

**LIST OF PAPERS BY MEMBERS OF
EARTHQUAKE RESISTANT STRUCTURE RESEARCH CENTER**

SEISAN-KENKYU : Bimonthly 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

*J. Suhara, R. Matsumoto, A. Otani, T. Shimada, K. Takahashi, K. Inoue, S. Ikutama, M. Morishita and T. Fujita: Study on Three-Dimensional Seismic Isolation System Applied to Advanced Nuclear Power Plant, Journal of Structural Engineering, Vol.52B, pp.207-220, 2006.3

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 (Part II) , Bulletin of Earthquake Resistance Structure Research Center, No. 39, pp.59-68, Institute of Industrial Science, University of Tokyo, 2006.3

S. Ueda, T. Enomoto and T. Fujita: Applications of Roller Type Isolation Device for Works of Art, Bulletin of Earthquake Resistance Structure Research Center, No. 39, pp.69-77, Institute of Industrial Science, University of Tokyo, 2006.3

*O. Takahashi, Y. Sekiguchi, Y. Tsuyuki, Y. Matsuzaki and T. Fujita: Research about the Analysys Model of Oil Damper under Extremely Small Excitation, Journal of Structural and Construction Engineering (Transactions of AIJ), No.602, pp.103-110, 2006.4

*E. Sato and T. Fujita: Semi-Active Seismic Isolation System with Controllable Viscous Dampers Using Magneto-Rheological Fluid, Transactions of the Japan Society of Mechanical Engineers, Ser.C, Vol.72, No.717, pp.1428-1434, 2006.5

- *N. Morikiyo, T. Fukazawa, K. Yoshie, H. Kitamura, T. Fujita, M. Asano and M. Yasuda: Study on Input Loss in Base-Isolated Buildings Based on Micro-Vibration Records, *AIJ Journal of Technology and Design*, No.23, pp.103-108, 2006.6
- E. Sato and T. Fujita: Semi-Active Seismic Isolation System Using MR Dampers for Buildings, 4th World Conference on Structural Control and Monitoring, San Diego, USA, 2006.7
- M. Shimazaki, T. Fujita, Y. Hashimoto, H. Yoshioka, T. Kitahara and T. Ogawa: Active Microvibration Control Systems Using Piezoelectric Actuators for Base-Isolated Precision Manufacturing Facilities, 4th World Conference on Structural Control and Monitoring, San Diego, USA, 2006.7
- Y. Nakamura, M. Nakayama, M. Yasuda and T. Fujita: Development of Active Six-Degrees-of-Freedom Micro-Vibration Control System Using Hybrid Actuators Comprising Air Actuators and Giant Magnetostrictive Actuators, *Smart Materials and Structures*, Vol.15, No.4, pp.1133-1142, 2006.8
- *M. Shimazaki, T. Fujita, Y. Hashimoto, H. Yoshioka, T. Kitahara and T. Ogawa: Comprehensive Active Microvibration Control Systems Using Piezoelectric Actuators for Base-Isolated Precision Manufacturing Facilities, *Transactions of the Japan Society of Mechanical Engineers, Ser.C*, Vol.72, No.722, pp.3123-3130, 2006.10
- *H. Furukawa, T. Fujita, T. Kamada, S. Sakaragi and H. Misoka: Experimental and Analysis of Active-Passive Seismic Isolation System Using Linear Motors, *Proceedings of the 12th Japan Earthquake Engineering Symposium*, pp.982-985, 2006.11
- Y. Nakano and H. Choi, Residual Seismic Capacity of Concrete Block Infilled RC Frames: Crack Development Mechanism of Concrete Block Wall, *Proceedings of the 3rd International Conference on Urban Earthquake Engineering*, pp. 537-544, Center for Urban Earthquake Engineering, Tokyo Institute of Technology, 2006.3.
- N. Takahashi, H. Shiohara and Y. Nakano, Equivalent Seismic Loss Spectrum for a Performance Based Design of Sustainable R/C Buildings, *Proceedings of the 8th U.S. National Conference on Earthquake Engineering*, Paper No.691, Earthquake Engineering Research Institute, 2006.4.

