

Thursday, October 16th

1F Conference Room

09:15 ~ 09:55	Near-fault Forum in commemoration of the 15th anniversary of Chi-Chi Earthquake	Keynote1 (Chair: Chin-Hsiung Loh) Multi-Scale Heterogeneity Model for Predicting Strong Ground Motions from Mega-Thrust Subduction Earthquakes / Kojiro Irikura , Emeritus Professor, Kyoto University
09:55 ~ 10:35		Keynote2 (Chair: Yih-Min Wu) Kinematic and Dynamic modeling of near-fault motions from modern earthquakes / Kuo-Fong Ma , Professor, National Central University
10:50 ~ 11:30		Keynote3 (Chair: Jianzhong Li) Seismic vulnerability statistical analysis of various building structures in Sichuan Province Lushan “4.20” Ms 7.0 strong earthquake / Baitao Sun , Professor, IEM, CEA
11:30 ~ 12:10		Keynote4 (Chair: David Lau) Seismic Design of Protective Systems for New and Existing Buildings Considering Recorded Performance / Kazuhiko Kasai , Professor, Tokyo Institute of Technology

13:40 ~ 15:40	R101-1 / Engineering Seismology	R103-1 / Seismic evaluation and retrofit of existing structure	R202-1 / Geotechnical earthquake engineering	R205-1 / Innovative design of new structures & Others
	Chairs: Vivek Walia Che-Min Lin	Chairs: Hsin-Yang Chung Kazushi Shimazaki	Chairs: Sockheang Sreng Wen-Yi Hung	Chairs: Hideaki Kato Shen-Haw Ju
	7-104-Shu-Hsien Chao Generation of input earthquake ground motion time history for near-fault site	22-193-Kenta Ishihana Research and development of laminated type base isolation device for practical application using urethane elastomer	14-008-Emilio Morales The Abatan Bridge - a forensic study on how and why it failed	36-278-Shen-Haw Ju Advantage of multi-span continuous bridges for highspeed trains
	7-094-Mandeep Pokhrel The effect of ground motion selection procedure and hazard spectra on design seismic demand of near-fault reinforced concrete tall buildings	22-199-Hsin-Yang Chung Dynamic pull-plate tests for the post-fire steel beam-to-column connections	14-111-Wen Liu Detection of geodetic deformation in the 2010 Baja California earthquake from satellite SAR images	17-164-Hideaki Kato Development of large-scale elastomeric seismic isolation bearings for buildings
	7-126-Yu-Yi Chang Use of centrifuge modeling and PFC ^{2D} simulation to evaluate the surface and subsurface deformation profiles induced by reverse faulting	23-009-Jui-Liang Lin Reliability assessment of using equivalent lateral force method to estimate elastic seismic responses with accidental torsion effects	14-128-Seyed Abolfazl Heidari Zonation for soil liquefaction potential assessment in Babol city, Iran	17-089-Masahiro Hattori Seismic performance of high strength RC columns under cyclic bending loading
	8-166-Vivek Walia Application of statistical tools to investigate soil-gas monitoring time-series data for seismogenic studies in Taiwan	23-018-Christopher Wenshen Pong Collapse analysis of steel plate shear wall buildings using the fema p695 methodology	14-200-Jonghoo Lee Seismic displacement of mountain slopes	17-122-Takahiro Mori Hysteresis model of deformation-history integral type for isolators
	8-201-Arvind Kumar Singular spectrum analysis for the identifications/removal of diurnal and semidiurnal variations in soil gas radon time-series data for earthquake precursory study	23-013-Kazushi Shimazaki Verifications on seismic strengthening of the existing RC building	14-223-Sockheang Sreng Dynamic centrifuge model tests of embankment with a new liquefaction countermeasure by ground improvement considering constraint effect	17-047-Takayuki Yamaguchi (may not attend) Bending shear tests of pipe section members on spheroidal graphite cast iron
	8-234-Ching-Chou Fu Temporal variations of gamma ray and soil radon concentration for detecting crustal activity changes in the longitudinal valley of eastern Taiwan	23-019-Takeshi Matsumoto Examination of repair methods for damaged steel members by finite element analysis	15-239-Wen-Yi Hung Seismic response of geosynthetic reinforced earth embankment by centrifuge shaking table tests	17-250-Yi-Lung Mo Periodic material-based seismic isolation for structures

