Fourth International Conference on Urban Earthquake Engineering

地盤地震工学2 Stress Reduction Factors in Simplified Liquefaction Susceptibility 14:30~16:15 Analysis/ A. Ansal (Bogazici University)

> A Two Mobilized-Plane Model for Soil Liquefaction Analysis/ S. S. Park (Kyungpook National University) and P. M. Byrne

> A Unified Prediction for Liquefaction and Settlement of Saturated Sandy Ground/ R. Uzuoka (Tohoku University) Full-Scale Testing of Piles in Liquefied Ground/ S. A. Ashford

> (University of California, San Diego) Analysis of Piles in Liquefying Soils/ M. Cubrinovski (University of

> Effects of Cyclic Loading on Mobilization of Earth Pressure Acting on Pile Caps/ A. Takahashi (Public Work Research Institute), H. Sugita and S. Tanimoto

> Liquefaction and Laterally Spreading against Bridge Foundations/ S. J. Brandenburg (University of California, Los

> E-Defense Shaking Table Test of Model Ground with Quay Wall on Liquefaction-Induced Lateral Spreading/ K. Tabata (National Research Institute for Earth Science and Disaster Prevention)

鋼構造2 C会場

Multiobjective Heuristic Approaches to Performance-Based 14:30~16:15 Seismic Design/ M. Ohsaki (Kyoto University)

Collapse Test of Steel Structural Model under High Gravity Force Field/ R. Okada (Tokyo Institute of Technology)

Pre-Fabricated Mezzanine Frame/ A. Sato (University of California, San Diego)

Evaluating Seismic Performance of Steel Reinforced Concrete Members/ H. L. Hsu (National Central University) and J. L. Juang Simulation of Progressive Collapse of High-rise Framed-Tube Structure/ H. Tagawa (Tokyo Institute of Technology)

Experimental Verification of Design Criteria of Knee Brace Damper/ Y. Koetaka (Kyoto University)

16:25~17:40 University)

特別講演・まとめ Technical Flaws behind the Katrina Disaster/ T. O'Rourke (Cornell

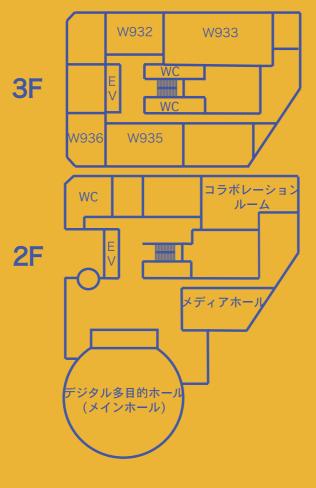
メインホール COE研究教育活動報告のまとめ・今後の展開/S. Midorikawa (Tokyo Institute of Technology) et al.

> The Future of Education in the Pacific Earthquake Engineering Research Center/ S. A. Ashford (University of California, San

閉会の挨拶







参加書:無料

懇親会:3月5日(百年記念館、2.000円)

申し込み:参加ご希望の方は下記へ、お名前、ご所属、ご連絡先を懇親会の出欠とともに 事前登録して下さい。

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問い合わせ先

CUEE大岡山事務局 TEL/FAX 03-5734-3200 CUEEすずかけ台事務局 TEL/FAX 045-924-5576/5199

Fourth International Conference on Urban Earthquake Engineering

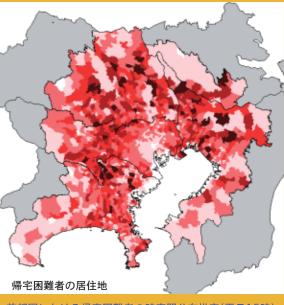
第4回都市地震工学国際会議

東京工業大学都市地震工学センター(Center for Urban Earthquake Engineering (CUEE))主催による第4回都市地震工学国際会議が3月5・6日に開催されます。今回の 会議では、下記のような国内外の著名な研究者の基調講演、招待講演などを含む全体セ ッションと、地震動、津波、地盤・基礎構造、上部構造の耐震、構造物の地震応答解析 の最先端、振動制御、地震防災と人間行動などのパラレルセッションを設け、特に若手 研究者の研究発表を拡充し、過去3回を大幅に上回る百二十余編の発表を予定しており ます。都市地震工学に関心をお持ちの方々の多数のご参加をお待ち申し上げます。

