



# ICAMSM 2025

2025 International Conference on Advanced Materials and Structural Mechanics

2025年先进材料与结构力学国际学术会议

## Announcement and Call for Papers

### 2025 International Conference on Advanced Materials and Structural Mechanics

**July 25-27, 2025 Shenyang, China**

**[www.icamsm.net](http://www.icamsm.net)**

Dear colleagues,

2025 International Conference on Advanced Materials and Structural Mechanics will be held from July 25 to 27, 2025, in Shenyang, China. This conference aims to bring together experts and scholars from around the world to share the latest research findings and technological advancements in the fields of advanced materials development, structural mechanics analysis, and related areas. The conference will cover multiple themes, including but not limited to material properties, structural design, mechanical analysis, nanomaterials, and their applications. Through academic exchange and collaboration, ICAMSM 2025 aims to promote the development of cutting-edge technologies, strengthen the connection between industry and academia, and provide new ideas and solutions for addressing modern engineering challenges. We welcome professionals from all sectors to actively participate and discuss the future of advanced materials and structural mechanics.

We would like to send our greetings and looking forward to seeing you in Shenyang, China for memorable experiences.



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## Organization

### Host

Liaoning Society of Mechanics

### Organizer

Northeastern University

### Co-Organizers

Harbin Institute of Technology

Dalian University of Technology

Jilin University

Shenyang University of Aeronautics and Astronautics

Shenyang University of Technology

Shenyang University of Architecture

## General Topics (but not limited to)

### Advanced Materials

Advanced Composite Materials, Functional Materials, Smart Materials, Flexible Electronic Materials, Biomaterials, Bionic Materials, Energy Materials, Extreme Environment Materials, Micro/Nanomaterials, Semiconductor Materials, Green and Sustainable Materials, Superplastic Materials, Non-Ferrous Metal Materials, Optical/Electronic/Magnetic Materials, Metamaterials

## General Topics (but not limited to)

### **Advanced Structural Mechanics**

Structural Mechanics in Extreme Environments of Aerospace, Structural Mechanics of Advanced Composite Materials, Structural Mechanics of Functional Materials, Structural Mechanics of Metamaterials, Micromechanics and Nanomechanics, Bionic Structural Mechanics, Static and Dynamic Mechanics of Smart Structures, Advanced Structural Dynamics and Control, Nonlinear Vibration and Noise Suppression, Thermal Fatigue and Mechanical Fatigue, Vibration Reduction, Noise Reduction, and Impact Resistance, Advanced Manufacturing and Structural Mechanics, High-Temperature Structural Dynamics

### **Frontier of Interdisciplinary Mechanics**

Interfacial Mechanics, Rigid-Flexible Interdisciplinary Mechanics, Multi-Field Coupling Mechanics, Multi-Scale Mechanics, Mechanics of New Energy Materials, Artificial Intelligence-Driven Dynamics, Intersection Of Quantum Mechanics and Structural Mechanics

## Call for Papers

All papers will be reviewed by two or three expert reviewers from the conference committees. After a careful reviewing process, all accepted papers will be published by IOP-Journal of Physics: Conference Series (JPCS) (ISSN:1742-6596) and submitted to EI Compendex and Scopus for indexing.

Full text submission deadline: July 18, 2025

## Committee

### Honorary Chair



**Prof. Bangchun Wen, Northeastern University, China**

Professor Wen is an academican of Chinese Academy of Sciences, chairman of the China Institute of Vibration Engineering, a member of China Committee of FToMM (The International Federation for the Promotion of Mechanism and Machine Science) and the International Rotor Dynamics Technical Committee.

Professor Wen is also the member of the 6th, 7th, 8th and 9th National Committee of CPPCC, and member of the 2nd, 3rd, and 4th Mechanical Engineering Discipline Assessment Team of Academic Degree Commission of the State Council, and a member of Asia-Pacific Vibration Conference Steering Committee. In the year of 1984, he was awarded National Middle-and-young-aged Outstanding-contributions Expert of the first group. Professor Wen systematically researched and developed the new discipline “Vibration Engineering” which combines vibration with mechanism. He also did a lot of research in rotor dynamics, and theory and application of mechanical systems nonlinear vibration, vibration diagnosis of mechanical fault, electromechanical integration, as well as the theory of engineering machinery. He issued more than 800 papers, among of which more than 400 have been indexed in SCI, EI and ISTP and has published and edited chiefly over 10 monographs. He has hosted 5 times of international academic conference, and has been the editor-in-chief of 4 collections of papers of international symposium. He has completed dozens of major research projects of national and horizontal level, and gained 5 international prizes, 4 National Invention Award and Science and Technology Progress Award and 20 national patents. There are a number of research achievements which have reached the international advanced level, making significant economic and social benefits.



