

# ICART 2025

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## The 5th International Conference on Advanced Railways and Transportation 2025

October  
29th ~ 31th, 2025  
MAISON GLAD  
JEJU, Korea

### CALL FOR PAPERS

The Organizing Committee invites all interested participants from academia, research laboratories, and industry around the world in the field of railway engineering and railway transportation to submit abstracts for oral or poster presentations. We welcome you to contribute to the most up-to-date research and latest test developments from around the world.



Abstract Submission Deadline : **May 30, 2025**

Acceptance Notification : **July 7, 2025**

Final Manuscript Submission (Optional) Deadline : **August 25, 2025**

Early Registration Deadline : **August 25, 2025**

## TOPICS

### 1. Network and Sustainability

- 1.1 Visions for Integrated Rail Network
- 1.2 Global Standards for Railway Interoperability
- 1.3 Railway Sustainability - Energy efficiency and CO2 emissions
- 1.4 Railway Sustainability - Noise, Vibration and Air quality
- 1.5 Freight & Logistics
- 1.6 Planning, Development and Operational Challenges in Railway Systems

### 2. Operation and Maintenance Innovation

- 2.1 Asset Management Systems
- 2.2 System Remodeling and Safety Protection Design
- 2.3 IoT based Real-time Detection of Safety
- 2.4 Big-data based Risk Management and Response
- 2.5 Condition Based Maintenance and Predictive Maintenance
- 2.6 Maintenance Process Quality Evaluation
- 2.7 Spare Parts Procurement and etc

### 3. Future of Mobility and Passenger Service

- 3.1 New Urban Mobility Visions
- 3.2 Urban Mobility in Autonomous Aerial Systems
- 3.3 Mobility on Demand and as a Service (MoDaaS)
- 3.4 Green Transport and Mobility
- 3.5 Autonomous Trams in Urban Area
- 3.6 Data sensing, analytics, and AI in Mobility
- 3.7 Emergency Evacuation and Transportation safety

### 4. Next Generation Vehicles

- 4.1 Innovation for the Rolling Stock Technology
- 4.2 Next Generation High-Speed Railway System
- 4.3 Advanced Light Rail Transits
- 4.4 Hyperloop
- 4.5 Impacts of Connected and Autonomous Vehicles on Rail Systems

### 5. Advanced Infrastructure and Civil Engineering

- 5.1 Rail Track Structure
- 5.2 Infrastructure Construction, Management and Maintenance
- 5.3 Rail Track Geotechnics
- 5.4 Tunnels and Bridges

### 6. Smart ICT Development

- 6.1 Artificial intelligence, Machine Learning, and cognitive computing
- 6.2 Big data, data engineering, and data analytics
- 6.3 Train Control & Traffic Management System
- 6.4 Information & Communication System
- 6.5 Digital Innovation
- 6.6 Other related topics



THE KOREAN SOCIETY FOR RAILWAY

ICART 2025 / icart@icart2025.kr / www.icart2025.kr