基調講演者: Prof. Atilla Ansal (Bogazici University, Turkey), Prof. Gregory L. Fenves (UC Berkeley, USA), Prof. John B. Mander (University of Canterbury, New Zealand), Dr. Yoshiteru Murosaki (総務省消防研究セ ンター). Prof. Tom O'Rourke (Cornell University, USA)

海外からの主な招待講演者: Prof. Scott A. Ashford (UC San Diego, USA), Dr. Ronald T. Eguchi (ImageCat, Inc., USA), Prof. Larry A. Fahnestock (University of Illinois at Urbana-Champaign, USA), Prof. Amit Kanvinde (UC Davis, USA), Dr. Matthew Purvance (Nevada University, USA), Prof. Ha-Won Song (Yonsei University, Korea), Dr. Michael Willford (ARUP, UK), Prof. S. D. Xue (Beijing University of Technology, China), Prof. Christopher Higgins & Prof. Harry Yeh (Oregon State Univ., USA).





地震防災シミュレーション:首都圏における帰宅困難者の時空間分布推定(平日15時)

2007年3月5日(月) · 6日(火)

東京工業大学大岡山キャンパス 西9号館 東京都目黒区大岡山2-12-1

文部科学省21世紀COE(Center of Excellence)拠点 東京工業大学・都市地震工学センター Center for Urban Earthquake Engineering (CUEE) URL: http://www.cuee.titech.ac.jp



メインホール

学長挨拶 /M. Aizawa (Tokyo Institute of Technology)

基調講演 9:40~10:50 メインホール

Computational Simulation for Earthquake Engineering/ G. L. Fenves (University of California, Berkeley)

Ground Motion Parameters for Vulnerability Assessment/ A. Ansal (Bogazici University)

構造物の地震応答 解析の最先端1 11:00~12:00 A会場

High-Rise Reinforced Concrete Building Using Hydraulic Damper and High-Ductility Concrete and its Vibration Analysis/ N. Koshika (Kajima Corporation), K. Kawano, Y. Omika, Y. Yamamoto and M. Maruta

Equilibration of Element with Multi-Deformation Components for Nonlinear Structural Analysis/ K. Li (CANNY Structural Analysis)

Dynamic Analysis of High-Rize Building with Passive Dampers Using "Building 3D DYNA"/ M. Ishii (Nikken Sekkei Ltd) and T.

地震動1 11:00~12:00 B会場

Strong Ground Motion Evaluation in the Tokyo Metropolitan Area: The 1923 Kanto Earthquake and Future Subduction-Zone Earthquakes/ K. Koketsu (University of Tokyo) and H. Miyake

Long-Period Strong Motions and Damage to Oil Storage Tanks due to the 2003 Tokachi-oki Earthquake/ K. Hatayama (National Research Institute of Fire and Disaster)

Developing Constraints on Extreme Ground Motions Based on Foam Rubber Model/ Y. Uchiyama (Taisei corporation)

橋梁構造1 C会場

Strain-Based Verification Method for Seismic Design of Steel 11:00~12:00 Bridge Structures / H. Ge (Nagoya University)

> Simulation Analysis on Collision Test Between Two Steel Bars/ Y. Kajita (Kyushu University)

昼食

構造物の地震応答 解析の最先端2 13:00~14:45 A会場

Damage Behavior Simulation of RC Structure Subjected to Seismic Loads/ S. Akiyama (ITOCHU Techno-Solutions Corp.), M. Mitsui, S. Sakai and K. Sato

Finite Element Simulation of Long-Period Ground Motions: The 1906 San Francisco Earthquake and Japanese Subduction-Zone Earthquakes/ Y. Ikegami (ITOCHU Techno-Solutions Corp.), K. Koketsu, T. Kimura and H. Miyake

Elastoplastic Beam Element with Consideration of Local Buckling Behavior/ K. Kaneko (Tokyo Institute of Technology)

MIDAS (Modelling, Integrated Design & Analysis Software) and Some Applications/ H. H. Moon (MIDAS Information Technology Co., Ltd.)

