

Break 15:15 – 15:30

Parallel Session 6 : Main Hall, Room A & B 15:30 – 16:45

Geotechnical Earthquake Engineering 3 : Main Hall

Physical Modelling on Seismic Performance of Underground Structures / O. Kusakabe (Tokyo Institute of Technology)

Ground Rupture Effects on Critical Lifelines: Strengthening Buried Pipelines to Avoid Post-Quake Disruption / T. Abdoun (Rensselaer Polytechnic Institute)

Effect of Excavation on the Seismic Behavior of Adjacent Tunnel / H.-T. Chen, (National Central University)

Evaluation of Seismic Earth Pressure and Sidewall Friction Acting on an Embedded Footing Based on Centrifuge Tests / S. Tamura (Kyoto University)

Analysis of Quay Wall Response Data during Earthquakes Using Hilbert -Huang-Transformation / C.-J. Lee (National Central University)

Passive Control and Base Isolation 2 : Room A

A New Adjustable Fluid Spring and Damper for Adjustable Passive Response Control / S. Nagarajaiah (Rice University)

Full-Scale Tests of Frame Subassemblies and Dampers to Be Used for E-Defense 5-Story Building Specimen / K. Kasai (Tokyo Institute of Technology)

Seismic Retrofitting of Low-Rise Buildings via Out-Frame Systems Connected by Viscous Dampers / M. Tsuji (Kyoto University)

Current Implementation Practices of Passive Energy Dissipaters in the United States / H. K. Miyamoto (Miyamoto International, Inc.)

Seismic Hazard Mitigation Planning and Human Behavior 2 : Room B

A Simple Method to Evaluate Potential Physical Damage in Urban Areas for Risk Management Purposes / F. Vidal (Universidad de Granada)

Towards Incombustible Cities: Probability Function of Remainder for Estimating the Life Span of Buildings / T. Osaragi (Tokyo Institute of Technology)

Earthquake Risk Assessment and Optimal Risk Management Strategy for Hi-Tech Fab in Taiwan / W.-K. Hsu (National Central University)

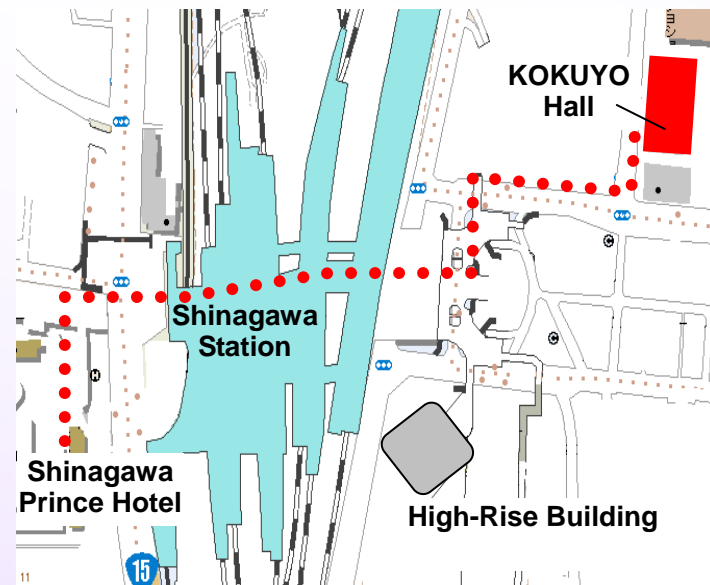
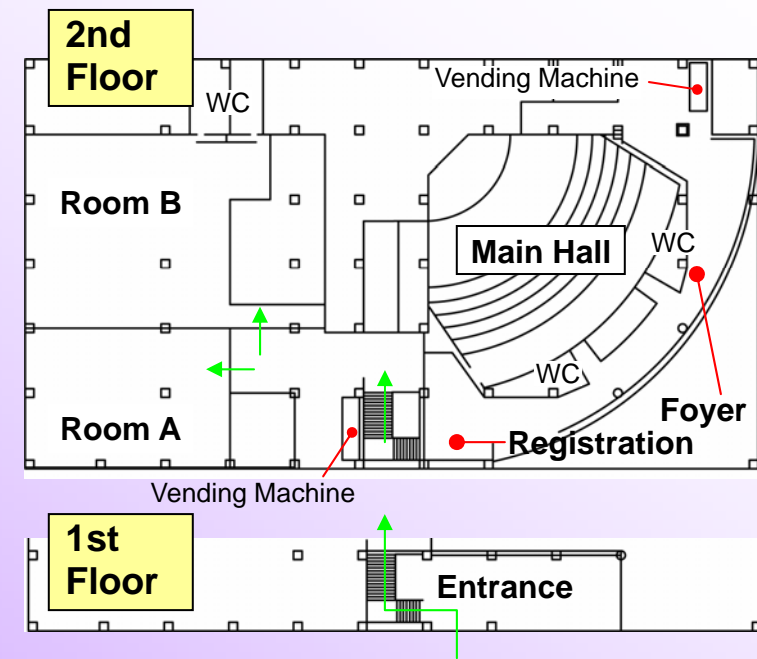
Social Difficulties Induced by Recent Earthquakes in Japan / K. Seo (Tokyo Institute of Technology)

