

**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

AIJ : The Architectural Institute of Japan

JCI : Japan Concrete Institute

JSSC : The Japan Society of Steel Construction

JGS : The Japanese Geotechnical Society

JAEE : The Japan Association for Earthquake Engineering

* : Written in Japanese

K. Konagai, M. Numada, A. Zafeirakos, J. Johansson, A. Sadr, and T. Katagiri, An example of landslide-inflicted damage to tunnel in the 2004 Mid-Niigata Prefecture earthquake, *Landslides* 2(2), pp. 159-163, 2005.

D.S. Kim and K. Konagai, Simple approach to obtain ground amplification motion of surface soil deposits with a radical change of depth, *Canadian Geotechnical Journal*, 42(2), 491-498, 2005.

K. Konagai, Data archives of seismic fault-induced damage, *Soil Dynamics and Earthquake Engineering*, 25(7-10), 559-570, 2005.

J. Johansson and K. Konagai, Fault induced permanent ground deformations—an experimental comparison of wet and dry soil and implications for buried structures, *Soil dynamics and earthquake engineering*, 26, 45-53, 2005.

J. Johansson and K. Konagai, Shear band and development length implications for rupture propagation through soil, *JSCE Journal of Earthquake Engineering*, 28, 82-93, 2005.

H. Tahghighi and K. Konagai, Impedence-based winkler spring method for soil pile group, *JSCE Journal of Earthquake Engineering*, 28, 83-84, 2005.

- K. Konagai, J. Johansson, A. Zafeirakos, M. Numada and A. Sadr, Damage to tunnels in the October 23, 2004 CHUETSU earthquake, JSCE Journal of Earthquake Engineering, 28, 75-127, 2005.
- A. Sadr and K. Konagai, A rational analogy for surface deposit rupturing problem, JSCE Journal of Earthquake Engineering, 28, 173-183, 2005.
- K. Abe, J. Johansson and K. Konagai, Flow analysis of dry sand mass using material point method, JSCE Journal of Earthquake Engineering, 28, 96-131, 2005.
- K. Konagai, J. Johansson, A. Zafeirakos, M. Numada, A. Amir and T. Katagiri, Geotechnical hazard for civil-infrastructures in the October 23, 2004, Niigata Chuetsu Earthquake, Japan, Bull., ERS, 38, 3-18, 2005.
- H. Tahghighi and K. Konagai, Nonlinear soil-pile interaction analysis using a rational Winkler spring method, Bull. ERS. 38, 155-163, 2005.
- *E.Sato and T.Fujita, Semi-Active Seismic Isolation System with Controllable Friction Dampers Using Piezoelectric Actuators, Transactions of the Japan Society of Mechanical Engineers, Ser.C, Vol.71, No.702, pp.405-412, 2005.2
- *S.Ueda, M.Akimoto, T.Enomoto and T.Fujita, Study of Roller Type Seismic Isolation Device for Works of Art, Transactions of the Japan Society of Mechanical Engineers, Ser.C, Vol.71, No.703, pp.807-812, 2005.3
- E.Sato and T.Fujita, Excitation Tests of Semi-Active Seismic Isolation System Using MR Dampers, Bulletin of Earthquake Resistance Structure Research Center, No.38, pp.39-47, Institute of Industrial Science, University of Tokyo, 2005.3
- H.Furukawa, T.Fujita, T.Kamada and H.Misoka, Response Analysis for Active-Passive Seismic Isolation System Using Linear Motors for Monocrystal Pullers, Bulletin of Earthquake Resistance Structure Research Center, No.38, pp.49-59, Institute of Industrial Science, University of Tokyo, 2005.3
- S.Ueda, T.Fujita, M.Iiba and T.Enomoto, Experiments and Analysis of Roller Type Isolation Device for Houses, Bulletin of Earthquake Resistance Structure Research Center, No.38,

pp.61-70, Institute of Industrial Science, University of Tokyo, 2005.3

M.Shimazaki, T.Fujita, Y.Hashimoto, H.Yoshioka, T.Kitahara and T.Ogawa, Comprehensive Active Microvibration Control System Using Piezoelectric Actuators for Base-Isolated Precision Manufacturing Facilities, Bulletin of Earthquake Resistance Structure Research Center, No.38, pp.71-80, Institute of Industrial Science, University of Tokyo, 2005.3

*T.Fujita, Microvibration Control Using Smart Materials, The Journal of The Acoustical Society of Japan, Vol.61, No.6, pp.334-339, 2005.6

T.Fujita, State of the Art on Application of Seismic Isolation to Civil and Industrial Structures in Japan, 9th World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, Kobe, Japan, 2005.6