13:40 ~ 15:40	2-192-Prabhu Muthuganeisan Probabilistic displacement hazard map of India	23-021-Yeong-Kae Yeh The study of the safety factor of the pushover analysis procedure based on the capacity spectrum method	16-093-Bharathi M Numerical simulation of horizontal dynamic pile load tests on under-reamed piles	18-007-Xingchen Chen Seismic performance of various spine frames with energy dissipation members
	2-025- Xin Wang Story-by-story shear-wave velocity extraction from microtremor records of high-rise buildings	23-022-Yuki Terazawa Response control of cantilevered RC walls in gymnasia with energy-dissipation bearings	16-118-Takuya Egawa Assessment of horizontal subgrade reaction of pile foundations in volcanic ash ground during earthquakes based on centrifuge model tests	18-016-Kenichi Hayashi Development of the shear panel damper with a large shear deformation performance
16:00 ~ 17:30	R101-2 / Engineering Seismology & Others	R103-2 / Seismic evaluation and retrofit of existing structure	R202-2 / Geotechnical earthquake engineering & Infrastructures and lifeline systems	R205-2 / Innovative design of new structures
	Chairs: Yoshihisa Maruyama Chun-Hsiang Kuo	Chairs: Jui-Liang Lin Yoshihiro Yamazaki	Chairs: Jiunn-Shyang Chiou Gee-Yu Liu	Chairs: Yi-Lung Mo Hung-Jen Lee
	1-028-Chun-Hsiang Kuo Strong ground motion simulation using modified semi-empirical technique for the M_L 6.2 Nantou, Taiwan earthquake	23-023-Kazuhiko Narita Seismic performance of school gymnasia with steel roofs supported by cantilevered RC wall frames	16-144-Xiao-Wei Wang Experimental investigation on seismic behavior of RC pile foundation considering bridge scour effects	18-020-Naoto Fukawa In-plane shear test of sandwiched panel consisted of thick plywood and thin light gauge steel members
	1-068-Yin-Tung Yen Source characteristics and strong-motion simulation of two moderate-size crustal earthquakes in southwest Taiwan	23-024-Tmofusa Akita Seismic capacity index of existing high-rise RC buildings in Japan	16-174-Jiunn-Shyang Chiou Pushover testing on a footing model on dry sand	18-029-Yuma Hoashi Out-of-plane stability factors for diagonally installed buckling restrained braces
	1-141-Yi-Wun Liao Ground motion simulation of the 1909 Taipei historical earthquake	23-035-Kohei Kawabata Seismic performance of external frames using high-strength polymer-cement-mortar in the beam-to-column joint for seismic retrofitting	27-090-Ryota Nakazawa Estimation of the distribution of sewer pipeline's length based on road network data	18-034-Ming-Chieh Chuang A cloud service for seismic design of buckling restrained braces and connections
	1-198-Jyun-Yan Huang Uncertainties of asperity distribution models for high frequency strong motion simulation	23-036-Yusake Ito Applications of a seismic retrofitting method using the framed steel brace partially jointed with anchors	27-101-Gee-Yu Liu Seismic loss estimation of water systems for utility emergency response	18-039-Saki Mihara Out-of-plane stability of buckling-restrained braces including moment transfer capacity at restrainer ends
	4-279-Yung-Bin Lin Lidar and optical imaging for bridge seismic crack measurement	23-038-Yoshihiro Yamazaki Analytical study on seismic behavior of wood structure horizontally combined with RC structure	27-107-Himan Hojat Jalali Finite element investigation of normal faulting effects on buried steel pipelines	18-048-Aruna Rawat Seismic response control of sloshing in cylindrical tanks by floating plate using finite element method
	36-273-Carlos Villaraza Significance of earthquake historical data and the probabilistic approach for seismic zoning	23-040-Takuya Kakahara An experimental study on the seismic retrofitting method of existing reinforced concrete buildings by external frame	28-136-Shin-Tai Song Influence of riverbed scour on seismic performance of bridges	18-251-Hung-Jen Lee Experimental investigation and database construction of seismic performance of new RC exterior beam-column connections

Friday, October 17th

1F Conference Room

09:00 ~ 09:40	Keynote5 (Chair: Shyh-Jiann Hwang) Identification of Collapse-Prone Concrete Buildings / Jack P. Moehle , Professor, U.C. Berkeley
09:40 ~ 10:20	Keynote6 (Chair: Kunitomo Sugiura) A Partial View on Post-Tohoku Research Activities in Japan / Masayoshi Nakashima , Professor, Kyoto University
10:40 ~ 11:20	Keynote7 (Chair: W. Phillip Yen) Time-Frequency Analysis of Feature Variations in Civil Engineering Structures Under Weak and Strong Motions Using Vibration-based Measurement / Chin-Hsiung Loh , Professor, National Taiwan University