Seismic Microzonation of Addis Ababa by Combining Analytical Procedure and Microtremor Measurements / M. Haile (Addis Ababa University)

Break 16:45 – 17:00

Closing Session : Main Hall 17:00 – 18:00

Closing Address / K. Tokimatsu (Tokyo Institute of Technology)



5th International Conference on Urban Earthquake Engineering

Tuesday, March 4 - Wednesday, March 5, 2008

Center for Urban Earthquake Engineering (CUEE) is pleased to present the 5th international conference on Urban Earthquake Engineering on March 4-5, 2008. In the upcoming conference, we will have four keynote lectures, each followed by parallel sessions on Engineering Seismology, Geotechnical Earthquake Engineering, Seismic Hazard Mitigation Planning and Human Behavior, Tsunami, Socioeconomic Issues, as well as Concrete, Steel, Bridge, and Passive Control and Base Isolation. The conference will offer a range of dynamic and exciting presentations by domestic and overseas experts in these fields. We hope that the conference will be a good occasion for everyone who is interested in Urban Earthquake Engineering. Please join us at the conference.



(This Photo by 9th Regional Coast Guard Headquarters)



Niigata prefecture damaged by Chuh-Etsu-Oki earthquake on July, 2007.

		Main Hall	Room A	Room B
4-Mar	9:00-9:30		Registration	
	9:30-10:45	Opening Address & Keynote Lecture 1 (Main Hall)		
	10:45-11:00	Break		
	11:00-12:15	Engineering Seismology 1	Concrete Structures 1	Socioeconomic Issues
	12:15-13:15	Lunch		
	13:15-14:30	Engineering Seismology 2	Concrete Structures 2	Steel Structures & Response Analysis of Structures 1
	14:30-14:45	Break		
	14:45-16:00	Engineering Seismology 3	Concrete Structures 3	Steel Structures & Response Analysis of Structures 2
	16:00-16:15	Break		
	16:15-17:45	Keynote Lectures 2 & 3 (Main Hall)		
18:00-20:00	Welcome Party (Room B)			
5-Mar	9:00-9:15	Registration		
	9:15-11:00	Geotechnical Earthquake Engineering 1	Tsunami	Bridge Structures
	11:00-12:00	Poster Session (Foyer)		
	12:00-13:00	Lunch		
	13:00-13:45	Keynote Lecture 4 (Main Hall)		
	13:45-14:00	Break		
	14:00-15:15	Geotechnical Earthquake Engineering 2	Passive Control & Base Isolation 1	Seismic Hazard Mitigation & Human Behavior 1
	15:15-15:30	Break		
	15:30-16:45	Geotechnical Earthquake Engineering 3	Passive Control & Base Isolation 2	Seismic Hazard Mitigation & Human Behavior 2
	16:45-17:00	Break		
17:00-18:00	Closing Remarks (Main Hall)			