## General Chair



### **Prof. Yanqing Wang, Northeastern University, China**

Secretary General of Liaoning Mechanics Society; Director of Liaoning Key Laboratory of Structural Dynamics; Vice Director of the Nonlinear Vibration Professional Committee of the Chinese Society of Vibration Engineering



### **Prof. Jian Xiong, Harbin Institute of Technology, China**

Deputy Director of State Key Laboratory of Special Environmental Composite Materials Technology; President of the Heilongjiang Provincial Association of Young Science and Technology Workers; Humboldt Research Fellow



### **Prof. Tianzhi Yang, Northeastern University, China**

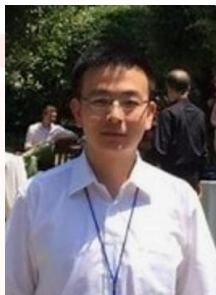
Member of the Nonlinear Vibration Special Committee of the Chinese Society of Vibration Engineering; Leading scientist in innovation and entrepreneurship in Suzhou High-tech Zone; Humboldt Research Fellow



### **Prof. Hui Li, Northeastern University, China**

Deputy Director of the Key Laboratory of Vibration and Control of Aero-Propulsion System of the Ministry of Education, Northeastern University; Member of the Vibration and Noise Control Professional Committee of the Chinese Society of Vibration Engineering

## Organizing Committee



### **Prof. Rui Li, Dalian University of Technology, China**

Director of the Institute of Engineering Mechanics of Dalian University of Technology; Vice Chairman of the Youth Committee of the Chinese Society of Mechanics



### **Prof. Dong Li, Northeastern University, China**

Director of the Department of Mechanics of School of Science, Northeastern University; Deputy Secretary-General of Liaoning Sports Industry School-Enterprise Alliance; Visiting Scholar at the University of Wisconsin-Madison



### **Prof. Hui Ma, Northeastern University, China**

Deputy Director of the Key Laboratory of Vibration and Control of Aero-Propulsion System of the Ministry of Education, Northeastern University; Member of the Nonlinear Vibration Professional Committee of the Chinese Vibration Engineering Society



### **Prof. John Dear, Imperial College London, United Kingdom**

Department of Mechanical Engineering, Faculty of Engineering, Imperial College London, Associate Editor of the International Journal of Lightweight Materials and Manufacture.

## Organizing Committee



**Prof. Zhaoye Qin, Tsinghua University, China**

Deputy Secretary-General of the Chinese Society of Vibration Engineering; Member of the Rotor Dynamics Committee of the Chinese Society of Vibration Engineering



**Prof. Ramesh K. Agarwal, Washington University , China**

Director of Aviation Research and Education Center; Director of Computational Fluid Dynamics Research Center; the William Palm Professor of Engineering at Washington University in St. Louis.



**Prof. Wei Sun, Northeastern University, China**

Member of Rotor Dynamics Committee of Chinese Vibration Engineering Society; Member of Vibration and Noise Control Committee of Chinese Vibration Engineering Society



**Prof. Bo Zhou, Shenyang University of Technology, China**

Secretary-General of Liaoning Vibration Engineering Society; Member of the 9th Liaoning Association for Science and Technology; Visiting Scholar of Kochi Institute of Technology, Japan



## Organizing Committee



**Prof. Zhongwei Guan**, Advanced Materials Research Centre of Technology Innovation Institute , United Arab

Executive Director of Advanced Materials Research Centre of Technology Innovation Institute in Abu Dhabi, Discipline Leader of the Center for Lightweight Composite Structures in the Engineering Department of the University of Liverpool, UK



**Prof. Jin Zhou**, Xi'an Jiaotong University, China

Vice Dean of the School of Future Technology at Xi'an Jiaotong University; Director of Shaanxi Mechanics Society; Honorary Research Fellow in University of Liverpool



