

LIST OF PAPERS BY MEMBERS OF
EARTHQUAKE RESISTANT STRUCTURE RESEARCH CENTER

SEISAN-KENKYU	: Monthly Journal of the Institute of Industrial Science, The University of Tokyo
JSCE	: The Japan Society of Civil Engineers
JSME	: The Japan Society of Mechanical Engineers
AJ	: The Architectural Institute of Japan
JCI	: Japan Concrete Institute
JSSC	: The Japan Society of Steel Construction
JGS	: The Japan Geotechnical Society
*	: Written in Japanese

F. Yamazaki and M. A. Ansary: "Horizontal-to-Vertical Spectrum Ratio of Earthquake Ground Motion for Site Characterization," *Earthquake Engineering and Structural Dynamics*, Vol. 26, No. 7, pp. 671-689, John Wiley & Sons, Ltd., 1997.

T. Ganev, F. Yamazaki, T. Katayama and T. Ueshima: "Soil-structure Interaction Analysis of the Hualien Containment Model," *Soil Dynamics and Earthquake Engineering*, Vol. 16, No. 7-8, pp. 459-470, Elsevier, 1997.

M. A. Ansary, F. Yamazaki and T. Katayama: "Stability of Horizontal-to-Vertical Response Spectral Ratio using Japanese Earthquake Database," *Geotechnical Engineering in Asia: 2000 and Beyond*, Proc. of the Third Asian Young Geotechnical Engineers Conference, pp. 1-12, 1997.

F. Yamazaki: "Earthquake Monitoring and Real-Time Damage Assessment Systems in Japan," Proc. of the 5th US-Japan Workshop on Urban Earthquake Hazard Reduction, pp. 397-400, EERI, 1997.

Y. Yoshikawa, Y. Shimizu and F. Yamazaki: "Early Earthquake Warning System for City Gas Network," Proc. of the 5th US-Japan Workshop on Urban Earthquake Hazard Reduction, pp. 401-411, EERI, 1997.

F. Yamazaki and M. A. Ansary: "Stability of H/V Spectrum Ratio of Earthquake Ground Motion," *Transactions of the 14th International Conference on Structural Mechanics in Reactor Technology*, Vol. 7, pp. 37-43, 1997.

H. Nakamura, T. Harada and F. Yamazaki: "Seismic Response Variability in Stochastic Ground Models," *Transactions of the 14th International Conference on Structural Mechanics in Reactor Technology*, Vol. 7, pp. 29-36, 1997.

F. Yamazaki and T. Ganev: "Soil-Structure Interaction Analysis of Hualien LSST Model in Wide Strain Range," *Transactions of the 14th International Conference on Structural Mechanics in Reactor Technology*, Vol. 8, pp. 427-434, 1997.

Y. Shimizu and F. Yamazaki: "Early Earthquake Warning System for City Gas Network," *Seismic Behaviour of Ground and Geotechnical Structures*, Proc. of Discussion Special Technical Session on Earthquake Geotechnical Engineering during 14th International Conference on Soil Mechanics and Foundation Engineering, pp. 317-322, 1997.

K. T. Shabestari and F. Yamazaki: "Attenuation Relation of JMA Intensity Based on JMA-87-Type Accelerometer Records," Proc. of the 24th JSCE Earthquake Engineering Symposium, pp. 169-172, JSCE, 1997.

K. T. Shabestari and F. Yamazaki: "Attenuation of JMA Intensity Based on JMA-87-Type Accelerometer Records," Proc. of the 2nd Symposium on the Mitigation of Urban Disasters by Near-Field Earthquakes, pp. 153-156, March 1997.

F. Yamazaki and M. A. Ansary: "On the Stability of Horizontal-to-Vertical Spectrum Ratio of Earthquake Ground Motion," Bulletin of Earthquake Resistant Structure Research Center, No. 30, pp. 27-44, Institute of Industrial Science, University of Tokyo, March 1997.

