

4th International Workshop on Structural Health Monitoring for Railway System IWSHM-RS 2025 Announcement

As one of the most authoritative academic workshop in the field of structural health monitoring for railway system, fault prognostics and diagnosis in China, the International Workshop on Structural Health Monitoring has been successfully held for three sessions. Each session brings together hundreds of academicians, scholars and industry technical experts from domestic and abroad. The development and application prospect of health monitoring technology in rail transit had been discussed in depth. The workshop provides an international, interdisciplinary and high-end communication platform for international health monitoring and railway system academia and industrial area.

IWSHM-RS 2025 will be guided by China Railway Society, CRRC Co., Ltd, co-hosted by State Key Laboratory of High-speed Maglev Transportation Technology, CRRC Qingdao Sifang Co., Ltd., held in November 17 to 18, 2025, Singapore (TBD).

This workshop focuses on cutting-edge technologies in the intelligent operation and maintenance of rail transit area. By developing ESG (Environmental, Social, and Governance)-oriented digital solutions, it aims to drive innovation in life cycle structural health monitoring systems. These efforts will support Singapore building a people-centric land transport network and achieving synergistic benefits across economic performance, ecological sustainability, and social responsibility in the rail transit industry.

Major Topics

1. Failure Diagnosis/Prediction
2. Equipment Health Management/Lifetime Prediction
3. Intelligent O&M Technology of High-speed EMUs
4. Signal Processing/Data Modeling
5. SHM Big Data Analysis
6. SHM Technology Engineering Application
7. Inductive Network/Monitoring System Integration
8. Multi-function Materials/Intelligent Structures
9. Testing/Calibration/Certification Accreditation
10. Corporate Social Responsibility Practices and Performance Evaluation from an ESG Perspective

Program

| | Nov.16 | Nov.17 | Nov.18 |
|--------|----------|---|---|
| A M | Register | 08:30-09:00 Opening Video | 09:00-12:00 Visit Tour at Singapore Bishan Depot |
| | | 09:00-09:30 Opening Ceremony | |
| | | 09:30-12:00 Keynotes | |
| | | 12:00-14:00 Buffet | 12:00-14:00 Buffet |
| P M | | Session 1: Singapore special session Session 2: Invited session Session 3: 2 nd Innovation Competition | / |
| | Banquet | Outstanding Paper & Competitors Award Closing Ceremony | |

Call for Papers

The papers accepted by the workshop will be published in a special issue of "High-speed Railway" Journal. "High-speed Railway" is an international journal hosted by Beijing Jiaotong University, with Academician Lu Chunfang as the chief editor. The journal was selected for the 2022 China Science and Technology Journal Excellence Action Plan - High-Starting New Journals Project and is currently indexed by international databases such as Scopus, DOAJ, and EBSCO.

Submission:

- Please register on the official website of the workshop in advance, then submit your abstract online. The workshop organizing committee will review the abstract and send the acceptance notifications to the authors;
- According to the submission specification and review procedure of "High-speed Railway", the papers that pass the final review will be officially published in this journal.

Key Dates for Paper

| | |
|----------------------------|--------------|
| Abstract submission due by | 31 May 2025 |
| Abstract acceptance | 10 June 2025 |
| Full papers due | 31 July 2025 |

Innovation Competition

The 2nd International Innovation Competition on Structural Health Monitoring for Railway System will be held during the workshop. Based on the fault sample data of metal and composite critical structures of rail vehicles, two independent and parallel competitions, "Damage diagnosis" and "Impact monitoring", were set up in this competition. Each competition is divided into two stages: preliminary and final, and the final ranking and award are based on the third-party evaluation results. One outstanding award, three excellent awards and three innovated awards are set for each competition. The winning

teams will be invited to participate workshop on-site, sharing technical achievements, and the organizing committee will award certificates and bonuses to the winning team.

Please register on the official website of the workshop in advance, then register on the Innovation Competition, which will start on May 19, 2025 and end on June 30, 2025. The relevant information of the competition will be released and updated on the workshop official website.

Key Dates for Competition

| | |
|--------------------------|--------------------------------|
| Preliminary | 19 May - 11 July 2025 |
| Final | 14 July - 12 September 2025 |
| The third-party evaluate | 15 September - 17 October 2025 |
| Award on site | 17 November - 18 November 2025 |

Registration

All the attendees should registration online via the following link:

<http://www.iwshm-rs.com/en-us/register.html>

The registration fee will be charged on-site:

| | |
|------------|---|
| Early bird | \$ 400 (Register before June 31 st) |
| Standard | \$ 500 |
| Student | \$ 300 |

Remark: The registration fee includes workshop brochure, e-proceedings, lunch on November 17&18, banquet on November 17.

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IWSHM-RS Organizing Committee