Venue: KOKUYO Hall, Tokyo, Japan

Registration Fee: Free (Welcome Party on March 4 is charged at 3000 yen/person)

How to register: Mail to reg@cuee.titech.ac.jp with name, affiliate, email address, phone number whether to participate in welcome party.

Contact:

CUEE O-okayama Office: Tel&Fax +81-3-5734-3200

CUEE Suzukakedai Office: Tel/Fax +81-45-924-5576/5199

Email: reg@cuee.titech.ac.jp

Organizer:

Center for Urban Earthquake Engineering, Tokyo Institute of Technology

(Tentative Program)

Tuesday, March 4

Registration 9:00 – 9:30

Opening Session : Main Hall 9:30 – 10:00
Welcome Message / T. Ohmachi (Tokyo Institute of Technology)
President's Message / K. Iga (Tokyo Institute of Technology)

Keynote Session 1 : Main Hall 10:00 – 10:45
Management of Worldwide Earthquake Risks to Business and Industry, Including Direct Losses, Business Interruptions, and Financial Losses / P. Yanev (Engineering Advisory Committee Member for UCB and MIT)

Break 10:45 – 11:00

Parallel Session 1 : Main Hall & Room A 11:00 – 12:15, Room B 11:00 – 12:30

Engineering Seismology 1 : Main Hall

Earthquake Early Warning - Provision to General Public and Future Prospect / O. Kamigaichi (Japan Meteorological Agency)
Experiments of Earthquake Early Warning to Expressway Drivers Using Synchronized Driving Simulators / F. Yamazaki (Chiba University)
Application of Earthquake Early Warning System to a High-Rise Building in Tokyo, Japan, Considering Long-period Strong Ground Motion / Y. Hisada (Kogakuin University)
On-Site Alarm- the Effective Earthquake Early Warning / Y. Nakamura (System and Data Research Co., Ltd)

Concrete Structures 1 : Room A

Effect of Active Confinement on Shear Behaviors of High-Strength Concrete Columns Prestressed Laterally / Y. Shinohara (Tokyo Institute of Technology)
Evaluation of Earthquake Damage of Reinforced Concrete Buildings in Niigata Prefecture / D. Kato (Niigata University)
Performance of Hybrid System with Corrugated Steel Shear Panel Installed in RC Frames / S. Kohno (Kyoto University)
A Convenient Seismic Retrofit Technique of Soft Story RC Buildings / T. Yamakawa (University of the Ryukyus)
Dynamics and Control of Building Structures by Constraints / H.-C. Eun (Kangwon National University)

Socioeconomic Issues : Room B

BCP in Japan: Diffusion and Expectation / H. Maruya (Kyoto University)
BCP in California : Practice and Issues / G. S. Selvaduray (San Jose State University)
Evaluation of Earthquake Resistance Capacity of Businesses : CMP Method / H. Kaji (Tokyo Institute of Technology)
The Current Status and Impact of Performance-based Earthquake Engineering in California Relative to Sustainable (Green) Building Design / L. Nishinaga (CSSC's Review Committee on P.E.E.R & Senior Civil Engineer Department of Publics Works)
Regional Economic Modeling for Disaster Impact Analysis: Trends and Issues / Y. Okuyama (International University of Japan)

