# 19<sup>th</sup> International Symposium on Magnetic Bearings Otsu, Japan, August 19-22, 2025

The nineteenth international symposium on magnetic bearings, ISMB19, will take place at Biwako Hotel in Otsu from August 19 to 22, 2025. The primary aims of ISMB19 are to promote scientific and technological exchange between Asia and other parts of the world, and to enhance the understanding and the dissemination of magnetic bearing technology worldwide. The ISMB is the major meeting for academic and industrial researchers from all over the world. Find out more on the history of ISMB and the past symposia at the web portal URL: http://www.magneticbearings.org/

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### Topics

Active magnetic bearings (AMB)
Passive magnetic bearings (PMB)
Electrodynamic bearings (EDB)
Superconducting magnetic bearings (SMB)

Hybrid bearing systems

Self-bearing (bearingless) motors

Smart bearings

Sensors, actuators, power electronics for magnetic

bearings

Self-sensing (sensorless) techniques

Modeling, simulation, design, and identification

Advanced control Rotor dynamics

Safety and reliability aspects

Fault detection, diagnosis and tolerance

Back up / Touch down bearings Components and materials

Industrial, medical, and aerospace applications
Superconducting and high Tc superconducting

magnetic applications

Blood pumps, vacuum pumps and canned pumps

Flywheels

Low loss and low power consumption magnetic

bearings

Ultra-high-speed bearings

Micro bearings

Electromagnetic suspensions (EMS) Electrodynamic suspensions (EDS)

Diamagnetic levitation Electrostatic levitation MagLev trains

Other related new fields

# Organizing Committee S. Ueno (Chair), J. Asan

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## Venue

The ISMB19 will be held at Biwako Hotel in Otsu (city), Shiga (prefecture), Japan. The hotel is located on the southern shore of Lake Biwa, where you can see a spectacular lake view. It can be reached by train in 10 minutes from Kyoto and 40 minutes from Osaka.

Otsu City is the ancient capital of Japan and home to many famous places including the World Heritage Site Hieizan Enryakuji.



https://www.biwakohotel.jp



The Japan Society of Mechanical Engineers, Division of Dynamics, Measurements and Control