M.Morishita, K.Inoue and T.Fujita, Three Dimensional Seismic Isolation Technology for Nuclear Power Plant Application, 9th World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, Kobe, Japan, 2005.6

K.Takahashi, K.Inoue, A.Kato, M.Morishita and T.Fujita, Development of Three-Dimensional Seismic Isolation for Power Plant, 9th World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, Kobe, Japan, 2005.6

S.Ueda, T.Fujita, M.Iiba and T.Enomoto, Study of Roller Type Isolation Device for Houses, 9th World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, Kobe, Japan, 2005.6

H.Furukawa, T.Fujita, T.Kamada and H.Misoka, Experimental and Analytical Studies of Active-Passive Seismic Isolation System Using Linear Motors for Monocrystal Pullers, 9th World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, Kobe, Japan, 2005.6

E.Sato and T.Fujita, Study of Semi-Active Seismic Isolation System with MR Damper, 9th World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, Kobe, Japan, 2005.6

- M.Shimazaki, T.Fujita, Y.Hashimoto, H.Yoshioka, T.Kitahara and T.Ogawa, Smart Structure of Base-Isolated Semiconductor Factories Using Piezoelectric Actuators for Active Microvibration Control, 9th World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, Kobe, Japan, 2005.6
- I.Iwasaki, J.Ogawa, Y.Takei and T.Fujita, Structure-Borne Noise Control of Steel Bridge Utilizing Shunt Piezoelectric Damping, 9th World Seminar on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, Kobe, Japan, 2005.6
- K.Takahashi, K.Inoue, M.Morishita and T.Fujita, Development of Three-Dimensional Seismic Isolation Technology for Next Generation Nuclear Power Plant Applications, 2005 ASME Pressure Vessel and Piping Division Conference, Denver, USA, 2005.7
- *O.Takahashi, Y.Tsuyuki, N.Ikahata, Y.Matsuzaki and T.Fujita, Development of Oil Damper and Research on Analytical Model with Consideration of Damping Characteristics, Journal of Structural and Construction Engineering (Transactions of AIJ), No.594, pp.49-56, 2005.8
- *A Research on Damping Performances Analytical Model of Brace-Type Oil Damper, Journal of Structural and Construction Engineering (Transactions of AIJ), No.594, pp.57-64, 2005.8
- K.Takahashi, K.Inoue, A.Kato, M.Morishita and T.Fujita, A Development of Three-Dimensional Seismic Isolation for Advanced Reactor Systems in Japan – No.2, 18th International Conference on Structural Mechanics in Reactor Technology (SMiRT 18), Beijing, China, 2005.8
- J. Koseki, T. Sato, S. Mihira, N. Takeya and M. Yoshizawa, Comparison of tensile strength of cement treated sand by various test methods, Proc. of International Conference on Deep Mixing, CD-ROM, 2005.5
- T. Namikawa, Y. Suzuki and J. Koseki, Seismic response analysis of lattice-shaped ground improvements, Proc. of International Conference on Deep Mixing, CD-ROM, 2005.5
- J. Koseki, A simplified procedure to evaluate earthquake-induced displacement of gravity type retaining walls, Proc. of 16th International Conf. on Soil Mechanics and Geotechnical Engineering, Osaka, Vol. 3, pp. 1509-1512, 2005.9

- L.Q. AnhDan and J. Koseki, Small strain behaviour of dense gravel and sand by true triaxial tests, *Soils and Foundations*, Vol. 45, No. 3, pp.21-38, 2005.
- N. HongNam and J. Koseki, Quasi-elastic deformation properties of Toyoura sand in cyclic triaxial and torsional loadings, *Soils and Foundations*, Vol. 45, No. 5, pp.19-38, 2005.
- J. Koseki, T. Yoshida and T. Sato, Liquefaction properties of Toyoura sand in cyclic torsional shear tests under low confining stress, *Soils and Foundations*, Vol. 45, No. 5, pp.103-113, 2005.
- K. Watanabe, J. Koseki and M. Tateyama, Application of high speed digital CCD camera to observe dynamic deformation characteristics of sand, *Geotechnical Testing Journal*, ASTM, Vol.28, No.5, pp.423-435, 2005.
- S. Maqbool, J. Koseki and T. Sato, Effects of large cyclic and creep loading on strength and deformation properties of compacted gravel, *Proc. of 7th International Summer Symposium, International Activities Committee, JSCE*, pp.187-190, 2005.
- J. Koseki, R. Salas-Monge and T. Sato, Plane strain compression tests on cement-treated sands, *Geomechanics: Testing, Modeling, and Simulation*, Geotechnical Special Publication No. 143, ASCE, pp.429-443, 2005.
- S. Shibuya, J. Koseki and T. Kawaguchi, Recent developments in deformation and strength testing of geomaterials, *Deformation Characteristics of Geomaterials -Recent Investigations and Prospects-*, Balkema, pp.3-26, 2005.
- K. Fujii, Y. Nakano, and Y. Sanada, Estimation of Seismic Demand of Multi-story Asymmetric Buildings, *Proceedings of the Second International Conference on Urban Earthquake Engineering*, pp. 435-442, Center for Urban Earthquake Engineering, Tokyo Institute of Technology, 2005.3.
- N. Tokui, Y. Nakano, Y. Sanada, Y. Sakai, H. Suwada, and H. Fukuyama, Development of Simplified Test Method with HFRCC Scaled Models, *Proceedings of the First International Conference on Advances in Experimental Structural Engineering*, Vol. 1, pp. 489-496, ICHIRYUSHA Publisher, 2005.7.