Performance Based Seismic Simulation of Structures and Foundations Using LS-DYNA/ M. Willford (ARUP)

地震動2 13:00~14:45

B会場

Site Response in Taipei Urban Area From Dense Microtremor Survey/ K. L. Wen (National Central University), C. M. Lin and C.

Overturning of Freestanding Objects: Applications to Precariously Balanced Rocks and Loss Estimation of Residential Contents/ M. Purvance (University of Nevada, Reno)

Input Motion Synthesis Considering the Information of the Response of Nonlinear Systems/ R. Honda (University of Tokyo) and R. Yamashita

Simulation of the MJ5.4 Earthquake with Use of the Empirical Green's Tensor Spatial Derivatives/ M. Ohori (Tokyo Institute of Technology) and Y. Hisada

A Study on Accuracy of Source Parameters Estimated by Waveform Inversion/ K. Motoki (Tokyo Institute of Technology), H. Yamanaka and K. Seo

Three Dimensional Numerical Simulations for Seismic Response of Large-Scale Underground Infrastructure/ T.Yamada (Tokyo Institute of Technology (Kajima Corporation)), T. Ichimura. N. Ohbo, Y. Yamaki, H. Itami and M. Hori

橋梁構造2 13:00~14:45 C会場

Development of the New Restraining Devices for a Railway Bridge with Isolation Bearings/ A. Toyooka (Kyoto University)

Fatigue Performance of Defect Containing Under-matched Welded Joints/ A. Tanabe (Tokyo Institute of Technology) and C.

The Effect of Impulsive Ground Motion on the Residual Displacement/ G. Watanabe (Tokyo Institute of Technology) and K. Kawashima

Seismic Performance Evaluation of Existing Steel Bridge Frame Piers with Circular Column/ K. Kinoshita (Tokyo Institute of Technology) and C. Miki

Parametric Study for Shear Carrying Capacity of Externally Prestressed Concrete Members/ C. Slivaleepunth (Tokyo Institute of Technology), T. Miki and J. Niwa

基調講演 Reconstruction after Catastrophe in Japan; A Case Study of the 14:55~15:30 1995 Hanshin -Awaji Great Earthquake/ Y. Murosaki (National メインホール Research Institute of Fire and Disaster)

制振・免震構造 15:40~18:25 A会場

Control Devices Incorporated with Shape Memory Alloy/ S.D.Xue (Beijing University of Technology)

Recent Development in Passive Control Technologies For Spatial Structures/ T.Takeuchi (Tokyo Institute of Technology)

Study of Lead Damper for Seismic Isolation System/ K. Morita (Fukuoka University)

Modal Coupling Effects of Mid-Story Isolated Buildings/ M. Kobayashi (Meiji University)

Time-History Analysis Model for Viscoelastic Damper under Long Duration Load/ D. Sato (Tokyo Institute of Technology)

Seismic Performance Evaluation of Existing R/C Buildings with Hysteresis Dampers Based on Energy Balanced Response/ K. Fujii (Tokyo University of Science)

Cumulative Damage of Damper in Elasto-Plastically Damped Buildings/ H. Ito (Tokyo Institute of Technology)

Development of Buckling-Restrained Braces in the United States/ L. Fahnestock (University of Illinois at Urbana-Champaign)

15:40~18:25 B会場

Tsunami Load Determination for On-Shore Structures/ H. Yeh (Oregon State University)

Studies of Past, Present and Future Tsunami Events/ K. Satake (National Institute of Advanced Industrial Science and Technol-

