China

"Evaluation method of acoustic emission detection of storage tank bottom plate based on SSA-BP neural network"

PP 15-20   Feng Zhou, Huafeng Li, Yingli Zhu, Jianyu Li, Gang Qi

Tianjin University of Science & Technology,China

"Prediction of metal fatigue life based on machine learning and acoustic emission"

PP 15-21   Jiehui Xie, Yating Liu, Shifeng Liu

 QingCheng AE Institute Co., Ltd, China

"Integrated Intelligent Monitoring Equipment for Vibration and Acoustic Emiss -ion Technology and Its Application"

16:30-17:30   **ISAE business meeting**

18:00-21:00   **Gala Dinner**

9:00-9:05   Welcoming address

SESSION 4: Chair: Prof. Gang Qi (University of Memphis, USA),

Prof. Longjun Dong (Central South University, China)

8:35-9:05   **Keynote presentation**

G.T. Shen

China Special Equipment Inspection and Research Institute, China

"Research on key technology of magnetic acoustic emission detection for early damage of ferromagnetic metal material"

9:05-9:35   **Invited presentation**

P. Wei

Beihang University, China

"Difference Between PZT AE sensors and Optic Fiber AE sensors "

10:05   PP 16-1   V. Barat, V. Bardakov, S. Elizarov

INTERUNIS-IT LLC, Russia

"Probability of detecting fatigue cracks in pearlitic steels by acoustic emission method"

10:20   PP 16-2   Tong Li, Hui Luo, Ke Bo, Sen Chai, Xiang Li

China Special Equipment Inspection and Research Institute, China

"Impact damage evaluation of large volume glass fiber wrapped gas cylinder based on acoustic emission technology"

10:35-10:50   **Coffee break**

10:50   PP 16-3   Ji Fu, Tian He

Beihang University, China

"Acoustic emission signal enhancement performance of waveguide rod with power-law thickness"

11:05   PP 16-4   Avik Kumar Das

Tsinghua University, China

"PSE as a tool to evaluate healing capacity in Cement Based Materials"

11:20	PP 16-5	Lidong Zhang, Shifeng Liu, Shuang Wang, <u>Jiehui Xie</u>, Yating Liu

Qingcheng AE Institute (Guangzhou) Co., Ltd, China

"Bridge Cable Wire Breaks Acoustic Emission Online Monitoring System Tests and Application Examples"

11:35	PP 16-6	<u>Y. P. Liu,</u> W. Zhou, J. Wang

Hebei University, China

"Damage mode identification of hybrid carbon/glass fiber composite by wavelet packet decomposition and machine learning"

12:00-13:30 **Lunch**

14:00-18:00 **Visit Activities**

<u>**Friday, Nov. 17**[th]</u>

9:00-9:05   Welcoming address

SESSION 5: Prof. Zhanwen Wu (China Special Equipment Inspection and Research Institute, China), Prof. Avik Kumar Das (Tsinghua University, China)

9:05-9:35   **Keynote presentation**

W. Zhou

Hebei University, China

"Acoustic Emission Monitoring and Damage Mode Recognition of Fiber Reinforced Composites"

9:35	PP 17-1	Yinlan Wang, <u>Qiang Wan</u>, Runye Sun, Yuan Liu, Yaguang Jin

China Special Equipment Inspection and Research Institute, China

"Experimental Study on Typical Damage Signal Characteristics of Ultra-low-Speed and Heavy Load Rolling Bearings"

9:50	PP 17-2	Longjun Dong, <u>Zixin Huang</u>, Qiaomu Luo, Xuewei Li, Shenglan Li

Central South University, China

"Rock Damage Characteristics and Evolution Law of Velocity Field under Temperature Load"

10:05   PP 17-3   W. Zhou, <u>Y. F. Su</u>, P. F. Zhang

Hebei University, China

"Investigation of transverse indentation response of the metal-composites hybrid tubes by acoustic emission and deep learning"

10:20-10:35   **Coffee break**

10:35   PP 17-4   <u>Zhimin Cao</u>, Junjiao Zhang, Bin Hu

China Special Equipment Inspection and Research Institute, China

"Research on attenuation characteristics and feature extraction of acoustic emission signal from polyethylene pipeline leakage"

10:50   PP 17-5   <u>Yufeng Ouyang</u>, Gongtian Shen, Yongna Shen

China Special Equipment Inspection and Research Institute, China

"A Precise Positioning Method for Tank Robots"

11:10-11:30   **Closing address**

12:00-13:30   **Lunch**

Note: underlined is the presenting author in this program.