F. Yamazaki, S. Noda and K. Meguro: "Development of Earthquake Monitoring and Early Damage Assessment Systems in Japan," Bulletin of Earthquake Resistant Structure Research Center, No. 30, pp. 45-58, Institute of Industrial Science, University of Tokyo, March 1997.

*K. Kajiwara and T. Fujita: "Active Microvibration Control Method Considering Elastic Vibration of a Table," Trans. of JSME, Vol. 63, No. 610, Ser.C, pp. 1893-1900, June 1997.

T. Fujita, Y. Sasaki, H. Abe, M. Tanaka, S. Asakura and M. Nakamaru: "Seismic Proving Test on Reactor Shutdown Cooling Systems (Test and Analytical Method on Pressure Pulsation)," The 1997 ASME Pressure Vessels and Piping Conf., PVP-Vol. 345, pp. 201-206, July 1997.

T. Fujita, Y. Sasaki, H. Abe, S. Asakura, N. Maruyama and N. Yoshika: "Seismic Proving Test on Reactor Shutdown Cooling Systems—Pressure Pulsation of Instrumentation Piping Induced by Seismic Motion," The 1997 ASME Pressure Vessels and Piping Conf., PVP-Vol. 345, pp. 207-211, July 1997.

T. Fujita: "Progress of Application, R&D and Design Guidelines for Seismic Isolation of Civil Buildings and Industrial Facilities in Japan," Int. Post-SMiRT Conference Seminar on Seismic Isolation, Passive Energy Dissipation and Active Control of Seismic Vibrations of Structures, Taormina, Italy, August 1997.

T. Fujita, Y. Sasaki, H. Abe, K. Kuroda, K. Kato, N. Yoshiga, N. Kojima, S. Asakura and M. Nakamaru: "NUPEC Project: Seismic Proving Test on Reactor Shutdown Cooling Systems—(Summary of Results)," Trans. of the 14th Int. Conf. on Structural Mechanics in Reactor Technology, Vol. 8, pp. 145-156, August 1997.

T. Kamada, T. Fujita, T. Hatayama, T. Arikabe, N. Murai, S. Aizawa and K. Tohyama: "Active Vibration Control of Frame Structures with Smart Structures Using Piezoelectric Actuators (Vibration Control by Control of Bending Moments of Columns)," Smart Materials and Structures, Vol. 6, No. 4, pp. 448-456, August 1997.

T. Fujita: "Smart Structures for Active Vibration Control of Buildings," Proc. of The 1997 International EAA Symposium on Active Control of Sound and Vibration (ACTIVE 97), Budapest, Hungary, XIX-XXXVIII, August 1997.

*K. Kajiwara and T. Fujita: "Active Microvibration Control Method Considering Elastic Vibration of Equipment-Table System," Trans. of JSME, Vol. 63, No. 613, pp. 3003-3010, September 1997.

T. Fujita, K. Sakaki and H. Hora: "Smart Structure Using Piezoelectric Actuator for Semiactive Control of Wind and Earthquake Response of Buildings," The 8th International Conference on Adaptive Structures and Technologies, Wakayama, Japan, October 1997.

*T. Fujita, K. Sakaki and H. Hora: "Fundamental Study of Structural Response Control by Friction Controllable Active Brace Using Piezoelectric Actuator," Trans. of JSME, Vol. 63, No. 614, pp. 3467-3471, October 1997.

*K. Kajiwara, M. Hayatu, S. Imaoka and T. Fujita: "Large Scale Active Microvibration Control System Using Piezoelectric Actuators Applied to semiconductor Manufacturing Equipment," Trans. of JSME, Vol. 63, No. 615, pp. 3735-3742, November 1997.

*T. Kamada, T. Fujita, T. Hatayama, T. Arikabe, N. Murai, S. Aizawa and K. Tohyama: "Active Vibration Control of Frame Structures with Smart Structure Using Piezoelectric Actuator" (2nd Report, Vibration Control by Combined Use of Bending Moment Control and Axial Force of the Columns)," Trans. of JSME, Vol. 63, No. 613, pp. 3743-3750, November 1997.