11:20 ~ 12:00	Keynote8 (Chair: Yi Lung Mo) Risk Assessment of a Moderate Seismicity Region / Tso-Chien Pan , Professor, Nanyang Technological University			
13:10 ~ 14:40	R101-3 / Engineering Seismology	R103-3 / Seismic evaluation and retrofit of existing structure	R202-3 / Urban risk assessment and emergency management & Others	R205-3 / Innovative design of new structures
	Chairs: Nakhorn Poovarodom Chi-Chin Tsai	Chairs: Han Seon Lee Lap-Loi Chung	Chairs: Chin-Hsun Yeh Yung-Yen Ko	Chairs: Pei-Ching Chen Jenn-Shin Hwang
	5-057-Kun-Sung Liu A study of site effects in Ilan, Taiwan based on attenuation relationships of seismic ground motion	23-041-Kenneth Roi Toral Structural retrofitting of reinforced concrete buildings using turnbuckle exterior post tensioning	30-014-Kirk Kennedy Yu Seismic risk assessment of heritage buildings in Iloilo city, Philippines	18-054-Tien-Hung Chiu Relocating fluid viscous dampers to improve seismic performance of RC buildings
	5-077- Yoshihisa Maruyama Evaluation of site amplification characteristics in Tokyo metropolis using supreme dataset	23-045-Satoshi Hamada Seismic response evaluation of 30 story high-rise RC building subjected to 2011 Tohoku earthquake and others	31-069-Yuki Habuka Estimation of traffic situation after the 2011 great east Japan earthquake based on probe-car data and vehicle information and communication system	18-130-Pao-Chun Lin Design and testing of buckling-restrained brace gusset connections
	5-131-Chi-Chin Tsai Relative differences between frequency domain equivalent linear and time domain nonlinear site response methods	23-055-Hideomi Ueda Basic experiment for damage detection of structures using infrared thermography device	36-284-Jian Wang Tuned-mass systems for the seismic upgrade of structures	18-058-Kento Suzuki Formulation of torsional interaction using the component mode method for two-story timber houses with 3D eccentricity
	5-095-Che-Min Lin S-wave velocity model of Taipei basin	23-096-Han Seon Lee Investigations of torsional behavior in shake-table responses of an RC low-rise building model having irregularities at the ground story	33-083-Saaya Iwase Simplified estimation method for building damage due to earthquakes in urban areas	18-050-Sato Hanako Transition of failure mechanism of damaged multi-story moment resisting frame after repair
	5-213-Nakhorn Poovarodom Evaluation of seismic site effects in Chiangrai, Thailand after 2014 earthquake	23-097-Kyung Ran Hwang Analytical investigations on the seismic response of an RC high-rise flat-plate core-wall building structural system	34-110-Kanai Junko Damage and emergency response of commercial establishments during the Awaji island earthquake	20-132-Pei-Ching Chen Smart rolling-type isolation devices using embedded electromagnets
	5-137-Brian Carlton Validation of a model to estimate design spectra for sites with soft cohesive soils	23-108-Takehiro Takahashi Resistant mechanism and ultimate state on top-edge part of connection joint of horizontally mixed structural system subjected to bending moment	35-032-Yung-Yen Ko Shaking table tests on scale model of freestanding dry storage cask for spent fuel	18-070-Shinichiro Tani An experimental study on inelastic behavior and restoring force characteristics of vibration control device as steel scaling-frame
15:00 ~ 17:00	R101-4 / Engineering Seismology	R103-4 / Seismic evaluation and retrofit of existing structure	R202-4 / Tsunamis & Others	R205-4 / Innovative design of new structures
	Chairs: Kuo-Liang Wen Strong Wen	Chairs: Yi-Hsuan Tu Dipti Ranjan Sahoo	Chairs: Latypov Valery Tzu-Kang Lin	Chairs: Hussam Mahmoud Yuan-Tao Weng
	5-222-Yuki Hirokawa Estimation of underground structures in Yangon city, Myanmar using single-station and array microtremors	23-115-Zhe Wang RC frames with column-isolated and slitted infill walls	12-243-Hussam Mahmoud Predicting tsunami impact loading using coupled Eulerian-Lagrangian formulation	18-079-Humberto Cabrera Structural assessment of a reinforced concrete building equipped with ADAS devices in Peru
5-156-Chun-Te Chen The characteristic of the H/V spectra of strong motion in the Taipei Basin	23-168-Yi-Hsuan Tu Analytical model for capacity curve of confined masonry wing-walls	13-063-Sotaro Sakaki Development of driving simulator with tsunami inundation scenario	18-127-Erwin Lim Experimental study of seismic behavior of RC coupling beams with intermediate shear span-to-depth ratio	