- W. Yang and Y. Nakano, Substructure Online Test by Using Real-time Hysteresis Modeling with A Neural Network, Proceedings of the First International Conference on Advances in Experimental Structural Engineering, Vol. 1, pp. 267-274, ICHIRYUSHA Publisher, 2005.7.
- Y. Nakano and H. Choi, Experimental Study on Seismic Behavior and Crack Pattern of Concrete Block Infilled RC Frames, Proceedings of the 4th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, pp. 323-332, 2005.10.
- Y. Nakano and H. Choi, Seismic Behavior and Crack Pattern of Concrete Block Infilled RC Frames of School Buildings in Korea, Proceedings of the 3rd ESnS International Seminar on Seismic Performance Evaluation and Retrofitting Techniques of Buildings, 2005.10.
- T. Nishikawa, Y. Nakano, Y. Tsuchiya, Y. Sanada and H. Sameshima, Quick Report of Damage Investigation on Buildings And Houses due to October 8, 2005 Pakistan Earthquake (submitted to Capital Development Authority (CDA), Islamabad Government of Pakistan), 26 pp., 2005.11.
- K.Kawaguchi, Y.Suzuki, Damage Investigations of Public Halls in Nagaoka City after Niigata-Chuetsu Earthquake, Bulletin of Earthquake Resistant Structure Research Center, No.38, pp.31-38, March 2005.
- K.Kawaguchi, Generalized Inverse and Computational Mechanics, Proceedings of the 5th International Conference on Computation of Shell and Spatial Structures, June 1-4, 2005 Salzburg, Austria, E. Ramm, W. A. Wall, K.-U. Bletzinger, M. Bischoff (eds.), ea_218.pdf, 4 pages, June 2005.
- K.Kawaguchi, Y.Suzuki, Damage Investigations of Public Halls in Nagaoka City after Niigata-Chuetsu Earthquake 2004 in Japan, Proceedins of IASS 2005, Theory, Technique, Valuation, Maintenance, Mircea Mihailescu and Calin Mircea (eds.), Bucharest, Romania, Vol.1, pp.421-428, Sept. 2005.
- K.Kawaguchi, Masayuki Takata, Three-Dimensional Measurement of an Inflatable Dome during Inflation, Textile Composites and Inflatable Structures, Structural Membranes 2005, E.Onate and B.Kroplin (eds.), pp.4-7, Oct. 2005.
- *K.Kawaguchi, Y.Suzuki, S.Ohya and M.Hattori, Safety of Interior Spaces of Large Enclosures

based on the Damage Investigations of Niigata-Chuetsu and Fukuoka-Seiho-oki Earthquake, SEISAN-KENKYU , Vol.57(2005)n.6, pp.543-545, 2005.11.

*K.Kawaguchi and Y.Suzuki, Extraction of Selfstress Modes and Inextentional Displacement Modes of Tensegrity Structures by Group Theory, Journal of Structural and Construction Engineering (Transactions of AIJ), No.597, pp.77-84, 2005.11.

S.Yoshinaka, H.Tsubota, Y.Mihara and K.Okamura, Novel FRP Arch System Using Adhesive Joints, Journal of The International Association for Shell and Spatial Structures, Vol.46(2005)n.1, pp.11-22, 2005.4.

*S.Yoshinaka and K.Kawaguchi, Vibration Control of Single Layer Lattice Shell Using Distributed MTMD Method, SEISAN-KENKYU, Vol.57(2005)n.6, pp.546-549, 2005.11.

*S.Yoshinaka and K.Kawaguchi, Vibration Control of Large Span Structures Using Distributed MTMD Method – on the configuration of MTMDs, Journal of Structural Engineering, Vol.52B(2006), 2006.3.