Vulnerability Estimation in Banda Aceh Using the Tsunami Numerical Model and the Post-Tsunami Survey Data/ S. Koshimura (Tohoku University)

Preliminary Results of the Offshore Tsunami Observation by the Kuril Islands Earthquake of 15 November 2006/ H. Matsumoto (Japan Agency for Marine-Earth Science and Technology)

Numerical Simulation on the Effect of Tsunamis on Eastern Coasts of Thailand/ A. Ruangrassamee (Chulalongkorn Univer-

Development of Numerical Tsunami Simulation Technique in Near Fault Area/ S. Inoue (Tokyo Institute of Technology)

Development of Tsunami Simulator with CIP/Multi-Moment Finite Volume Method/ R. Akoh (Tokyo Institute of Technology), S. Ii

Large Model Tests and Numerical Simulation of Surge Front Tsunami Force/ T. Arikawa (Port and Airport Research Institute)

A Scenario of Earthquake-Tsunami Disaster and a Policy of Measures for Road Networks/ S. Kataoka (National Institute for Land and Infrastructure Management)

15:40~18:25 C会場

地震防災と人間行動 Advanced Damage Detection for Hurricane Katrina -Integrating Remote Sensing and VIEWS^TM Field Reconnaissance / R. T. Equchi (ImageCat, Inc.)

> Building Damage Assessment after the 2006 Central Java Earthquake Using High-Resolution Satellite Images/ H. Miura (Tokyo Institute of Technology), M. Matsuoka and F. Yamazaki

> Damage Detection Technique Using Satellite SAR Imagery and its Application to Recent Earthquakes/ M. Matsuoka (NIED, Earthquake Disaster Mitigation Research Center), F. Yamazaki, K. Horie and H. Ohkura

Study on Disaster Information Linkage between Fire Headquarters and Local Government -A Case Study for Landslide Disaster-/ T. Mizuta (Akita National College of Technology) and

What We Learn from Damages and Human Behavior in Condominium Buildings in the 2005 Off West Fukuoka Prefecture Earthquake/ H. Murakami (Yamaguchi University)

Seismic Risk Perception and Communication/ S. Fujii (Tokyo Institute of Technology)

Effectiveness of Floor Area Ratio System by Structures for the Reduction of Fire-Spreading Risk/ Y. Meshitsuka (Tokyo Institute of Technology)

Discrete Choice Analysis for Predicting Emergency Housing Market after Severe Earthquake/ K. Sato (Tokyo Institute of Technology), I. Nakabayashi and S. Midorikawa

18:35~20:05 百年記念館

基調講演 メインホール

Engineering for Complex Geotechnical and Lifeline Systems/ T. 9:40~10:50 O'Rourke (Cornell University)

> Performance Based Earthquake Engineering with a Particular Emphasis on Financial Risk Assessment/ J. B. Mander (University of Canterbury)

コンクリート構造1 Seismic Analysis of Underground Reinforced Concrete Structures A会場

11:00~12:00 and a New Challenge for Numerical Solution/ H. W. Song (Yonsei University)

RC Pile Foundation-Soil Interaction Analysis Using 3-D Finite Element Method/ T. Maki (Saitama University)

Damage Avoidance Design as Applied to Precast Concrete Structures/ R. P. Dhakal (University of Canterbury)

地盤地震工学1 11:00~12:00 B会場

Simulation of Cutting and Filling Ground Behavior in Niigata-ken Chuetsu Earthquake 2004/ K. Fukutake (Shimizu Institute of

SAFETY -An Earthquake Disaster Mitigation Measure Considering Cost-Performance and Environmental Impact/ H. Hazarika (Port and Airport Research Institute)

Evaluation of Seismic Stability of Foundations on Slope/ M. Okamura (Ehime University)

Effects of Near Fault Strong Ground Motion on a Circular Tunnel/ A. Farahan (Tokyo Institute of Technology)

