

【Special lecture Report】

Date and Time: Friday September 26, 2025 15:00–17:00

Format: In-person

Venue: Saitama University, Building No.1, Department of Civil and Environmental Engineering, No.31 Lecture Room

Number of Participants: Approximately 30

In Japan and other developed countries, many bridges were designed based on outdated design standards and are still in service today. To maintain and operate these bridges effectively and safely, it is essential to manage them in a way that appropriately reflects the environmental and loading conditions they are subjected to.

This seminar introduced and discussed technologies that contribute to the effective management of existing bridges. Dr. Govinda PANDEY (an alumnus of our university) from Rockfield Technologies in Australia was invited to present the bridge vibration-based monitoring system developed by Rockfield, and to engage in discussions on challenges in bridge management.

From Saitama University, Professor Emeritus Hiroshi MUSTUYOSHI presented the current state of deterioration in Japanese bridges, Associate Professor Ji DANG introduced inspection and damage detection methods using UAVs and AI, and Professor Takeshi MAKI shared research examples related to performance evaluation of deteriorated prestressed concrete (PC) bridges. These presentations were followed by in-depth discussions.

