

# **The 16<sup>th</sup> Japan-Taiwan-Korea Joint Seminar on Earthquake Engineering for Building Structures, Seoul, Korea, September 19-20, 2014**

## **Seminar Program**

### Friday, September 19

08:00 Bus from Hoam Faculty House to Bldg. #39, B103 Multi-purpose Conference Hall  
(Two SNU students will be waiting in front of the main building of Hoam Faculty House)

08:30-08:50 Registration

08:50-09:00 Opening Session

Prof. Susumu Kono

Prof. Chung-Che Chou

Prof. Cheol-Ho Lee

09:00-10:30 Session A: Reinforced Concrete Structures I (Bldg. #39, B103)

Chairman: Prof. Sung-Gul Hong and Prof. Masanobu Sakashita

1. Torsional Responses of an RC Low-Rise Building Model Having Irregularities at Ground Story  
Han Seon Lee and Kyung Ran Hwang
2. Experimental Study on the Impact Damage of Reinforced Concrete Walls Caused by Collision of  
Tsunami Debris  
Hidekazu Watanabe, Susumu Kono, and Satoshi Nakamura
3. An Experimental Study On Confined RC Wall Boundary Regions under Uniaxial Monotonic and  
Cyclic Reversal Loadings  
Eko Yuniarsyah, Rafik Taleb, Susumu Kono, and Masanori Tani
4. Bond Strength Model for Beam Re-bars in Interior Beam-Column Joints  
Hong-Gun Park, Hyeon-Jong Hwang, and Tae-Sung Eom
5. Effect of Bi-directional Lateral Loading on In-plane Shear Resistance of RC Wall  
Takanori Matsui, Yuki Idosako, Masanobu Sakashita, and Minehiro Nishiyama

10:30-10:50 Coffee Break

10:50-12:20 Session B: Tall Buildings and Base Isolation (Bldg. #39, B103)

Chairman: Prof. Han Seon Lee and Prof. Chung-Che Chou

6. Structural Design of the Tallest Building in Korea  
Jong-Ho Kim, Yeonki Jung, Jidong Kim, Jaehyuk Lee, and Taejin Kim
7. Study on Dynamic Behavior of High-Rise Base-Isolated Building Based on Its Responses  
Recorded during The 2011 Tohoku-Oki Earthquake  
Kazuhiro Matsuda and Kazuhiko Kasai
8. Experimental Study of a Piezoelectric Sliding Isolation System for Seismic Protection of  
Equipment  
Lyan-Ywan Lu and Kuan-Wen Pong
9. Seismic Performance of Structures Base-Isolated with Rocking Bearing  
Chin-Tung Cheng and Chih-Hong Chao
10. New Structural System with Double Reinforced Concrete Beams for Long-Span Structures  
Jae-Man Lee, Kil-Hee Kim, Kwang-Man Kim, Yong-Jun Lee, and Jung-Yoon Lee

12:20-13:30 Lunch

13:30-15:00 Session C: Steel Structures (Bldg. #39, B103)

Chairman: Prof. Susumu Kono and Prof. Thomas Kang

11. Seismic Performance of Low-Rise Steel Intermediate Moment Resisting Frames  
Hyung-Joon Kim and Jin-Young Park
12. Experimental Evaluation of Composite Columns Confined by Multiple Interlocking Spirals  
Ching-Yu Liang, Cheng-Chih Chen, Cheng-Chiang Weng, Samuel Yen-Liang Yin, and Jui-Chen Wang
13. Cyclic Loading Test on RHS Columns under Bi-directional Horizontal Forces and Constant Axial Force  
Takanori Ishida, Yuko Shimada, and Satoshi Yamada
14. Seismic Tests of Large-Scale Steel Energy Dissipating Braces: Dual-Core Self-Centering Brace and Sandwiched Buckling-Restrained Brace  
Chung-Che Chou, Ping-Ting Chung, and Yu-Tsen Cheng
15. A Case Study of Seismic Performance of Special Concentrically Braced Frame with Strongback System  
Chui-Hsin Chen, Yao Tang, and Yi-Rung Tsai

15:00-15:20 Coffee Break

15:20-16:50 Session D: Damping Systems (Bldg. #39, B103)