*S. Fujita, O. Furuya, T. Fujita, Y. Suizu, Y. Kasahara, T. Teramoto and H. Kitamura: "Vibration Control of High-Rise Buildings Using High-Damping Rubber Damper" (3rd Report, Temperature Dependency and Durability of Cylinder Type High-Damping Rubber Damper)," Trans. of JSME, Vol. 64, No. 617, pp. 86-91, January 1998.

*S. Fujita, O. Furuya, T. Fujita, Y. Suizu, Y. Kasahara, T. Teramoto and H. Kitamura: "Vibration Control of High-Rise Buildings Using High-Damping Rubber Damper (4th Report, Loading Tests of Full-Size Cylinder Type High-Damping Rubber Damper and Examination of Its Vibration Control Performance)," Trans. of JSME, Vol. 64, No. 617, pp. 92-97, January 1998.

T. Fujita, H. Nonaka, C.S. Yang, H. Kondo, Y. Mori and Y. Amasaka: "Active Vibration Control of Frame Structures with Smart Structure Using Magnetostrictive Actuator," SPIE's Symposium on Smart Structures and Materials, March 1998.

K. Ohi and X.G. Lin: "Hybrid Simulation of Seismic Responses of Semi-rigidly Jointed Steel Frames", Bulletin of Earthquake Resistant Structure Research Center, No. 30, pp. 19-26, Institute of Industrial Science, University of Tokyo, July 1997.

K. Ohi and X.G. Lin: "Pseudo-dynamic Tests and Analysis on Semi-rigidly Jointed Steel Frames," Proc. of the 5th International Colloquium on Stability and Ductility of Steel Structures, Vol. 2, pp. 1109-1114, Nagoya, July 1997.

Z. Fu, K. Takanashi, K. Ohi and X.G. Lin: "Non-linear Analysis on the Seismic Behavior of Frames with Semirigid Connection," Proc. of the 5th International Colloquium on Stability and Ductility of Steel Structures, Vol. 2, pp. 1131-1138, Nagoya, July 1997.

K. Ohi, X.G. Lin, A. Nishida, S. Lee and K. Tanaka: "Vibration Tests on a 3-story Steel Building Model with Low-yield-point Steel Dampers," Proc. of the 2nd International Conference on Behavior of Steel Structures in Seismic Areas, pp. 752-759, Kyoto, August 1997.

H. Sun, K. Ohi and K. Takanashi: "A Proposal and Verification about Plastic Design Process with Target Collapse Mechanism for Structures," Proc. of the 7th International Conference on Structural Safety and Reliability, Kyoto, November 1997.

K. S. Lee, S. Onaya, N. Kurasawa, Y. Nakano and T. Okada: "Potential Seismic Risk Assessment of Urban Cities Based on Macro-Zonation Concept," Bulletin of Earthquake Resistant Structure Research Center, No. 30, pp. 91-102, Institute of Industrial Science, The University of Tokyo, March 1997.

Y. Nakano: "Recent Seismic Retrofit Techniques of Existing RC Buildings in Japan," Proc. of the ESNS International Seminar on New Building Construction Technology for the 21st Century, pp. 2-16, ESNS Structure Research Center, Institute of New Technology, Kwangwoon University, February 1998.

J. Koseki and O. Matsuo: "Liquefaction Induced Uplift of Sewer Manholes and Pipes," Proc. of 3rd Asian Young Geotechnical Engineers Conference, pp. 549-557, May 1997.

K. Hayano, T. Sato and F. Tatsuoka: "Deformation Characteristics of A Sedimentary Soft Mudstone from Triaxial Compression Tests using Rectangular Prism specimens," Geotechnique, No. 47, Vol. 3, pp. 439-450, August 1997.