Lunch Break 12:15 (12:30) – 13:15

Parallel Session 2 : Main Hall, Room A & B 13:15 – 14:30

Engineering Seismology 2 : Main Hall

Effect of Long-distance Sumatra Earthquakes on High-rise Buildings in Singapore / T.-C. Pan (Nanyang Technological University)
Verification of the National Seismic Hazard Maps for Japan with Actual Observed Strong Motions by K-NET in Last Decade / H. Fujiwara (National Research Institute for Earth Science and Disaster Prevention)
Ground Motions and Damages of the December 26, 2006 Hengchun Earthquake / K.-L. Wen (National Central University)
Seismic Behavior of Office Furniture in High-rise Buildings due to Long-period Ground Motion / S. Midorikawa (Tokyo Institute of Technology)

Concrete Structures 2 : Room A

Collection and Analysis of Dense Experimental Test Data / D. A. Kuchma (University of Illinois)
Seismic Retrofit of Gravity-Load-Designed Concrete Structures / K.-H. Tan (National University of Singapore)
Size Effect on the Shear Strength of RC Deep Beams / K. Kosa (Kyushu Institute of Technology)

Steel Structures, Response Analysis of Structures 1 : Room B

Trends in Structural Design of High-Rise Steel Buildings in Japan / T. Kobori (Nikken Sekkei Ltd.)
Retrofit Design of Office Building Using Seismic Resistant Facade / Y. Kanebako (Kanebako Structural Engineers)
Seismic Isolated Structures Applied to from Detached Houses to High-Rise Apartments in Japan / A. Wada (Tokyo Institute of Technology)
Some New Developments in Earthquake and Health Monitoring of Buildings /

R. Nigbor (University of California, Los Angeles)
Modelling of Plan Irregular Building Subjected to Design Response Spectra for Ipoh (Malaysia) / T. A. Majid (Universiti Sains Malaysia)

Break 14:30 – 14:45

Parallel Session 3 : Main Hall, Room A & B 14:45 – 16:00

Engineering Seismology 3 : Main Hall

Modified Semi Empirical Technique for Prediction of Strong Ground Motion / A. Joshi (Indian Institute of Technology)
Complex Faulting Process and Prediction of Strong Ground Motion from Crustal Deformation / S. Kurita (Tokyo University of Science)
The Detailed Study on the Deep Ground Structure around Hsichu Area, Taiwan / H. Morikawa (Tokyo Institute of Technology)
Exploration of Underground Structure for Estimation of Ground Motion in Fukuoka Area and Practical Use to the Earth Science Education / N. Yamada (Fukuoka University of Education)
Waveform Inversion of Shallow Seismic Refraction Data Using Hybrid Heuristic Search Method / H. Yamanaka (Tokyo Institute of Technology)

Concrete Structures 3 : Room A

Gravity Load Collapse of Reinforced Concrete Columns / M. Yoshimura (Tokyo Metropolitan University)
An Analytical Study on Seismic Behavior of Multi-story RC Frames with Shear-failure Type Partial Walls / H. Hotta (Tokyo Institute of Technology)
Collapse Simulation of Reinforced Concrete Structure under Seismic Excitation / C.-Y. Wang (National Central University)
Evaluation on Residual Load Carrying Capacity of Corroded RC Beams by 3D Lattice Model Analysis / T. Miki (Kobe University)

Steel Structures, Response Analysis of Structures 2 : Room B

Weld Acceptance Criteria for Beam-End Butt Joints in Seismically Loaded Steel Structures / Y. Harada (Chiba University)
Application of Wedge Device to Steel Structures / T. Takamatsu (Hiroshima Institute of Technology)
Seismic Performance of a Multi-Tower Hybrid Structure / Y. Zhou (Tongji University)
Cyclic Tests on Wood Panel Restrained Steel Shear Walls with Slits / T. Hitaka (Kyoto University)
Effect of Aspect Ratios on the Seismic Performance of Steel-concrete Composite Members / H.-L. Hsu (National Central University)

Break 16:00 – 16:15

Keynote Session 2 : Main Hall 16:15 – 17:00
Scalable Wireless Sensor Networks for Structural Monitoring / G. L. Fenves (University of California, Berkeley)