- K. Fujii, Y. Nakano and H. Sakata, Nonlinear Analysis of Single-story Unsymmetric Buildings with Elasto-plastic Seismic Control Devices, Proceedings of the 8th U.S. National Conference on Earthquake Engineering, Paper No.217, Earthquake Engineering Research Institute, 2006.4.
- Y. Nakano, T. Nishikawa, Y. Tsuchiya, Y. Sanada and H. Sameshima, Damage to Building Structures due to 2005 October 8 Pakistan Earthquake, Proceedings of the Korea-Japan International Seminar on Upgrading Seismic Performance of Masonry Buildings, pp. 65-82, Gansam Partners and Research Institute of Industrial Science and Technology, 2006.5.
- H. Choi, Y. Nakano and N. Takahashi, Estimation of Residual Seismic Capacity of Unreinforced Concrete Block Wall Infilled Reinforced Concrete Buildings, Proceedings of the Korea-Japan International Seminar on Upgrading Seismic Performance of Masonry Buildings, pp. 49-64, Gansam Partners and Research Institute of Industrial Science and Technology, 2006.5.
- Y. Sanada, Y. Nakamura, N. Yamauchi and Y. Nakano, Experimental Study on Masonry Walls Using Interlocking Units, Proceedings of the Korea-Japan Workshop and Seminar on the Performance Enhancement of Masonry Structure, pp. 39-48, Gansam Partners and Research Institute of Industrial Science and Technology, 2006.5.
- K. Konagai, Y. Nakano et al., Advanced Body of the “JSCE/AIJ Mission for Reconstruction Recommendations for Areas Devastated by the May 27, 2006, Java Earthquake, Indonesia”, Provisional Report of the May 27, 2006, Mid Java Earthquake, Indonesia, 31 pp., JSCE and AIJ, 2006.6.
- Y. Sanada, N. Yamauchi, Y. Nakano and Y. Nakamura, A Feasibility Study on Retrofit Method Using Masonry Walls Consisting of Ductile Interlocking Blocks, Proceedings of the 10th East Asia-Pacific Conference on Structural Engineering and Construction, Vol. Materials, Experimentation, Maintenance and Rehabilitation, pp. 3-8, 2006.8.
- N. Takahashi, Y. Nakano and H. Shiohara, Reparability Demand Spectrum of R/C Buildings due to the Lifecycle Seismic Loss Estimation, Proceedings of the First European Conference on Earthquake Engineering and Seismology, Paper No.807, The European Association for Earthquake Engineering, 2006.9.

- H. Choi, Y. Nakano and N. Takahashi, Residual Seismic Performance of RC Frames with Unreinforced Block Wall Based on Crack Widths, Proceedings of the First European Conference on Earthquake Engineering and Seismology, Paper No.748, The European Association for Earthquake Engineering, 2006.9.
- Y. Sanada, Y. Nakamura, N. Yamauchi and Y. Nakano, Seismic Performance of Masonry Walls Using Interlocking Units, Proceedings of the First European Conference on Earthquake Engineering and Seismology, Paper No.508, The European Association for Earthquake Engineering, 2006.9.
- Y. Nakano and H. Choi, Residual Seismic Capacity Estimation of RC Frames with Concrete Block Infill Based on Their Crack Widths, Proceedings of the 5th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, pp. 513-524, 2006.11.
- R. Guragain, K. Worakanchana, P. Mayorca and K. Meguro : Simulation of Brick Masonry Wall Behavior Under Cyclic Loading Using Applied Element Method, Seisan-kenkyu (IIS technical journal), Vol.58, No.6, 2006.
- K. Worakanchana and K. Meguro : Voronoi Applied Element Method for Analysis of the Soil Deposit under the Fault Action, Seisan-kenkyu (IIS technical journal), Vol.58, No.6, 2006.
- N. Sathiparan, P. Mayorca, K. N. Nesheli, R. Guragain and K. Meguro : Experimental Study on Unburned Brick Masonry Wall Retrofitted by PP-Band Meshes, Seisan-kenkyu (IIS technical journal), Vol.58, No.3, 2006.
- F. Uehan, and K. Meguro : A Method to Remotely Measure Microtremors for Vibration Diagnoses of Railway Structures, Structural Eng./Earthquake Eng., JSCE, Vol.23, No.1, 159s-166s, 2006. 4.
- K. Meguro: Development of a new generation Disaster manual –Efficient use of information for total disaster management–, 1st International Forum on Patient Safety, p46, Union of Risk Management for Preventive Medicine, 2006.1.
- K. Worakanchana and K. Meguro : Voronoi Applied Element Method: Theory and Application for Linear and Non-Linear Materials, Proc. of Fifth international symposium on New Technologies of Urban Safety of Mega Cities in Asia, pp. 557-568, Phuket, Thailand,

2006.11.

K. N. Nesheli, N. Sathiparan, R. Guragain, P. Mayorca, F. Ito, H. Kagawa, T. Tsugawa and K. Meguro : Full-Scale Shaking Table Tests on Masonry Buildings Retrofitted by PP-Band Meshes, Proc. of Fifth international symposium on New Technologies of Urban Safety of Mega Cities in Asia, pp. 579-588, Phuket, Thailand, 2006.11.