G. L. Jiang, F. Tatsuoka, A. Flora and J. Koseki: "Inherent and Stress State-Induced Anisotropy in Very Small Strain Stiffness of A Sandy Gravel," Geotechnique, No. 47, Vol. 3, pp. 509-521, August 1997.

Y. Sasaki, J. Koseki, K. Shioji, M. Konishi, Y. Kondo and T. Terada: "Damage to Higashinada Sewage Treatment Plant by the 1995 Hyogoken-Nambu Earthquake," Seismic Behaviour of Ground and Geotechnical Structures, Special Volume of TC4 -Proc. of Discussion Special Session on Earthquake Geotechnical Engineering, Hamburg, 6-12 September 1997, Seco e Pinto (ed.), A.A.Balkema, September 1997.

J. Koseki, O. Matsuo, and Y. Hayashi: "Model Tests on Uplift of Sewer Manholes and Pipes Accompanying Deformation of Liquefied Backfill Soil," Proc. of International Symposium on Deformation and Progressive Failure in Geomechanics, Asaoka, Adachi & Oka (eds.), Pergamon, pp. 593-598, October 1997.

K. Sudo, T. Katayama, K. Meguro, A. S. Herath and D. Dutta: "Center-to-Center (INCEDE-NCEER) Cooperative Research and US-Japan Common Agenda on Earthquake Related Issues and the Role of INCEDE Towards Goals of IDNDR," Proc. of the Workshop on Earthquake Engineering Frontiers in Transportation Facilities, Post-Earthquake Reconstruction Strategies: NCEER-INCEDE Center-to-Center Project, Technical Report NCEER-97-0005/INCEDE Report No. 1997-01, pp. 19-24, August 1997.

K. Sudo and K. Meguro: "Seismological Aspects of the Hyogo-ken Nambu Earthquake, the Kobe Earthquake, of 17 January 1995," Proc. of the Workshop on Earthquake Engineering Frontiers in Transportation Facilities, Post-Earthquake Reconstruction Strategies: NCEER-INCEDE Center-to-Center Project, Technical Report NCEER-97-0005/INCEDE Report No. 1997-01, pp. 27-28, August 1997.

*K. Sudo: "How much the earthquake insurance system could mitigate the disaster of the Kobe earthquake to householders in Japan," Programme and Abstracts, The Seismological Society of Japan, No. 2, C-38, September 1997.

*K. Sudo: "What lessons from the Kobe earthquake could be helpful to the developing world?," SEISAN-KENKYU, Vol. 49, No. 11, pp. 1-2, Institute of Industrial Science, University of Tokyo, November 1997.

*K. Sudo: "Seismological aspects of the Kobe earthquake," SEISAN-KENKYU, Vol. 49, No. 11, pp. 3-6, Institute of Industrial Science, University of Tokyo, November 1997.

K. Meguro and T. Hatem: "Development and Application of A New Model for Fracture Behavior Analysis of Structures," Proc. of the Workshop on Earthquake Engineering Frontiers in Transportation Facilities, Post-Earthquake Reconstruction Strategies: NCEER-INCEDE Center-to-Center Project, Technical Report NCEER-97-0005/INCEDE Report No. 1997-01, pp. 265-279, August 1997.

K. Meguro and T. Hatem: "An Efficient Technique for Farcture Analysis of Structures," Bulletin of Earthquake Resistant Structure Research Center, No. 30, pp. 27-44, Institute of Industrial Science, University of Tokyo, March 1997.

K. Meguro and T. Katayama: "Simulation of Collapse Process of Elevated Expressway Bridges Due to the Kobe Earthquake," Proc. of the Workshop on Earthquake Engineering Frontiers in Transportation Facilities, Post-Earthquake Reconstruction Strategies: NCEER-INCEDE Center-to-Center Project, Technical Report NCEER-97-0005/INCEDE Report No. 1997-01, pp. 155-162, August 1997.

K. Konagai and T. Katsukawa: "Real Time Control of A Shaking Table for Simulating Soil-FlexibleStructure Interaction," Bulletin of Earthquake Resistant Structure Research Center, No. 30, pp. 27-44, Institute of Industrial Science, University of Tokyo, March 1997.