Keynote Session 3 : Main Hall 17:00 – 17:45
New Developments of Strong Motion Prediction Learning from Recent Disastrous Earthquakes - Impact and Lessons from the 2007 Chuetsu-oki Earthquake - / K. Irikura (Kyoto University)

Reception : Room B 18:00 – 20:00

Wednesday, March 5

Registration 9:00 – 9:15

Parallel Session 4 : Main Hall, Room A & B 9:15 – 11:00

Geotechnical Earthquake Engineering 1 : Main Hall

Generalized Scaling Relations for Dynamic Level Ground Response / T. Tobita (Kyoto University)
Experimental Evaluation of Stress State around Pile Group during Lateral Flow of Liquefied Soil / M. Ramin (Tokyo Institute of Technology)
Centrifuge Tests on Double Piles Subjected to Liquefaction-Induced Lateral Flow / J. R. Dungca (De La Salle University)
Behavior of Full -scale Airport facilities under conditions of controlled blast induced liquefaction. -Ishikari, Hokkaido project- / T. Sugano (The Port and Airport Research Institute)
Centrifuge Modelling on Liquefaction Resistance of Unsaturated Ground / J. Takemura (Tokyo Institute of Technology)
Simple Shear Tests on Sand Improved by Cement in Grid Pattern / A. Takahashi (Tokyo Institute of Technology)
Numerical Simulation of Liquefaction Process of Unsaturated Soil / R. Uzuoka (Tohoku University)
Evaluation on Performance of Existing Pile Foundation against Seismic Soil Deformation / S. Mori (Ehime University)

Tsunami : Room A

An Investigation of Potential Tsunami Hazard in South China Sea region / Philip L.-F. Liu (Cornell University)
Verification of Tsunami Loading on a Damaged Building in Khao Lak, Thailand / P. Lukkunaprasit (Chulalongkorn University)
Behavior of a Reinforced-Concrete Building under Tsunami Loading Patterns

by Full-Scale Pushover Test / A. Ruangrassamee (Chulalongkorn University)
Challenges for Tsunami Disaster Reduction by National Highway Administrators / S. Kataoka (National Institute for Land and Infrastructure Management)
Application of Greenbelt to Mitigate Tsunami Hazard / T. Hiraishi (Port and Airport Research Institute)
Deep-sea Survey for Development of Offshore Network Observatory off Kii-peninsula / H. Matsumoto (Japan Agency for Marine-Earth Science and Technology)
Recent Development of the Dynamic Tsunami Simulation / T. Ohmachi (Tokyo Institute of Technology)

Bridge Structures : Room B

Seismic Response of Bridge with C-bent RC Column by Distributed Hybrid Simulation / Y. Takahashi (Kyoto University)
Nonlinear Dynamic Analysis of Isolated Bridges with Unseating Prevention Devices / T.-Y. Lee (National Central University)
Multi-dimensional Hybrid Simulation Using Mixed Displacement and Load Control: Application to Skew RC Bridges / N. Nakata (Johns Hopkins University)
Upper Part of a High-Rise Bridge and its Time-Series Movements via GPS Measurement / J. Wu (National Central University)
Seismic Behavior of Beam-to-column Connections with Fillets of Steel Rigid Frame Piers / K. Ono (Tokyo Institute of Technology)
Nonlinear Responses of Bridge Piers Considering Pirodic and Phase Characteristics of Input Motions / T. Kitahara (Kanto Gakuin University)
Optimal Bilinear Models of Super High Damping Rubber Bearing for Seismic Response Analysis / J. Yoshida (University of Yamanashi)

Poster Session : Foyer 11:00 – 12:00

Strong Motion Simulation and Source Modeling of the 2001 Geiyo (Mj6.8), Japan, Earthquake, Using the Empirical Green's Function Method / M. Ohori (Tokyo Institute of Technology)
An Estimation of Strong Motions in the Damaged Areas for the Noto Hanto Earthquake in 2007 Using Ground Motion Data from Aftershock Observations / K. Motoki (Tokyo Institute of Technology)