15:00 ~ 17:00	5-271-Edwin Nadir Castrillo Local site effect characterization in the old downtown area of Managua city, Nicaragua based on long period microtremors	23-129-Pao-Chun Lin Seismic retrofit of reinforced concrete frame with buckling-restrained braces	36-140-Leila Haj Najafi Modeling strategies for consideration of nonlinearity in steel structures	18-148-Mohd Irwan Adiyanto Cost optimization of seismic design of low rise hospital RC frame in Malaysia
	5-147-Saikat Bagchi Effect of Indo-Gangetic plain on ground motion	23-134-Tuyen Le Quang Modal identification via continuous Cauchy wavelet transform and ARX model	36-184-Daisuke Tsuruta Study on design of multiple tuned mass damper for small swivel type excavators	18-149-Jae-Do Kang Simplified method for estimating inelastic seismic demand of multistory frame with displacement-dependent passive dampers
	5-155-Kuo-Liang Wen Seismic site response analysis and microzonation from microtremor survey in the Hanoi, Vietnam	23-139-Dipti Ranjan Sahoo Optimum range of slenderness ratio for braces in special concentric braced frames	36-210-Latypov Valery Carbonization of concrete: worried about durability?	18-154-Chin-Han Lin Experimental and analytical studies on diaphragm plates in steel seismic welded beam-to-box column moment connections
	3-044-Strong Wen The estimation of strong motion and 3-D velocity structure beneath the Yun-Chia-Nan area, Taiwan	23-117-Bhushan Raisinghani Influence of parameters on performance evaluation of RC structures	36-219-Panitan Lukkunaprasit Performance of buildings in the Mw6.1 Mae Lao earthquake in Thailand on May 5, 2014	18-189-Alireza Manafpour Economical assessment of various objectives in seismic design using damage probabilities
	3-046-Luis Moya Estimation of geodetic displacements in the 2011 Tohoku earthquake from accelerograms and GPS data	23-180-Jer-Fu Wang An analytical parameter extraction method for the combined building-MTMD systems	36-266-Kunitaro Hashimoto Real scale experimental study on shear panel damper of multi-pipe integration bridge pier	18-196-Chao-Hsien Li Cyclic tests of two reduced-scale substructures of a twelve-story steel plate shear wall using multi-axial testing system in NCREE
	3-080-Wen-Shinn Shyu Hybrid method combines transfinite interpolation with series expansion to simulate the anti-plane response of a u-shaped canyon	23-182-Ching-Yi Tsai Improving self-centering steel plate shear wall boundary frame efficiency with finite-element modeling	36-242-Tzu-Kang Lin Application of multi-scale sample entropy for structural health monitoring	18-244-Hussam Mahmoud Innovative building system with suspended floor slabs for seismic applications

Saturday, October 18th

1F Conference Room

09:00 ~ 09:40	Keynote9 (Chair: Kuo-Liang Wen) Region-Specific and Path-Specific Ground Motions Models for Seismic Hazard Assessment / Norman Abrahamson , Engineering Seismologist, PG&E			
09:40 ~ 10:20	Keynote10 (Chair: Chia-Ming Uang) Development and Seismic Performance Evaluation of a Steel Dual-Core Self-Centering Braced Frame System in Taiwan / Chung-Che Chou , Professor, National Taiwan University			
10:40 ~ 12:10	R101-5 / Engineering Seismology	R103-5 / Seismic evaluation and retrofit of existing structure	R202-5 / Seismic issues on nuclear power plants	R205-5 / Innovative design of new structures
	Chairs: Tadanobu Sato Hung-Chie Chiu	Chairs: David Lau Pennung Warnitchai	Chairs: Chiun-Lin Wu Eric Yee	Chairs: Ji Dang Yu-Chi Sung
	3-160-Yu-Ju Wang New attenuation relationship for peak ground acceleration and response spectra of normal faulting events in the northeast offshore Taiwan	23-215-David Lau Analytical modelling of seismically deficient reinforced concrete shear walls with fibre reinforced polymer sheets	35-280-Chiun-Lin Wu Nuclear power and its plant infrastructures: past, present, and future	19-002-Koichi Tomisawa Composite ground pile foundation combined with piles and improved ground
	3-161-Ya-Ting Lee Characteristics of strong shaking duration in Taiwan	23-172-Bo Li Relocating plastic hinge to strengthen reinforced concrete beam-column joints	35-001-Zih-Yu Lai Quasi-static tests and numerical analysis for flanged joints in residual heat removal piping system	19-003-Ji Dang Incremental dynamic analysis for bi-directional seismic performance of isolated bridges

