The 3rd Japan-Korea-Taiwan Joint Seminar on Earthquake Engineering for Building Structures

SEEBUS 2001

November 16 and 17, 2001
Howard International House, Taipei, Taiwan

SEMINAR PROGRAM

Friday, November 16th

8:30 - **Registration**

9:00 - 9:20 **Opening Session**
Fumio WATANABE
Dong-Guen LEE
Keh-Chyuan TSAI

9:20 – 10:30 **Session A: Seismic Analysis / Assessment (I)**
Chairmen: Fumio WATANABE and Han-Seon LEE
Hiroshi KURAMOTO
Sub-structure Pseudo Dynamic Test and Analysis of 6-Story Reinforced Concrete Frame with Soft First Story
Dong-Guen LEE, Hyun-Su KIM, and Kye-Hong NAMGUNG
Analysis of Shear Wall Building Structures with Openings
Shang-Hsien HSIEH and Yuan-Sen YANG
Parallel Sparse Solution for Nonlinear Dynamic Analysis of Large-Scale Building Structures
Heecheul KIM and Sung-Hun JANG
An Evaluation and Response Analysis of a Wall-Frame Structural System with Haunch at the Transfer Floor

10:30 – 10:50 **Coffee Break**

10:50 – 12:20 **Session B: Steel Connections / Pile Foundation**
Chairmen: Dong-Guen LEE and Shyh-Jiann HWANG
Ichiro TAKEUCHI, Nobuyoshi UNO, and Kazuo INOUE
Performance of Bolted Friction Joints with High Slip Coefficient and Super High Tension Bolts
Cheol-Ho LEE
Seismic Design of Rib-Reinforced Steel Moment Connections Based on Equivalent Strut Model
Keiichiro SUITA, Kazuo INOUE, Ichiro TAKEUCHI, and Nobuyoshi UNO
Mechanical Behavior of Bolted Beam-to-Column Connections with Hysteretic Damper
Shen-Haw JU
Modeling Flexible Pile Foundations Using Finite Elements
Madan Bahadur KARKEE and Takashi HORIGUCHI
Dynamic Tests to Evaluate the Bearing Capacity of Piles

12:20 – 13:40 **Lunch**

13:40 – 15:25 **Session C: Seismic Analysis / Assessment (II)**
Chairmen: Keh-Chyuan TSAI and Hitoshi TANAKA
Masaru TERAOKA, Yoshikazu KANOH, Kazuya HAYASHI, and Naoki TAKAMORI
Seismic Evaluation of Subassemblages Consisting of Exterior Column and Halfspan Beams in Lower Part of RC High-Rise Building
Han-Seon LEE and Dong-Woo KO
Seismic Responses of a High-Rise RC Bearing-wall Structure with Bottom Piloti Frames
Maw-Shyong SHEU, Pai-Chi LAN, and Sai-Hong TANG
Seismic Capacity Assessment and Retrofitting of Low-Rise RC Street Building
Sang Whan HAN and Li-Hyung LEE
Seismic Behaviors of Ordinary Moment Resisting Concrete Frames
Liang-Jenq LEU and Min-Hsuan TSAI
Tangent Stiffness Matrix for Nonlinear Analysis of Planar Steel Frames Considering the Effects of Spread of Plasticity
Jang-Hoon KIM and Jae-Kwan KIM
Experimental Implications on Seismic Resistance of Unreinforced Cement Brick Walls

15:25 – 15:45 **Coffee Break**

15:45 – 17:30 **Session D: RC / Composite Member Behavior**
Chairmen: Cheol-Ho LEE and Maw-Shyong SHEU
Hitoshi TANAKA, Tsuguo HIKIDA, and Hiroyuki NAKAJI
The Scale Effects on the Reinforced Concrete Columns with High Axial Load
Dae-Kon KIM and Sung-Hoon KIM
An Experimental Study for Composite Steel Column Comprising with Partial Concrete Encasement to Improve its Fire Resistance
Shyh-Jiann HWANG, Hsin-Wan YU, and Li-Ping CHEN
Analytical Models for Predicting Lateral Load Response of RC Squat Walls
Minehiro NISHIYAMA and Susumu KONO
Scale Effect on Flexural Compression Behavior of Reinforced Concrete Columns
Yung-Chih WANG
The Influence of Steel Bar Curtailment on Seismic Performance of Building Structures
Susumu KONO, Fumio WATANABE, and Akihiro KAJITANI
Stress-Strain Relation of Confined Concrete under Dynamic Loading

18:30 – 20:30 **Banquet**

Saturday, November 17th

9:00 – 10:10 **Session E: Seismic Design (I)**
Chairmen: Masayoshi NAKASHIMA and Liang-Jenq LEU
Motohide TADA, Tomonori FUKUI, Masayoshi NAKASHIMA, and Charles W. ROEDER
Comparison of Strength Capacity for Steel Building Structures between the United States and Japan
Jong-Cheng WU and Hsin-Hsien CHIH
Application of LMI-Based Robust H∞ Control to a Full-Scale Building
Kyung-Won MIN, Jae-Seung HWANG, Sang-Hyun LEE, and Jin-Wook JOUNG
New Active Control Algorithm Based on Probability Distribution of Structural Energy
Ching-Tung HUANG
An Investigation on Inelastic Structural Responses for the 1999 ChiChi Near-Field Ground Motions

10:10 – 10:30 **Coffee Break**

10:30 – 12:00 **Session F: Seismic Design (II)**
Chairmen: Heecheul KIM and Minehiro NISHIYAMA
Iori KANAO, Masayoshi NAKASHIMA, and Liu DAWEI
Post-Buckling Instability and Bracing Effects of RBS Steel Beams Subjected to Large Earthquake Loading
Jinkoo KIM and Yukyung KIM
Design of Unbond Braces Using Capacity Spectrum Method
Cheng-Cheng CHEN, Chin-Hua Wang, and Tien-Chin Hwang
Buckling Strength of Buckling Inhibited Braces
Sung-Gul HONG and Loc-Bae KIM
Seismic Performance of Free-Edge Wall-Ends with Interlocking Spiral Reinforcement
Keh-Chyuan TSAI, Hong-Yuan WANG, Chih-Hong CHEN, Gee-Yu LIU, and Kung-Juin WANG
Substructure Pseudo Dynamic Testing of Low Yield Strength Steel Shear Panels

12:00 - 12:20 **Closing Session**
Fumio WATANABE
Dong-Guen LEE
Keh-Chyuan TSAI

12:20 – 13:40 **Lunch**

14:00 – 16:30 **Technical Tour**