A. Mikami and K. Konagai: "A Simplified Evaluation Method of Dynamic Interaction between Closely Spaced Embedded Foundations of Arbitrary Shapes," Bulletin of Earthquake Resistant Structure Research Center, No. 30, pp. 27-44, Institute of Industrial Science, University of Tokyo, March 1997.

K. Konagai and T. Nogami: "Simulation of Soil-Structure Interaction on a Shaking Table," Numerical and Physical Modeling for Dynamic Soil-Structure Interaction, Geotechnical Special Technical Publication, Geo-Institute, ASCE, Vol. 64, pp. 91-106, July 1997.

T. Nogami, S. Zhen, A. Mikami and K. Konagai: "Simplified Approach for Dynamic Soil-Structure Interaction Analysis of Rigid Foundation," Numerical and Physical Modeling for Dynamic Soil-Structure Interaction, Geotechnical Special Technical Publication, Geo-Institute, ASCE, Vol. 64, pp. 26-46, July 1997.

K. Konagai and T. Matsushima: "Key Parameters Governing Dynamic Granular Slope Stability," Journal of Japan Society of Dam Engineers, Vol. 7, No. 1, pp. 27-31, 1997.

K. Kawaguchi, K. Oda and Y. Hangai: "Exeriments and Construction of Truss Structure Stabilized by Cable Tension," Proc. of the IASS International Symposium '97 on Shell & Spatial Structures, Vol. 1, pp. 421-429, November 1997.

Y. Hangai: "Shape Analysis of Spatial Structures," Proc. of the International Symposium on the Structural Analysis and Design of Spatial Structures, pp. 80-100, STRESS (Advanced Structure Research Station), Hanyang University, Seoul, Korea, June 1997.

S. Kim, M. Kang, T. Kwun and Y. Hangai: "Dynamic Instability of Shell-Like Shallow Trusses Considering Damping," Computers & Structures, Vol. 64, No. 1-4, pp. 481-489, October 1997.

S. Taki and Y. Hangai: "Optimal Shapes for Dynamic Buckling of Shallow Arches Subjected to Up-and-Down Earthquake Excitation," Proc. of the International Colloquium on Computation of Shell & Spatial Structures, pp. 355-360, Department of Civil Engineering, National Taiwan University, November 1997.

M. Fernandez, K. Mitsui, A. Nishida and Y. Hangai: "Optimal Shapes of Towered Shells of Revolution Against El Centro and Hachinohe Earthquakes," Proc. of the International Colloquium on Computation of Shell & Spatial Structures, pp. 367-372, Department of Civil Engineering, National Taiwan University, November 1997.

T. Kanemitsu and Y. Hangai: "Member Arrangement of Spatial Structures in Construction Process," Proc. of IASS International Symposium '97 on Shell & Spatial

Structures, Vol. 1, pp. 367-373, Nanyang Technological University, Singapore, November 1997.

K. Kawaguchi, K. Oda and Y. Hangai: "Experiments and Construction of Truss Structure Stabilised by Cable Tension," Proc. of IASS International Symposium '97 on Shell & Spatial Structures, Vol. 1, pp. 421-429, Nanyang Technological University, Singapore, November 1997.

A. Nishida and Y. Hangai: "Wave Propagation Properties of Lattice Structures," Proc. of IASS International Symposium '97 on Shell & Spatial Structures, Vol. 2, pp. 641-649, Nanyang Technological University, Singapore, November 1997.

M. Takayama, T. Nakagawa, K. Fujita and Y. Hangai: "The Effect of Loading Mode on Failure Characteristics and Elasto-Plastic Behaviour of Free-Formed Reinforced Concrete Shells," Proceedings of IASS International Symposium '97 on Shell & Spatial Structures, Vol. 2, pp. 801-809, Nanyang Technological University, Singapore, November 1997.