

SEEBUS 2022 in NITech

Program (1st day) 2022.12.10

9:15 Registration (at Bldg.4 Hall)

9:30 Opening

Chairperson: **Chung-Chan HUNG (TW), Masanori TANI (JP)**

- 9:45 **Energy-Based Hysteresis modeling of Reinforced Concrete Members under Cyclic Loading (K1)**
Tae-Sung EOM, Insung KIM, and Hong-Gun PARK
- 10:00 **Seismic Behavior of Concrete Beams with Different Types of Hoops in the Plastic Hinge Region (T1)**
Yu-Chen OU, Hermawan SUTEJO, and Jyun-Lin HUANG
- 10:15 **PLASTIC HINGE MODEL OF REINFORCED CONCRETE COUPLING BEAMS (K2)**
Hyeon-Jong HWANG, Soo-Hyun KIM, Sung-Hyun KIM, Mok-In PARK, and Hong-Gun PARK
- 10:30 **RC Coupling Beams with Different Arrangements of Transverse Reinforcement Tested under Seismic or Wind Loads (K3)**
Tse-An CHOU, Seung Heon LEE, and Thomas KANG
- 10:45 **PUSHOVER ANALYSIS MODELS OF SIMPLE INTERIOR SEISMIC RETROFIT METHODS FOR RC STREET-HOUSES (T3)**
Yi-Hsuan TU, and Chun-Jung LIN
- 11:00 **THICKNESS OF SHEAR FLOW PATH IN RC MEMBERS AT MAXIMUM TORSIONAL STRENGTH (K4)**
Dong-Hwan KIM, Hyeong-Gook KIM, Yong-Jun LEE, Jung-Yoon LEE, and Kil-Hee KIM
- 11:15 **EQUIVALENT LINEAR METHODS FOR LEAD-RUBBER-BEARING SYSTEMS SUBJECTED TO PULSE-LIKE GROUND MOTIONS (T4)**
Yin-Nan HUANG, and Julian ADIPUTRA
- 11:30 **Flexural capacity at pile head interface (J8)**
Himeka KAWANO, Subedi NARESH, Susumu KONO, Taku OBARA, Katsumi KOBAYASHI, Yasuhiro GUNJI, and Takeshi FUKUDA
- 11:45 **SEISMIC PERFORMANCE OF PILE-SUPPORTED SLAB WHARF DECK (K6)**
Decukhang (DK) LEE

12:00 Group Photo 1st & Lunch (Check the Map)

Chairperson: **Hong-Gun PARK (KR), Yi-Hsuan TU (TW)**

- 13:30 **ARTIFICIAL NEURAL-NET BASED HYSTERESIS IDENTIFICATION (K5)**
Sung-Yong KIM, Hong-Rae JANG, and Cheol-Ho LEE
- 13:45 **A Mesh Insensitive Constitutive Model for High-Fidelity 3D Simulations of Concrete Structures under Cyclic Loading (T7)**
Terry YP YUEN, Tzu-Han WEN, Chung-Chan HUNG, and Johnson ZHANG
- 14:00 **CYCLIC LOADING TESTS ON PRE-DAMAGED RC COLUMNS STRENGTHENED WITH UFC PANELS (J11)**
Sua LIM, Masanori TANI, Tomohisa MUKAI, Hidekazu WATANABE, Taku ISHIOKA, Masayoshi KOMIYAMA, Tsubasa HATTORI, and Daisuke MATSUMOTO
- 14:15 **SEISMIC PERFORMANCE OF HIGH-STRENGTH REINFORCED CONCRETE COLUMNS AFTER FIRE EXPOSURE (T8)**
Bo-Jun HUANG, Chung-Chan HUNG, Rong-Jing WANG, Shun-Chih WANG, Ming-Yuan LEI, and Chi-Chung LEE

