KAZUHIKO KASAI

Professor Emeritus, Tokyo Institute of Technology,
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Education:

B.E. Architecture, Waseda University, Tokyo, JAPAN, 1974.
M.A.Sc. Civil Engineering, University of Waterloo, Ontario, CANADA, 1979.
Ph.D. Civil Engineering, University of California, Berkeley, USA, 1985.

University Position:

Specially Appointed Professor and Industry Collaboration Research Chair, Tokyo Institute of Technology, JAPAN, April 2017 – March 2022.
Director, Structural Engineering Research Center, April 2011 - March 2017.
Professor, Tokyo Institute of Technology, JAPAN, May 1997 - March 2017.
Guest Professor, Tongji University, CHINA, April 2008-present.
Associate Professor, Lehigh University, USA, Jan. 1993 - Apr. 1997.
Associate Professor, Illinois Institute of Technology, USA, June 1992 - Dec. 1992.
Assistant Professor, Illinois Institute of Technology, USA, Aug. 1986 - May 1992.
Lecturer & Assistant Researcher, Univ. of Calif., Berkeley, USA, Jun. 1985 - Jul. 1986.

Selected Awards:

• Tejima Innovation Award, "House Vibration Control Damper and Its Manufacturing Process", Tokyo Institute of Technology, 2021.
• JSSI Contribution Award, "Extensive Service Leading Passive Control Evaluation Committee", Japan Society of Seismic Isolation, 2014.
• JAEE Contribution Award, "Extensive Service for Proposing International Relations and World Conference on Earthquake Engineering", Japan Association for Earthquake Engineering, 2012.
• 2009 Outstanding Earthquake Spectra Paper Award, with Maison, B.F., and Deirlein G., EERI, CA, US.
• 2005 AIJ Research Award, Architectural Institute of Japan, 2005.
• 1991-1996 Presidential Young Investigator (PYI) Award, President George Bush and White House, US.

Selected Publications:

• Kasai, K., Watai, K., Maeda, S., Sato, D., Yosuke, S., (2020) "Equivalent Mass-Spring Modeling Method for Super-Tall Buildings of Increasing Height (Part 1): Over View of Past and Proposed Methods for Bending-shear Model", J. Structural and Construction Eng., Trans. AIJ, No.772, pp.791-801, June. (in Japanese)

• Kasai, K. (2016) "Performance of seismic protective systems for super-tall buildings and their contents", International Journal of High-Rise Buildings, Vol.5, No.3, pp.155-165, Sep.
• Kasai, K., Chimamphant S. and Matsuda, K.(2016) "Performance Curves for Base-Isolated Buildingd Reflecting Effect of super structure vibration period, J. Structural and Construction Eng., Trans. AIJ, No.720, pp.239-249, Feb. (in Japanese)
• Kasai, K., Nam, T-T, and Maison, B.F (2016) "Structural collapse correlative analysis using phenomenological fiber hinge elements to simulate two-directional column deteriorations", Earthquake Engineering & Structural Dynamics, Vol.45, Issue 10, Pages: 1581–1601, August.
• Kasai, K., Matsuda, Y., Motoyui, S., and Kishiki, S., (2015) "Fundamental Study Using Test Loading Scheme for Steel Frame Subassembly with Damper Connection Details", J. Structural and Construction Eng., Trans. AIJ, No.708, pp.309-319, Feb. (in Japanese)

Activities in Professional Organizations:
• Chairman, Response Control Committee, Chairman, Passive Control Evaluation Subcommittee, and Leader, System Analysis Working Group of Japan Society for Seismic Isolation (JSSI), and serving as Chief Editor/Writer of "JSSI Design and Construction Manual for Passively Controlled Buildings", 2001-2022.
• Leader of the E-Defense steel building research projects and US-Japan joint research program including full-scale tests of conventional structure and value-added or response-controlled structures, 2005-2011.
• Japan Side Leader, Research on the Seismic Evaluation and Mitigation Technology of Urban Super-Tall Buildings, Strategic Japanese-Chinese Cooperative Program, Japan Science and Technology Agency (JST), and China National Science Foundation (CNSF), 2010 - 2014.
• Chairman, Subcommittee on Passively Controlled Steel Structures, Architectural Institute of Japan, (AIJ), 2005 –2012.
• Chairman, Committee on House Passive Control Technology, Consortium for Building Research & Development, 2009 -present.
• Editor, Journal of Disaster Research, 2004-present

Summary of Activities:

Prof. Kazuhiko Kasai is an internationally recognized researcher and educator in the areas of steel structure, response control, and earthquake engineering. He lead major research projects whose total budget exceeds 15 million dollars, and attracted more than 4 million dollars for his own research interest.

For 22 years, Prof. Kasai was the chairman of Response Control Committee and the chairman of Passive Control Effects Sub-Committee, Japan Society of Seismic Isolation (JSSI), significantly contributing to Japan's technology for building response control. He was also the chairman of Steel Passive Control Sub-Committee, Architectural Institute of Japan (AIJ), and various committees in Japan. He was the Japan-side leader of E- Defense steel building research and US-Japan projects including major full-scale shake-table tests on conventional structure and value-added or response-controlled structures. He is also the Japan-side leader of the Strategic China-Japan (National Natural Science Foundation of China and Japan Science and Technology Agency) Cooperative Program, with focus on seismic evaluation and mitigation technologies for tall buildings.

Prof. Kasai was the chief editor for "JSSI Manual for Design and Construction of Passively Controlled Building, the 1st to the 3rd editions", the chief editor for all the AIJ monthly journals, and the guest editor for the special issue "Japan's Advanced Technology for Building Seismic Protection", Journal of Disaster Research