A Trial Study on Evaluation of the Phase Spectra in Small Earthquake Records by Using Inversion Technique / K. Shirai (Tokyo Institute of Technology)
Mixel Analysis of High Resolution Satellite Image for Detailed Geomorphologic Classification Mapping / K. Ishii (Tokyo Institute of Technology)
Recognition of Nonlinear Site Response Applying the Moving Window Spectral Ratio Method / C.-W. Chang (National Central University)
A New Spectral Representation of Strong Motion Earthquake Data : Hilbert Spectral Analysis of Taipower Building Station / S.-C. Su (National Central University)

Time Domain BEM Analysis of a Cylinder Embedded in Soil with Anisotropy / T.-A. Tan (Tokyo Institute of Technology)
The Experimental Research of Ductility and Energy Dissipation of Steel Fiber Reinforced Concrete Shear Wall / J. Zhao (Zhengzhou University)
Dynamic Collapse Tests of Miniature Reinforced Concrete Frames under High-gravity Field Using Large Centrifuge / R. Okada (Tokyo Institute of Technology)

Experimental and Numerical Studies on the Damage of Rainforced Concrete Column under Impulsive Loading / N. Kawai (Tokyo Institute of Technology)
Shear Failure of Short Cantilever RC Columns under Cyclic Loading, Experiment and Analysis / I. O. Toma (Tokyo Institute of Technology)
The Influence of Segmental Length on the Shear Behavior of Segmental Concrete Members / C. Sivaleepunth (Tokyo Institute of Technology)
Evaluation of the Local Behavior of Recycled Concrete under Cyclic Loading by Using Image Analysis / Y. Noma (Tokyo Institute of Technology)
Effects of Subgrade Reaction on Deformation and Failure Mode of Pile Group / H. Suzuki (Tokyo Institute of Technology)
Horizontal Bearing Capacity of Pile Foundations Reinforced with Sheet Piles / J. Izawa (Tokyo Institute of Technology)
Nonlinear Stress-Strain Relation of Sand for Expanding Dynamic Analysis / H. Ohkawa (Tokyo Institute of Technology)
Effects of Stress Releasing of Ground on Seismic Stability of Tunnel / S. Shibayama (Tokyo Institute of Technology)
Model Tests on Behavior of Tunnels under Deformation of the Ground upon Earthquake / K. Yashiro (Railway Technical Research Institute)
Eccentric Building Pounding Considering Effects of Underlying Soil / K. Shakya (Tokyo Institute of Technology)
Practical Three-dimensional Effective Stress Analysis Considering Cyclic Mobility Behavior / H. Yoshida (Tokyo Electric Power Services Co., Ltd.)
A Study on Dynamic Characteristics of the Edge of Diluvial Terrace / T. Sekiguchi (Chiba University)
Infrastructure Services in a Time of Disaster: Lessons from the 2004 Indian Ocean Tsunami in Banda Aceh, Sumatra, Indonesia / I. Syabri (Institut Teknologi Bandung)
Small Tsunami in Toyama Bay Caused by the 2007 Noto Hanto Earthquake / S. Inoue (Tokyo Institute of Technology)
Physical Modeling: an Estimation of Wave Forces on an Inland Bridge Subject to Tsunami Bores / T.-L. LAU (Chulalongkorn University)
Inelastic Response and Damage Detection of an RC Building due to Impact of Tsunami Water-Borne Massive Objects / K.-M. Madurapperuma (Tokyo Institute of Technology)
Crack Propagation in Under-matched Joints under Seismic Loading / A.