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- 14:30 Flexural-Shear Behavior of Existing Reinforced Concrete Columns Under High Axial Load and Varying Axial Load. Residual Seismic Performance of a Damaged RC Infilled Wall (T11)
Yi-An LI, Ling-Jyun CHEN, Wen-Cheng SHEN, Pu-Wen WENG
- 14:45 NUMERICAL INVESTIGATION OF THE POST-FIRE PERFORMANCE OF PILOTTYPE RC BUILDING STRUCTURES (K8)
Jinwon SHIN, Yurim CHU, Taejin KIM, and Sung-Mo CHOI
- 15:00 DESIGN AND CONSTRUCTION OF YODOKO SAKURASTADIUM, SUBSTANTIAL PCA CONVERSION AND JAPAN'S FIRST APPLICATION OF BRIGHTLY COLORED CONCRETE FOR ACHIEVING A DECARBONIZED SOCIETY (J5)
Tomonori SHIBUTANI, Yasuhiko YAMASHITA, Kinya TAGAKI, Souichirou KUSHIMA, Yuuki MURAKAMI, and Yoshiyuki NAKASONE
- 15:15 DAMAGE IMAGE GENERATION OF BRIDGE WITH CONDITIONAL GENERATIVE ADVERSARIAL NETWORK (T5)
Tzu-Kang LIN, and Hao-Tun CHANG
- 15:30 Development of Geometrically Nonlinear Mass Damper with Mass Moment of Inertia for Seismically-Excited Buildings (T10)
Chia-Ming CHANG, and Tzu-Lun KAO
- 15:45 COMPARATIVE DAMAGE ASSESSMENT OF STEEL BEAM-TO-BOX COLUMN CONNECTIONS UNDER FIRE AND SUBJECTED TO EARTHQUAKE SHAKING (T12)
Heui-Yung CHANG, Rong-Hong CHEN, Chi-Ming LAI, Sin-Yu Kang, Chu-Tsen LIAO, and Chien-Kuo CHIU

16:00 Break

Chairperson: Kil-Hee KIM (KR), Kazuya MITSUI (JP)

- 16:30 DESIGN AND CONSTRUCTION OF RC SPIDER WEB FRAME SURROUNDED BY ORGANIC SHAPED WALL (J6)
Satoshi KAWAMURA
- 16:45 Seismic Behavior of Low-yield Double Steel Plate and Concrete Shear Walls (T6)
Chin-Tung CHENG, Jhe-Li SU, Chau-Cho YU, Yi-Shan LIN, and Chi-Ming LAI
- 17:00 BI-DIRECTIONAL LOADING TESTS ON RC SHEAR WALLS SUBJECTED TO VARYING AXIAL LOAD (J10)
Ryo YAMADA, Masanori TANI, and Minehiro NISHIYAMA
- 17:15 Residual Seismic Performance of a Damaged RC Infilled Wall (T9)
Chien-Kuo CHIU, Wen-I LIAO, and Chu-Tsen LIAO
- 17:30 UNIAXIAL COMPRESSIVE CAPACITY OF HIGH-STRENGTH CIRCULAR HOLLOW PRECAST CONCRETE-FILLED STEEL TUBE (J9)
Clarissa JASINDA, Susumu KONO, Taku OBARA, Hiroshi HATTA, and David MUKAI
- 17:45 CENTRIFUGE TESTS FOR SINGLE-DEGREE-OF-FREEDOM (SDOF) FRAME STRUCTURE WITH SHALLOW FOUNDATION (K7)
Jin-Young PARK, Hong-Gun PARK, Dong-Kwan KIM, and Jin-Woo KIM
- 18:00 Close First-day Seminar

Program (2nd day) 2022.12.11

9:40 Registration (at Bldg.4 Hall)

Chairperson: **Thomas KANG (KR)**, **Yin-Nan HUANG (TW)**

10:00 **MODELLING ISSUE OF STEEL BRACES USING A PHYSICAL MODELING METHOD (K9)**

Dong-Hyeon SHIN, and Hyung-Joon KIM

10:15 **EFFECT OF LOADING PROTOCOL ON HYSTERETIC RESPONSE AND STIFFNESS DETERIORATION OF STEEL HOLLOW STRUCTURAL SECTION COLUMNS (J2)**

Itsuki MATSUMOTO, Kazuya MITSUI, and Kikuo IKARASHI

10:30 **EXPERIMENTAL DEVELOPMENT OF KNIFE-PLATE-CONNECTED STEEL PANEL DAMPERS (T2)**

Po-Chien HSIAO, and Chun-Yi LI

10:45 **NUMERICAL INVESTIGATION ON FLEXURAL BUCKLING STRENGTH OF H-SECTION COLUMNS CONSISTING OF ULTRA-HIGH STRENGTH STEEL FLANGE AND NORMAL STRENGTH STEEL WEB (J7)**

Shotaro HAYAKASHI, Hayato ASADA, and Kenzo TAGA

11:00 **A STUDY ON BUCKLING STRENGTH OF REINFORCED ANGLE STEEL POST IN TRANSMISSION TOWERS (J4)**

Shunichi TAKAGI, and Atsushi SATO

11:15 **EFFECT OF ASSEMBLY TYPES ON BOLTED CONNECTION STRENGTH CONSIST OF BUILT-UP ANGLE MEMBERS UNDER MONOTONIC TENSILE FORCE (J1)**

Hideo HAIKATA, Kikuo IKARASHI, and Kazuya MITSUI

12:00 **Group Photo 2nd and Closing**