

The 15th International Symposium on Linear Drives for Industry Applications

LDIA 2025

May 18th – 21st 2025, Daejeon, Republic of Korea

The 15th International Symposium on Linear Drives for Industry Application (LDIA) will be held in Daejeon, Republic of Korea on May 18–21, 2025. The goal of LDIA 2025 is to bring together researchers from both academia and industry, to share research findings, and to discuss future developments in linear drive technology. This symposium will cover invited talks as well as technical sessions including oral and poster presentation.



IMPORTANT DATES

 **Abstract Submission Deadline**
December 13, 2024

 **Notification of acceptance**
February 28, 2025

 **Full Paper Submission Deadline**
April 4, 2025

CONFERENCE TOPICS

Topic 1: Electromagnetic Linear Motors and Actuators

- 1.a. Linear motors
- 1.b. Linear actuators
- 1.c. Tubular motors
- 1.d. Nano and micro actuators
- 1.e. Multi-dimensional linear and planar drives

Topic 2: Non-electromagnetic Linear Motors and Actuators

- 2.a. Linear motors
- 2.b. Linear actuators
- 2.c. Nano and micro actuators
- 2.d. Multi-dimensional linear and planar drives
- 2.e. Bio-actuators
- 2.f. Piezo electric actuators

Topic 3: Power Electronics and Control Methods for Linear Drives

- 3.a. Linear drive and motor control
- 3.b. Power electronic supply of linear drives
- 3.c. Control theory and its application

Topic 4: Levitation Technologies

- 4.a. Magnetic levitation for linear drives
- 4.b. Magnetic suspensions for motors
- 4.c. Electrodynamic levitation
- 4.d. Control strategies
- 4.e. Novel levitation control schemes

Topic 5: Subsystems for Linear Drives

- 5.a. Bearings and guidings
- 5.b. Power sources and power conversion
- 5.c. Sensors and measurement systems

Topic 6: Applications of Linear Drives and Levitation Technologies

- 6.a. Transportation
- 6.b. Factory automation and machine tools
- 6.c. Office automation
- 6.d. Robotics
- 6.e. Home and medical applications

Topic 7: Methods for Prediction and Analysis

- 7.a. Numerical analysis of magnetic and electric fields
- 7.b. Analysis of coupled systems
- 7.c. Prediction of force, vibration and acoustic noise emission
- 7.d. Prediction of bearing voltages and bearing currents
- 7.e. Visualization
- 7.f. Dynamics
- 7.g. EMS

Topic 8: Materials

- 8.a. Permanent magnets
- 8.b. Superconductors
- 8.c. Piezo devices
- 8.d. Magnetic materials
- 8.e. Special design of force elements

Topic 9: Other Related Topics and New Technologies





DIGEST SUBMISSION

Authors are invited to submit a one-page digest through the online submission system. The digest must be submitted in PDF format and digests presented at LDIA 2025 must be original material and have not been previously presented or published. All accepted digests will be published in the conference proceedings and IEEE's Xplore Digital Library.

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VENUE

Daejeon, known as the science capital of Korea, is where advanced knowledge, science, and technology converge. It serves as a significant transportation hub located in the heart of the country. What makes Daejeon unique among other Asian cities is its impressive array of universities and research institutes which conducts world-class research in applied sciences, from semiconductors to fusion technology and next-generation satellites. This robust infrastructure has earned Daejeon the nickname "Silicon Valley of Asia."

The conference venue, Daejeon Convention Center (DCC), is situated in the heart of the science park, a popular destination offering various exhibits and activities.