Chairman: Prof. Cheng-Chih Chen and Prof. Hyung-Joon Kim

16. Mitigation of Off-Tuning Effect of Floor Vibration by Using Asymmetric Tuned Mass Damper  
Sung-Yong Kim, Cheol-Ho Lee, and Dong-Guen Lee
17. Performance Verification of a Leverage-Type Stiffness-Controllable Mass Damper  
Shih-Yu Chu, Lyan-Ywan Lu, Shih-Wei Yeh, and Chih-Hua Peng
18. A Fast Computer Vision Method for Liquid Height Measurement of TLCs  
Junhee Kim, Chan-Soo Park, and Kyung-Won Min
19. An Assessment for the Design of High-Damping Rubber Bearings Using Bilinear and Effective Linear Models  
Pei-Chuan Chao and Yin-Nan Huang
20. FE Analysis of Multi-Storey RC Frames with Energy Dissipating SIM panels  
Yuri Totoev and Zhiyu Wang

16:50-17:10 Group Photo

17:20-18:20 Bus from SNU Bldg. #39 to "Hotel Novotel Seoul Ambassador Gangnam"

18:20-21:00 Banquet at Restaurant (Bordeaux Hall in the Hotel Novotel Seoul Ambassador Gangnam)

21:00-21:30 Bus from "Hotel Novotel Seoul Ambassador Gangnam" to Hoam Faculty House

Saturday, September 20

08:30 Bus from Hoam Faculty House to Bldg. #39, B103 Multi-purpose Conference Hall  
(Two SNU students will be waiting in front of the main building of Hoam Faculty House)

09:00-10:30 Session E: Masonry Structures and Infilled Frames (Bldg. #39, B103)

Chairman: Prof. Shyh-Jiann Hwang and Prof. Kazuhiro Matsuda

21. Multi-Level Evaluation of Stone Pagodas under Earthquake Loading  
Namhee-Kim Hong and Sung-Gul Hong
22. Seismic Performance Evaluation of Earthquake-Damaged Buildings in Indonesia Affected by Brick Masonry Infill  
Maidiawati, Yasushi Sanada, and Jafril Tanjung
23. Analytical Model for Capacity Curve of Confined Masonry Wing-Walls  
Yi-Hsuan Tu, Tsung-Hua Chuang, and Hsing-Yu Yeh
24. Proposal of Simplified Backbone Curve for URM Wall Infilled RC Frame  
Ho Choi, Kiwoong Jin, and Yoshiaki Nakano
25. Seismic Fragility of Lightly Reinforced Concrete Frames with Masonry Infill  
Jong-Su Jeon, Ji-Hun Park, and Reginald DesRoches

10:30-10:50 Coffee Break

10:50-12:20 Session F: Reinforced Concrete Structures II (Bldg. #39, B103)

Chairman: Prof. Lyan-Ywan Lu and Prof. Yasushi Sanada

26. Seismic Evaluation of RC Slab-Column Frames and Proposed Changes to ACI 369 & ASCE 41  
Thomas H.-K. Kang, Amy C. Hufnagel, YeongAe Heo, and Sohyun Moon
27. Structural Experiments of One-Story One-Bay R/C Moment Resisting Frames with Non-Structural Walls  
Rok-Hyun Yoon, Yasushi Sanada, Suguru Suzuki, Takumi Akahori, and Hiroshi Kuramoto
28. Experimental Study of Alternative Detailing for Coupling Beams  
Shyh-Jiann Hwang, Erwin Lim, Chih-Hung Cheng, Ting-Wei Wang, and Yu-Hsuan Chang
29. Analytical Study on Seismic Behavior of Horizontal Hybrid Structure of Wood and RC  
Yoshihiro Yamazaki and Hiroyasu Sakata
30. Cyclic Testing of Precast High-Strength Reinforced Concrete Columns with Welded Transverse Reinforcement  
Yu-Chen Ou and Harun Alrasyid

12:20-13:20 Lunch

13:20-13:40 Closing Session

Prof. Susumu Kono

Prof. Chung-Che Chou

Prof. Cheol-Ho Lee

14:00-17:00 Bus from SNU Bldg. #39 to Technical tour site (Lotte World Tower construction site)

17:00-18:00 Bus from Lotte World Tower to Hoam Faculty House (Optional)