

The Fourteenth Taiwan-Korea-Japan Joint Seminar on Earthquake Engineering for Building Structures (SEEBUS 2012)

Osaka, Japan, November 1-2, 2012

Seminar Program

Thursday, November 1

09:00 - 09:30 Registration

09:30 - 09:40 Opening Session

09:50 - 11:10 Session A: Shear Wall (Chair: *Minehiro NISHIYAMA* and *Tae-Jin KIM*)

(1) Nonlinear 3D Solid Finite Element Analysis of RC Shear Wall Subassemblages under Lateral Loads
Kyung Ran HWANG and Han Seon LEE

(2) Static Loading Test of Precast CES Shear Walls in Flexural Failure
Tomoya MATSUI, Takashi FUJII, Suguru SUZUKI and Hiroshi KURAMOTO

(3) Interaction between Over-Turning Moment and Shear Capacity of Seismic Light Gage Bearing Wall
Atsushi SATO, Tetsuro ONO, Hisayuki OKADA, Shigeaki TONAI and Honami NISHIZAWA

(4) Study on Deformation Capacity of R/C Bearing Walls with Rectangular Cross-Section
Based on Experimental Database
Masanori TANI, Hiroshi FUKUYAMA and Susumu KONO

11:20 - 12:00 Session B: Seismic Device (Chair: *Kyung-Won MIN* and *Shih-Yu Joseph CHU*)

(1) New Shape of LCVA with Multi Cells Reducing Wind Induced Responses of Tall Buildings
Dong Ik KIM, Kyung Won MIN, Ji Hun PARK, Ji Young SEONG, Lae Keon KIM, Kyu Seok HWANG, Yong Sik GIL and Dong Guen LEE,

(2) Seismic Performance Evaluation of a School Building Retrofitted with the Ultra-Strength Steel
Yu Lin CHUNG, Xuchuan LIN and Kazuhiro HAYASHI

12:00 - 13:00 Lunch

13:00 - 14:00 Session C: Precast / Prestressed Concrete (Chair: *Chung-Che CHOU* and *Masanori TANI*)

(1) Innovative Construction Technologies for Sustainable Development
Raymond WANG and Samuel Yen-Liang Yin

(1) Flexural Behavior of Prestressed Concrete Beams using Steel-Fiber Reinforced Concrete
Hyeongjae YOON and Minehiro NISHIYAMA

(3) Seismic Performance of Prestressed Concrete Beams -Effect of Bond Strength and Mild Steel Ratio-
Jaeman LEE and Minehiro NISHIYAMA

14:00 - 15:20 Session D: Beam-Column Joint (Chair: **Bing LI** and **Kil-Hee KIM**)

- (1) Considerations of Bond-Slip for Performance-based Design of RC Beam-Column Connections
Hong Gun PARK, Hyeon Jong HWANG and Tae Sung EON
- (2) Anchorage Behavior of Headed Bar in Beam-Column Joints
Chien Kuo CHIU, Ker Chun LIM and Kai Ning CHI
- (3) Flexural Strength of Beam-Column Joint in Reinforced Concrete Building with Soft-FirstStory
Susumu TAKAHASHI, Halim SEFATULLAH, Toshikatsu ICHINOSE, Masaomi TESHIGAWARA and Hiroshi FUKUYAMA
- (4) Experimental Study on Structural Behavior of Concrete-Filled Square tubular Column to H-Beam Connections without Diaphragm
Masaru TERAOKA and Satoshi SASAKI

15:40 - 17:00 Session E: Steel Structures(Chair: **Cheol-Ho LEE** and **Yu-Lin CHUNG**)

- (1) Analytical Investigation of Seismic Performance of WUF-W Connections to Inclined Columns
Yong Wan KIM, Tae Jin KIM, Dae Eon KANG and Jong Ho KIM
- (2) Local Buckling and Inelastic behaviour of I-Shaped Beams Fabricated from High Strength Steel
Cheol Ho LEE, Kyu Hong HAM, Dae Kyung KIM, Chang Hee PARK and Chia Ming UANG
- (3) Experimental Behavior of In-Plane Buckling Braces
Cheng Chih Chen and Wei Chien TANG
- (4) Internal Flange Stiffened Moment Connections with Low damage Capability under Seismic Loading
Chung Che CHOU, Sheng Wei LO and Gin Show LIOU

17:00 – 18:20 Session F: Dynamic Response Characteristics (Chair: **Lyan-Ywan LU** and **Atsushi SATO**)

- (1) Response Modification Factor for Lightweight Steel Panel-Modular Structures as a Dual Frame System
Sung Gul HONG and Eo Jin LEE
- (2) Evaluation of Field Measured Damping Ratio of Tall Concrete Buildings in Korea
Hong Jim KIM, Jin Hee JEONG and Ji Seong JO
- (3) Co-Shape Oscillators for the Seismic Analysis of Inelastic Asymmetric-Plan Buildings
Jui Liang LIN, Keh Chyuan TSAI and Ming Chieh CHUANG
- (4) Early Stage Seismic Damage Assessment of Reinforced Concrete Walls Considering Crack Conditions
Junya YOSHIMURA, Susumu KONO, Masanobu SAKASHITA, Minehiro NISHIYAMA, Takuya NAGAE, Taizou MATSUMORI, Tomohisa MUKAI Masanori TANI, Hiroshi FUKUYAMA and Isao AMANO

19:00 – 21:00 Dinner at Osaka University

Friday, November 2

09:10 - 10:30 Session G: Reinforced Concrete (Chair: *Hiroshi KURAMOTO* and *Ji-Hun PARK*)

- (1) Bond-Strengthening Hooks for RC Members with High Strength Shear-Reinforcing Spirals
Kil Hee KIM, Young Seek KIM, Min Jun KIM, Dong Hwan KIM and Sang Woo KIM
- (2) Axial Elongation of Reinforced Concrete Members
Jung Yoon LEE and Jung Wook PARK
- (3) Plastic Hinge Length of Corroded Reinforced Concrete Beams
Yu Chen OU and Nguyen Dang NGUYEN
- (4) Response of Old-Type RC Columns under Seismic Loading
Bing LI and Thanh Phuon PHAM

10:40 – 11:40 Session H: Masonry Structures (Chair: *Hong-Gun PARK* and *Yu-Chen OU*)

- (1) Effects of Added Viscous Damping on Seismic Response of Masonry-Infilled Frames
Ji Hun PARK
- (2) Analytical Cracking Resistance and Initial Stiffness of Confined Masonry Wing-Walls
Yi Hsuan TU, Hsing Yu YEH and Tsung Hua CHAUANG
- (3) Analytical Model for Strength and Stiffness Prediction of Brick Masonry Infill
Maidiawati, Yasushi SANADA and THANDAR OO

11:40 - 12:20 Session I: Risk / Damage Assessment (Chair: *Shyh-Jiann HWANG* and *Masanobu SAKASHITA*)

- (1) Damage Assessment of Scaled-Down Two-Story Reinforced Concrete School Building Models
Shih Yu CHU, Min Hsiang HU and Ling Chieh Chang
- (2) Sensitivity Studies for Seismic Performance Assessment of Safety-Related Nuclear Structures
Yin Nan HUANG

12:30 - 13:30 Lunch

13:30 - 13:40 Closing Session

15:00 - Construction Site Tour (ACTY Osaka)

18:30 - Dinner at Downtown Osaka