Sathiparan, N., Mayorca, P., Nesheli, N., Guragain, R., and Meguro, K., Experimental Study on In-plane and Out-of-plane Behavior of Masonry Wallettes Retrofitted by PP-Band Meshes, Seisan-kenkyu (IIS technical journal), Vol.57, No.6, pp.26-29, 2005.11.

Meguro, K., Mayorca, P., Guragain, R., Sathiparan, N., and Nesheli, N., Shaking Table Experiment of Masonry Buildings and Effectiveness of PP-Band Retrofitting Technique, Seisan-kenkyu (IIS technical journal), Vol.57, No.6, pp.30-33, 2005.11.

Kimiro Meguro, Report on the 2004 Sumatra Earthquake and Tsunami Disaster, ICUS Report No.8, International Center for Urban Safety Engineering, Institute of Industrial Science, The University of Tokyo, p140, 2005.9.

Said Elkholy and Kimiro Meguro, Numerical Study of Collapse Behavior of Steel Buildings due to Extremely High Seismic Load, Proceedings of JSCE Earthquake Engineering Symposium, CD-ROM, 2005.

- Kohiyama, M., Kiremidjian, A., Meguro, K., and Yoshimura, M.: Evaluation of Earthquake Disaster Mitigation Programs for Homeowners in Japan, based on Effective Risk Communication, Proceedings of the First International Conference on Urban Disaster Reduction, Kobe, Japan, 2005.
- Meguro, K., Yoshimura, M., Takase, Y., Goh, B., and Sone, A., Development of Integrated System for Total Disaster Management, Proceedings of the First International Conference on Urban Disaster Reduction, Kobe, 2005.
- Yoshimura, M., Meguro, K., and Kohiyama, M., Survey on Residents' Attitudes for Retrofitting of Existing Vulnerable Houses," Proceedings of the 4th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, pp.213-220, Singapore, 2005.10.
- Kondo, S., and Meguro, K., A Case Study of the Introduction of Disaster Management System at Islamic Republic of Iran, Proceedings of the 4th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, pp.193-202, Singapore, 2005.10.
- Sathiparan, N., Mayorca, P., Nesheli, N., Guragain, R., and Meguro, K., In-plane and Out-of-plane Behavior of PP-band Retrofitted Masonry Wallettes," Proceedings of the 4th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, pp.231-240, Singapore, 2005.10.
- Takashima, M., Koshimura, S., and Meguro, K., Development of Possible Tsunami Exposure Estimation Module for Tsunami Disaster Response, Proceedings of the 4th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, pp.481-488, Singapore, 2005.10.
- Kawin, W., and Meguro, K., Failure Mechanism of Shih-Kang Dam by Applied Element Method," Proceedings of the 4th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, pp.119-128, Singapore, 2005.10.
- Meguro, K., Mayorca, P., Sathiparan, N., Guragain, R., and Nesheli, N., Shaking Table Tests of 1/4 Scaled Masonry Models Retrofitted with PP-band Meshes, Proceedings of the 4th International Symposium on New Technologies for Urban Safety of Mega Cities in

Asia, pp.9-18, Singapore, 2005.10.

Navaratnarajah Sathiparan, Kimiro Meguro, Mayorca Paola, Nesheli Kourosh Nasrollahzadeh, Evaluation of retrofitting masonry structures with polypropylene band meshes by means of diagonal compression tests, Proceedings of JSCE 60th Annual Conference, 1-518, JSCE, 2005.9.

Said Abd-Elfattah Said Elkholy, Kimiro MEGURO, Modeling of steel structures in fire conditions using IAEM: Proceedings of JSCE 60th Annual Conference, 1-608, JSCE, 2005.9.

K. Meguro and M. Takashima, Proposal of a Sustainable Tsunami Disaster Mitigation System for the Indian Ocean Region, ICUS Report No.8, pp. 129-133, International Center for Urban Safety Engineering, Institute of Industrial Science, The University of Tokyo, September 2005.

Nesheli, N., and Meguro, K., Experimental Study on Seismic Rehabilitation of Concrete Columns by Prestressed Carbon Fiber Belts, Bulletin of Earthquake Resistant Structure Research Center, No.38, pp. 135-144, Institute of Industrial Science, University of Tokyo, 2005.3.

Elkholy, S., and Meguro, K., Simulation of Seismic Damage to Steel Buildings, Bulletin of Earthquake Resistant Structure Research Center, No.38, pp. 145-154, Institute of Industrial Science, University of Tokyo, 2005.3.