K. Meguro, D. Ito and Y. Sato : Efficiency of Furniture Overturning Protection Devices During Earthquakes - A Experimental and Numerical Study, Proc. of Fifth International Symposium on New Technologies of Urban Safety of Mega Cities in Asia, pp. 589-597, Phuket, Thailand, 2006.11.

P. Mayorca, N. Sathiparan, R. Guragain and K. Meguro : Comparison of the Seismic Performance of Different Strength Masonry Structures Retrofitted with PP-Band Meshes, Proc. of Fifth International Symposium on New Technologies of Urban Safety of Mega Cities in Asia, pp. 535-544, Phuket, Thailand, 2006.11.

M. Yoshimura and K. Meguro : Development of Fragility Surfaces based on Building Damage Data During the 1995 Kobe Earthquake, Proc. of Fifth International Symposium on New Technologies of Urban Safety of Mega Cities in Asia, pp.461-467, Phuket, Thailand, 2006.11.

R. P. Kumar and K. Meguro : Nonlinear Numerical Modeling of Infinite Media using Applied Element Method, Proc. of Fifth International Symposium on New Technologies of Urban Safety of Mega Cities in Asia, pp. 525-534, Phuket, Thailand, 2006.11.

K. Meguro: Development of Simple, Economic and Efficient Retrofitting Method for Masonry buildings considering Local Availability and Acceptability in Earthquake Prone Regions, Proc. of the Fourth International Conference on Urban Earthquake Engineering, 7pages, Tokyo Institute of Technology, Tokyo, 2006.3.

K. Meguro: Issues for implementation of safer houses in developing countries, Proc. of 100th Anniversary 1906 San Francisco Earthquake Conference, San Francisco, 2006.4.

K. Meguro and M. Takashima: Proposal of a Sustainable Tsunami Disaster Mitigation System Considering the Characteristics of the Indian Ocean Region, the Fourth International Conference on Urban Earthquake Engineering, 7pages, Tokyo Institute of Technology, Tokyo,

2006.4.

- K. Meguro, P. Mayorca, N. Sathiparan, R. Guragain and K. N. Nesheli : Seismic simulation of 1/4 scale unreinforced masonry models retrofitted with PP-band meshes, Proceedings of JSCE 61th Annual Conference, 2006.9.
- M. Yoshimura, K. Meguro and M. Kohiyama: Survey on Residents' Attitudes toward Retrofitting of Existing Seismic Vulnerable Houses in Japan, Bulletin of Earthquake Resistant Structure Research Center, No. 39, Institute of Industrial Science, University of Tokyo, pp.105-114, 2006.3.
- M. Takashima, S. Koshimura and K. Meguro: Development of Possible Tsunami Exposure Estimation Module for Tsunami Disaster Response, Bulletin of Earthquake Resistant Structure Research Center, No. 39, Institute of Industrial Science, University of Tokyo, pp.115-120, 2006.3.
- K. Worakanchana and K. Meguro: Voronoi Applied Element Method for Structural Analysis: Theory and Application for Linear and Non-Linear Materials, Bulletin of Earthquake Resistant Structure Research Center, No. 39, Institute of Industrial Science, University of Tokyo, pp.121 -140, 2006.3.
- K. Meguro, P. Mayorca, R. Guragain, N. Sathiparan and K. N. Nesheli: PP-Band Retrofitting Technique: Affordable, Acceptable and Feasible Method for Developing Countries, Bulletin of Earthquake Resistant Structure Research Center, No. 39, Institute of Industrial Science, University of Tokyo, pp.141 -148, 2006.3.
- 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, 2006.
- H. Tahghighi and K. Konagai, "Numerical analysis of non-linear soil-pile interaction under lateral loads," Soil dynamics and earthquake engineering, 27, 463-474, 2006.
- K. Abe, J. Johansson and K. Konagai, "A new method for run-out analysis and motion prediction of rapid and long-traveling landslides with MPM," Journal of Structural Mechanics and Earthquake Engineering, JSCE, 63(1), 93-109, 2007.