Verification of Generalized Scaling Relations for Dynamic Centrifuge Experiment/ T. Tobita (Kyoto University)

鋼構造1 C会場

Simulating Earthquake Induced Fracture in Steel Structures: 11:00~12:00 Models and Methods/ A. M. Kanvinde (University of California, Davis)

> Performance of Prefabricated Steel Stair Assemblies under Seismic and Gravity Loads/ C. Higgins (Oregon State University) Earthquake Resistance Performance of Flexible-Stiff Mixed Structure for Effective Use of High-Strength Steel/S. H. Oh (RIST

ポスターセッションDevelopment of a New Time-Domain Boundary Element Method 13:00~14:20 in 3-D Elastodynamics for Seismic Analysis/ T. Saitoh (Fukui University), K. Kimoto and S. Hirose

> Wave Propagation in 2D Anisotropic Layered Media Using Boundary Element Method/ T. Alan (Tokyo Institute of Technology) and

> Using Stochastic Finite-Fault Modeling to Study the Site Effect in the Taipei Basin/ C. T. Chen (National Central University) and K.

> Evaluation of Site Amplifications at High Frequencies in the Taipei Basin/ M. W. Huang (National Science and Technology Center for Disaster Reduction), K. L. Wen and J. H. Wang

> Parametric Study on Inelastic Displacement Ratios for Near-Fault Pulse-Type Ground Motion/ C. H. Zhai (Harbin Institute of Technology), S. Li, N. Li, and L. L. Xie

> Parametric Study on Control of Waveforms Using All Pass Function/ K. Shirai (Tokyo Institute of Technology) and T.

> The Effect of Near-Field Ground Motions on Bi-Directional Response of Structures/ A. Ruangrassamee (Tokyo Institute of A Model of Base Rock Structure for Hsinchu Basin, Taiwan Using

> Gravity Survey/ H. Morikawa (Tokyo Institute of Technology), M. Komazawa, H.T. Chen, T. Shosaka, and C. Takahasi

> Some Examples Showing Very Vulnerable Condition in Earthquake Countries/ K. Seo (Tokyo Institute of Technology)

> Seismic Performance of Horizontally Curved Bridge/ S. Nagata (Tokyo Institute of Technology) and I. G. Buckle

> Shaking Table Tests of Two-Story Wood Frames with Passive Control System/ K. Matsuda (Tokyo Institute of Technology) Motion and Control Analysis of Structure under Earthquake

> Excitation/ C. Y. Wang (National Central University), C. C. Chuang, S. H. Chen and S. K. Chen

> Seismic Testing of a Nonlinear Structure with a MR Damper/ T. Y. Lee (National Central University), K. Kawashima and P. C. Chen Analyses of School Building Strengthened by TADAS/ H. T. Chen

> (National Central University) and R. Y. Chen Aluminium Shear Panels as Passive Enegy Dissipation Devices for Steel Braced Frames/ R. Durgesh C (Indian Institute of Technol-

> ogy Kanpur) and B. Dhritiman Experiment of Composite Member Composed of Cedar-Glulam-Timber and Steel Plate Applied Friction Connector/ H. Sakata (Tokyo Institute of Technology), T. Takeuchi, K. Matsuda, and A.

Tomimoto

Space-Time Distribution of Railroad Passengers for Disaster Prevention Planning/ T. Osaragi (Tokyo Institute of Technology) and I. Otani

Examination about Relations Between Stiffness of Floor and Initial Inclination of Furniture at Earthquake Fundamental Study on Establishment of Evaluation Method for Seismic Resistance of Floor Finishing System Part 3/ T. Yokoi (Tokyo Institute of Technology), Y. Yokoyama and Y. Yoshida

An Attempt to Improve the Evacuation Drill Quality with The Multiagent Simulation/ K. Hashimoto (Tokyo Institute of Technology)