Tanabe (Tokyo Institute of Technology)
Effect of Backfill Soil on Seismic Response of a Horizontally Curved Bridge / S. Nagata (Central Research Institute of Electric Power Industry)
Vertical Response Characteristics of Rubber Bearings with Asymmetric-nonlinear-elasticity / K. Iiyama (Tokyo Institute of Technology)
Detection of Slope Failure Areas Using High-resolution Satellite Images and Digital Elevation Model for the 2004 Niigata-ken Chuetsu Earthquake, Japan / H. Miura (Tokyo Institute of Technology)
An Evacuation Simulation from Spreading Fire after an Earthquake in the Area Densely Crowded with Wooden Houses / Y. Mabuchi (Tokyo Institute of Technology)

A Study on Response Characteristic of Seismically Isolated Tall Building / D. Sato (Tokyo University of Science)
Numerical Investigation of Beam-Column-Gusset Components in Value-Added Frames / K. Kaneko (Tokyo Institute of Technology)
Equivalent Linearization of System with Nonlinear Viscoelastic Dampers and Its Appliacon to Passive Control Design / Y. Ooki (Tokyo Institute of Technology)
Passive Control Design Method for Building Structure with Bilinear Oil Damper / H. Ito (Tokyo Institute of Technology)
Dynamic Collapse Behavior of 3-D Steel Frame Model / Y. Shimada (Tokyo Institute of Technology)

Dynamic Behavior of Wood Frames with Passive Control Mechanism and Nonstructural Walls Using Shaking Table / K. Matsuda (Tokyo Institute of Technology)
A Conceptual Design of Mobile Gaming System on Public Education of Earthquake Disaster / M. Fujioka (Tokyo Institute of Technology)
An Experimental Approach to Predicting Housing Situation Following Urban Disaster / K. Sato (Tokyo Institute of Technology)

Lunch Break 12:00 – 13:00

Keynote Session 4 : Main Hall 13:00 – 13:45
Modeling and Monitoring for Tall RC Core Buildings / J. Wallace (University of California, Los Angeles)

Break 13:45 – 14:00

Parallel Session 5 : Main Hall, Room A & B 14:00 – 15:15
Geotechnical Earthquake Engineering 2 : Main Hall
Geotechnical Problems in the 2007 Niigata-ken Chuetsu-oki Earthquake / K. Tokimatsu (Tokyo Institute of Technology)
Effects of Local Site Amplification on Damage to Wooden Houses in Near-Source Region for The 2007 Noto Hanto Earthquake / H. Arai (National Research Institute for Earth Science and Disaster Prevention)
Centrifuge Modeling of Rocking of Shallow Foundations for Bridges / B. L. Kutter (UC Davis)
Cyclic Softening of Low-Plasticity Clay and Its Effect on Seismic Foundation Performance / J. P. Stewart (UCLA)
Development of UK-NEES Facilities / G. Madabhushi (University of Cambridge)

Passive Control and Base Isolation 1 : Room A

Comparison of Seismic Behavior of Eccentrically Braced Steel Frames with Fixed Base and Partially Uplift Columns / M. Midorikawa (Hokkaido University)
Mode Control Seismic Design with Dynamic Mass / T. Furuhashi (Nihon University)
Shaking Table Test using Multipurpose Test Bed / T. Takeuchi (Tokyo Institute of Technology)
Performance Based Seismic Design for High-Rise Buildings in Metropolitan City / X.-L. Lu (Tongji University)

Seismic Hazard Mitigation Planning and Human Behavior 1 : Room B

Earthquake Risk Modeling and Its Application in China / Z. Wang (Secretary General of 14WCEE, China)
Disaster Education Using a Portable Virtual-Reality System and Its Efficiency / R. Ohno (Tokyo Institute of Technology)
Trust, Security, and Peace of Mind with Respect to Seismic Risk / S. Fujii (Tokyo Institute of Technology)
Disaster Management System Design Using Moving Objects Database / C.-C. Chou (National Central University)



(Peach Blossoms)

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