**Prof. Yongcun Zhang**, Dalian University of Technology, China

Director of the Institute of Manufacturing Process Mechanics, Dalian University of Technology; Director of the Composite Structure Design Professional Committee of the Chinese Society for Composite Materials



**Prof. Jianhai Zhang**, Jilin University, China

Deputy Director of Jilin Province International Joint Center for Material Service Performance Testing; Vice Chairman of the Nondestructive Testing Branch of Jilin Mechanical Engineering Society



## Organizing Committee



**Prof. Liming Zhou, Jilin University, China**

Director of the Engineering Mechanics Department of the School of Mechanical and Aerospace Engineering of Jilin University; Member of the Mechanics Teaching Committee of the Chinese Mechanical Industry Education Association



**Prof. Lye Sun Woh, Nanyang Technological University, Singapore**

Deputy Director of Air Traffic Management Research Institute of Nanyang Technological University

## Academic Committee



**Prof. Yanting Ai**, Shenyang Aerospace University, China

Member of the National Aeronautics and Astronautics Professional Teaching Steering Committee; Vice Chairman of Liaoning Vibration Engineering Society



**Prof. Wanji Chen**, Shenyang Aerospace University, China

Director of the Institute of Aircraft Structure Analysis, Shenyang Aerospace University; Director of the University-level Key Laboratory of Aircraft Structure Analysis



**Prof. Hulun Guo**, Tianjin University, China

Director of Rotor Dynamics Committee of Vibration Engineering Society; Young Editorial Board Member of Chinese Journal of Applied Mechanics



**Prof. Weixi Huang**, Tsinghua University, China

Member of the Turbulence and Stability Professional Group; Deputy Director of the Fluid Mechanics Professional Committee of the Chinese Society of Mechanics

## Academic Committee



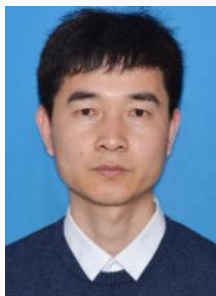
### **Prof. Qingkai Han, Northeastern University, China**

Director of the Chinese Society of Vibration Engineering; Vice Chairman of the Rotor Dynamics Committee of the Chinese Society of Vibration Engineering; Director of the Mechanical Reliability and Dynamics Research, Northeastern University



### **Prof. Peng Liu, Zhejiang University, China**

Vice Dean of the School of Mechanical and Aerospace Engineering; Deputy Director of Jilin Province Material Service Performance Testing Technology and Intelligent Equipment Innovation Center



### **Prof. Xianzhen Huang, Northeastern University, China**

Vice Dean of the School of Mechanical Engineering and Automation, Northeastern University; Director of the Reliability Section of the Chinese Society of Mechanical Engineers



### **Prof. Xiangying Guo, Beijing University of Technology, China**

Secretary-General of the Overseas Chinese Federation of the University; Youth Committee Member of the Beijing Overseas Chinese Federation Association

## Academic Committee



### **Prof. Yang Liu, Northeastern University, China**

Deputy Director of the Academic Affairs Office of Northeastern University; Director of the Engineering Training Center at Northeastern University; Executive Director of the Liaoning Vibration Engineering Society



### **Prof. He Li, Northeastern University, China**

Chairman of the Vibration Utilization Committee of the Chinese Vibration Engineering Society; Executive Director of the Chinese Vibration Society; Vice Chairman of the Liaoning Society of Vibration Engineering



### **Prof. Jian Li, Northeastern University, China**

Vice Dean of the School of Science, Northeastern University; Executive Vice President of Liaoning Mechanics Society; Director of the Chinese Society of Vibration Engineering



### **Prof. Changyou Li, Northeastern University, China**

Member of the Fatigue Branch of the Chinese Society for Materials Research; Director of Liaoning Mechanics Society; Tenured Professor of Northeastern University



## Academic Committee



### **Prof. Zhaohui Ren, Northeastern University, China**

Director of the Mechanical Design and Theory Research Institute;  
Chairman of the Labor Union of the School of Mechanical Engineering  
and Automation; Secretary General of Liaoning Vibration Engineering  
Society



### **Prof. Xiaopeng Li, Northeastern University, China**

Director of the Department of Mechanical Engineering, Northeastern  
University; Director of Liaoning Provincial Key Laboratory of  
Mechanical Equipment Dynamics Reliability