- K. Konagai, K. Oguni, A. Akbar, H. Kodama and T. Ikeda, "Damage and rehabilitation in areas affected by the October 8, 2005, Kashmir Earthquake, Pakistan," *Bull. ERS.* 39, 1-11, 2006.
- L.Q. AnhDan, J. Koseki and T. Sato: Evaluation of quasi-elastic properties of gravel using a large-scale true triaxial apparatus, *Geotechnical Testing Journal, ASTM*, Vol.29, No.5, pp.374-384, 2006.
- T. Namikawa and J. Koseki: Experimental determination of softening relations for cement-treated sand, *Soils and Foundations*, Vol.46, No.4, pp.491-504, 2006.
- J. Koseki, T. Sasaki, N. Wada, J. Hida, M. Endo and Y. Tsutsumi: Damage to earth structures for national highways by the 2004 Niigata-ken Chuetsu earthquake, *Soils and Foundations*, Vol.46, No.6, pp.739-750, 2006.
- L.I.N. DeSilva, J. Koseki, T. Sato and L. Wang: High capacity hollow cylinder apparatus with local strain measurements, *Geomechanics II: Testing, Modeling and Simulation, Geotechnical Special Publication No. 156, ASCE*, pp.16-28, 2006.
- J. Koseki, R.J. Bathurst, E. Guler, J. Kuwano and M. Maugeri: Seismic Stability of Reinforced Soil Walls, Keynote lecture, *Proc. of 8th International Conference on Geosynthetics*, Yokohama, Vol.1, pp.51-77, 2006.
- S. Nakajima, J. Koseki, K. Watanabe, M. Tateyama and N. Kato: Shaking table model tests on geogrid reinforced soil retaining wall with embedded sheetpile, *Proc. of 8th International Conference on Geosynthetics*, Yokohama, Vol.4, pp.1507-1510, 2006.
- S. Nakajima, J. Koseki, K. Watanabe and M. Tateyama: Evaluation of allowable displacement of retaining walls by shaking table model tests, *Proc. of International Conference on Physical Modelling in Geotechnics*, HongKong, Vol.2, pp.1101-1106, 2006.
- S. Maqbool, Y. Tsutsumi, J. Koseki and T. Sato: Effect of lubrication layers on dynamically and statically measured small strain stiffness of dense Toyoura sand, *Proc. of International Symposium on Geomechanics and Geotechnics of Particulate Media*, Yamaguchi, pp.55-60, 2006.

- Y. Tsutsumi, J. Koseki, T. Sato and S. Maqbool: Effects of large cyclic and creep loading on local deformation characteristics of compacted gravel, Proc. of International Symposium on Geomechanics and Geotechnics of Particulate Media, Yamaguchi, pp.77-84, 2006.
- T. Kiyota, T. Sato, J. Koseki and Y. Tsutsumi: Comparison of liquefaction properties of in-situ frozen and reconstituted sandy soils, Proc. of International Symposium on Geomechanics and Geotechnics of Particulate Media, Yamaguchi, pp.113-119, 2006.
- L.I.N. DeSilva, J. Koseki and T. Sato: Effects of different pluviation techniques on deformation property of hollow cylinder sand specimens, Proc. of International Symposium on Geomechanics and Geotechnics of Particulate Media, Yamaguchi, pp.29-32, 2006.
- J. Deng, Y. Tsutsumi, H. Kameya, T. Sato and J. Koseki: Effect of thin sandy layer on slope failure caused by the 2004 Chuetsu Earthquake, Proc. of 8th International Summer Symposium, International Activities Committee, JSCE, pp.139-142, 2006.
- L.I.N. DeSilva, T. Sato and J. Koseki: Variations of shear strain along height and perimeter of hollow cylinder specimens during cyclic torsional shear loadings, Proc. of 8th International Summer Symposium, International Activities Committee, JSCE, pp.143-146, 2006.
- O.H. Qureshi, T. Sato, Y. Tsutsumi and J. Koseki: Large scale triaxial tests on gravelly soils retrieved from tunneling sites in Toyama, Proc. of 8th International Summer Symposium, International Activities Committee, JSCE, pp.131-134, 2006.
- R.I. Wicaksono, Y. Tsutsumi, T. Sato and J. Koseki: Comparison of different types of accelerometers in wave velocity measurement of Toyoura sand specimen, Proc. of 8th International Summer Symposium, International Activities Committee, JSCE, pp.135-138, 2006.
- J. Koseki and Y. Tsutsumi: Damage to earth structures by the 2004 Niigata-ken Chuetsu earthquake in Japan and their rehabilitation works, KGS-AGS Joint Workshop, 2006 Fall Geotechnical Engineering Conference, Daegu, Korea, pp. 430-433, 2006.
- S. Maqbool and J. Koseki: Effects of compaction on dynamically and statically measured small strain stiffness of gravel, Proceedings of International Conference on Earthquake Engineering, ICEE, Lahore, pp.161-175, 2006.