

**TOPICS** 

# **International Conference on Mechanical Transmission**

April 17-20, 2025 | Chongqing, China

In recent years, to meet the escalating demands of modern industry and society, the mechanical transmission technology has been making continual progress and getting new achievements in design theories, advanced materials, processing and evaluation techniques. Currently, new applications such as large megawatt wind turbines, new energy vehicles, all electrical equipment, etc., and increasingly stringent environmental protection requirements poses significant challenges to mechanical transmission. Meanwhile, the emergence of cutting-edge technologies such as artificial intelligence and digital twins bring new revolution to the mechanical transmission.

Therefore, State Key Laboratory of Mechanical Transmission for Advanced Equipment in China is organizing the International Conference on Mechanical Transmission (ICMT 2025), which offers a shared platform for scientists, manufacturers and users, to discuss and present trends and innovations in mechanical transmission. On behalf of the Organization of ICMT 2025, we are delighted to invite academic researchers and industrial engineers from all around the world to participate in this event, scheduled for 17-20 April 2025, in Chongqing, China. The conference covers the most important and interesting research subjects of mechanical transmission such as gears, bearings, reducers/transmissions, and electric drive transmission systems, etc.

- New theories and methods of mechanical transmissions
- Modeling and simulation of mechanical transmissions
- Strength, fatigue, reliability, dynamics and noise of mechanical transmissions
- Lubrication and sealing theories and technologies
- Metals, composites, polymers, and new/special materials for mechanical transmissions
- Advanced manufacturing techniques including precision, green, efficient and intelligent machining for mechanical transmissions
- Advanced heat treatment and surface modification techniques for transmission components
- Advanced measuring and characterizing technologies of mechanical transmissions
- Wew test methods for endurance, efficiency and NVH behavior
- Smart gears and bearings for condition monitoring systems and additional functions
- Digital twins for design, manufacturing and testing of mechanical transmissions
- Mechanical transmissions with artificial intelligence
- Application of mechanical transmissions in all fields of industry, like transmissions used in marine, automotive, aerospace, railway, wind turbines, robots, construction machinery, etc.

Prospective authors are invited to submit a 400 word abstract by 30 June 2024 using the conference website at https://icmt2025.org/. The official language of the conference is English. Full paper submission will be requested after the acceptance of the abstract. The submitted paper will go through a peer review process and be published in the proceedings of the ICMT2025 conference, which will be sent to EI database for indexing.

#### **Important Dates**

30<sup>th</sup> June 2024 Abstract Submission Acceptance Notification of Abstract 30th July 2024 30th Oct. 2024 **Draft Paper Submission** Acceptance Notification of Full Paper 10th Dec. 2024 15th Jan. 2025 Registration and Submission of Final Paper

#### **Conference Registration Fees**

450 USD (CNY 3200) Early registration (before 15th Feb. 2025) Registration (after 15<sup>th</sup> Feb. 2025) 500 USD (CNY 3600) Early registration for Students (before 15th Feb. 2025) 300 USD (CNY 2200) Registration for Students (after 15<sup>th</sup> Feb. 2025) 350 USD (CNY 2500)

Accompanying attendees refer to the above standard charges.

#### Conference Organizer State Key Laboratory of Mechanical Transmission for Advanced Equipment (SKLMT), Chongqing University

The SKLMT at Chongqing University is one of the earliest State Key Laboratories in the field of mechanical engineering in China. It serves as a leading scientific research platform for both theoretic and applied fundamental research in mechanical transmissions, including theory and method of mechanical transmission, advanced manufacturing technique, system integration and measurement technology. These research achievements have made significant contributions to the development of high-end equipment across various industries of China such as metallurgy, marine, aerospace, new energy equipment, robotics and machine tools, etc.





#### Conference Location: Chongqing, China

Chongqing, located in the southwest of China, is the youngest municipality established in 1997. Renowned for its mountainous landscape, the city is known as the 'mountain city'. Its rich cultural heritage, including the Ba, Three Gorges, and Three Kingdoms cultures, along with its modern urban civilization, contribute to Chongqing's wealth of cultural tourism resources. Experiencing unprecedented development, Chongqing has become the largest manufacturing center and a prominent economic growth pole in the western China.

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ntact Further information concerning accommodation, paper submission etc., can be

found on the conference website at: 🏽 https://icmt2025.org/ 👤 Dr. Wei

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