### **Prof. Shujun Ma, Northeastern University, China**

Deputy Director of the Institute of Mechanical and Electronic  
Engineering, Northeastern University, Member of the Program  
Committee of MARSS, Member of Chinese Micro-Nano Robotics and  
Automation Technology Committee



### **Prof. Feng Li, Jilin University, China**

Executive Director of Jilin Mechanics Society; Visiting scholar at the  
University of Iowa, USA

## Academic Committee



### **Prof. Dan Sun, Shenyang Aerospace University, China**

Dean of the School of Aerospace Engines, Shenyang Aerospace University; Director of the Institute of Advanced Sealing Technology for Aerospace Engines, Shenyang Aerospace University



### **Prof. Yundong Sha, Shenyang Aerospace University, China**

Director of the China Power Engineering Society; Deputy Director of the Key Laboratory of Advanced Testing Technology for Aviation Propulsion Systems in Liaoning Province; Director of the National Experimental Teaching Demonstration Center for Aviation Engineering



### **Prof. Chaofeng Li, Northeastern University, China**

Executive Director of Liaoning Vibration Society; Executive Director of China Rotor Dynamics Society; Senior Member of Chinese Mechanical Engineering



### **Prof. Peixin Gao, Yantai University, China**

Vice Dean of the School of Mechanical and Electrical Automotive Engineering, Yantai University; Director of the Rotor Dynamics Branch of the Chinese Society of Vibration Engineering

## Academic Committee



**Prof. Xiaodong Yang, Shenyang Aerospace University, China**

Dean of the School of Aeronautics and Astronautics; Member of the Dynamics and Control Professional Committee of the Chinese Society of Mechanics



**Prof. Tao Yu, Yantai University, China**

Director of the Science and Technology Department of Yantai University; Director of the Shandong New Energy Vehicle Electric Drive Technology Innovation Center



**Prof. Bing Wang, Fuzhou University, China**

Deputy Director of the Key Laboratory of Terahertz Functional Devices and Intelligent Sensing in Fujian Province ; Member of the Materials Branch of the Chinese Mechanical Engineering Society; Executive Director of the Fujian Mechanical Engineering Society



**Prof. Xueliang Zhang, Northeastern University, China**

Executive Director of Liaoning Vibration Engineering Society; Academic Committee Member of Liaoning Province Large Machinery Health Monitoring and Maintenance Technology Engineering Research Center



## Academic Committee



### **Prof. Hongliang Yao, Northeastern University, China**

Secretary General of Vibration Utilization Professional Committee of China Vibration Engineering Society ; Deputy Director of Intelligent Mining Equipment Research Center; Member of the Rotor Dynamics Professional Committee of the Chinese Society of Vibration Engineering



### **Prof. Minghui Yao, Tianjin University of Technology, China**

Executive Vice Dean of the School of Aeronautics and Astronautics, Tianjin University of Technology; Member of the Nonlinear Vibration Professional Committee of the Chinese Vibration Engineering Society



### **Prof. Xufang Zhang, Northeastern University, China**

Member of the Reliability Committee of the Chinese Mechanical Engineering Society; Young Member of the Random Vibration Committee of the Chinese Vibration Engineering Society



### **Prof. Jing Zhao, Northeastern University, China**

Secretary General of the Asian Society of Mechanical and Electrical Engineers; Executive Director of the Liaoning Vibration Engineering Society



## About Shenyang

Shenyang, the capital of Liaoning Province, is a major city in Northeast Asia, recognized for its historical and cultural significance and as a transportation hub. It serves as a national advanced manufacturing base and a center for modern services and technological innovation. Covering 12,860 square kilometers and home to 9.204 million residents as of 2023, Shenyang governs 10 districts, 2 counties, and 1 county-level city.

Known as the birthplace of the Qing Dynasty, Shenyang, originally called Shengjing, became the capital in 1625 when Qing Taizu Nurhaci moved it there. Following the establishment of the People's Republic of China, it transformed into a crucial heavy industrial base, earning titles such as "The Equipment Ministry of the Republic" and "the Eldest Son of the Republic."



### Shenyang Imperial Palace

The Shenyang Palace was first built in 1625 and is one of the two well-preserved ancient palace complexes in China. The Shenyang Palace Museum, established in 1926 based on the Shenyang Palace, is an ancient cultural and art museum. In 2004, it was added to the UNESCO World Heritage List.

### Contact us

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