Development of Effective Education Tool for Virtual Experience of Environmental Hazard: Earthquake Simulator and Portable VR System/ J. Ryu (Tokyo Institute of Technology) and R. Ohno Field Survey of the Damage Caused by the Central Java

Earthquake of May 27, 2006 / R. M. Syam (Tokyo Institute of Technology) and R. Ohno Dynamic Impact of Massive Tsunami Waterborne Objects on

Structures / M. Madurapperuma (Tokyo Institute of Technology) and A. C. Wijeyewickrema A Series of Micro-Tremor Measurements at a Fill Dam Damaged

by The 2004 Niigata-Chuetsu Earthquake/ T. Ohmachi (Tokyo Institute of Technology) Shear Strength of R/C Members Based on Plastic Theory which

Takes Account of Influence of Axial Force and Amount of Longitudinal Reinforcement/ H. Hotta (Tokyo Institute of Technology) Bi-Axial Non-Linear Macroscopic Response Analysis of Slipping

Type R/C Structure to Strong Earthquake Motion/ H. N. Huy (Tokyo Institute of Technology), K. Nishimura and K. Takiguchi Evaluation on Shear Mechanism of Corroded RC Beams by Lattice

Institute of Technology) and J. Niwa Seismic Pounding of Adjacent Reinforced Concrete Buildings with Non-Equal Story Heights Considering Soil Flexibility Effects/ K. Shakya (Tokyo Institute of Technology) and A. C. Wijeyewick-

Model Analysis Considering Bond Deterioration/ T. Miki (Tokyo

rema Seismic Stability of Rectangular Tunnels with Countermeasures/ J. Izawa (Tokyo Institute of Technology), O. Kusakabe, H. Nagatani, T. Yamada and N. Ohbo

Soil-Pile-Structure Interaction during Multi-Dimensional Shaking through Physical Model Tests Using E-Defense Facility/ H. Suzuki (Tokyo Institute of Technology), K. Tokimatsu, M. Sato and K.

Effects of Nonlinear Dynamic Properties of Surface Soils on Seismic Ground Motion and Building Damage in Ojiya during 2004 Mid Niigata Prefecture Earthquake/ T. Sekiguchi (Tokyo Institute of Technology) and K. Tokimatsu

Pullout Resistance of Anchor Bolt in Cemented Sand Subjected to Shear Strain/ J. Takemura (Tokyo Institute of Technology), Y. Miyamoto and J. Izawa

Analytical Method for Elastic Post-Buckling Behavior of a Bar with Intermediate Compressive Forces Using Modified Slope-Deflection Method/ S. Ogata (Tokyo Institute of Technology)

A Method for Evaluation of Elastic Buckling Strength of H Shaped Steel Member under Shear Bending/ T. Wang (Tokyo Institute of Technology) and K. Ikarashi

A会場

コンクリート構造2 Hysteretic Behavior of RC Knee Joint with Various Anchorage 14:30~16:15 Details/ S. Y. Seo (Chungju National University)

> Lateral Force-Resisting Mechanism of Shear-Critical Reinforced Concrete Shear Wall Estimated from its Local Shear Force/ Y. Sanada (Toyohashi University of Technology)

> Ultimate Strength Equations for R/C Members Retrofitted by Circular Steel Tubes/ Y. Sun (Kobe University)

Behavior of Reinforced Concrete Beams Strengthened with Curtailed Composite Plates/ Y. C. Wang (National Central Univer-

Corrosion/ M. Iwanami (Port and Airport Research Institute), E. Development of High Strength RC Flat Beam System and SRC Flat Beam System/ K. Nishimura (Tokyo Institute of Technology), K.

Takiguchi, H. Hotta, Y. Masui, Y. Tsuneki, Y. Koitabashi, and N.

Structural Performance of RC Columns Subjected to Rebar

Mechanical Properties of Composite PC Bridges Using UFC Truss/ H. Murata (Tokyo Institute of Technology), T. Miki and J. Niwa

Continued to next page $\rightarrow \rightarrow \rightarrow \rightarrow$