10:40 ~ 12:10	3-167-Hao Wu Fragility curves of buildings in north of Miyagi prefecture during the 2011 off the pacific coast of Tohoku earthquake	23-194-An-Chien Wu Experimental study on seismic retrofit of reinforced concrete frames using buckling-restrained braced frames	36-053-Hsuan-Chih Yang Using the numerical simulation to investigate the seismic response of a free-standing vertical cylindrical cask for spent fuel	19-004-Zhongguo Guan Evaluation for multi-level performance of tall reinforced concrete bridge columns
	3-176-Tadanobu Sato Stochastic characteristics of earthquake motion phase difference and its mathematical interpretations	23-183-Shuichi Imai Study on vibrational characteristics of seismic isolated structure based on seismic observation records	35-052-Ming-Yi Shen Developing a numerical model of a residual heat removal piping system	19-262-Chi-Ying Lin Study on the methodology for reliability-based bridge design considering the equivalent scour load
	3-191-Yong Gook Lee Effect of spatial variability of shear wave velocity on seismic response of soil deposits	23-228-Pennung Warnitchai Simplified but accurate analysis procedure for seismic evaluation of tall buildings	35-086-Chang-Ching Chang An efficient procedure for seismic probabilistic risk assessment using response-based fragility curves	19-264-Kuang-Yen Liu Feasibility study of new RC on the seismic design of bridge column
	3-209-Hung-Chie Chiu Estimating the rotation-motion effects on extremely large ground motions	23-238-John van de Lindt Understanding the seismic collapse behavior of soft-story light-frame wood buildings through full-scale shake table testing	35-256-Eric Yee Seismic compression at a vertical array strongly shaken by the 2007 Niigata-Ken Chuetsu-Oki earthquake	20-006-Jianzhong Li Shake table test of a bridge model supported on elastomeric pad bearings
13:20 ~ 15:20	R101-6 / Engineering Seismology & Others	R103-6 / Seismic evaluation and retrofit of existing structure	R202-6 / Others	R205-6 / Innovative design of new structures & Seismic evaluation and retrofit of existing structures
	Chairs: Kazuaki Masaki Yih-Min Wu	Chairs: Zheng-Kuan Lee Joon-Ho Choi	Chairs: Chi-Chang Lin Yuan-Sen Yang	Chairs: Lyan-Ywan Lu Barenten Suci
	6-260-Rih-Teng Wu A study on distinguishing between earthquake signal and non-earthquake signal for on-site earthquake early warning system	24-073-David Lau A probabilistic performance-based seismic risk assessment methodology for bridge inventories	36-249-Chi-Chang Lin Experimental verification of friction typed multiple tuned mass dampers for vibration control of high-rise buildings	18-065-Barenten Suci Seismic evaluation of a building structure equipped with colloidal dampers
	6-175-Yih-Min Wu Development of earthquake early warning system using low cost accelerometer in Taiwan	24-081-Zheng-Kuan Lee Loading tests and long-term monitoring on Wugu-Yangmei viaduct of Taiwan national highway	36-270-Sannidhya Kumar Ghosh Efficient design of fluid viscous dampers for seismic vulnerability mitigation of structures	21-051-Wang-Chuen Lin Generalized analytical models for sloped rolling-type isolation bearings
	6-261-Shyu-Yu Wu Off-line simulation of on-site peak ground acceleration estimation based on support vector regression	24-163-Zhongqi Shi Analytical study on the effect of friction on vibration characteristics of a flexural failure type RC bridge column (c1-1) based on E-defense excitation	36-265-Yong-An Lai Phase control tuned mass damper for base excitation	21-056-Taichi Matsuoka Inertia damper that has a spiraled orifice
	6-109-Yuma Kawasaki Early warning technique for detecting deterioration of laminated rubber bearing by using AE method	24-088-Koichi Hozoji proposal of the detailed modeling method for dissipation device installed with oblique direction in bridge structure	36-224-Chen Xu Mechanical investigation on seismically designed integrated steel pipes bridge pier system	21-145-Lyan-Ywan Lu A floor isolation system using multi-functional sliding isolators
	6-125-YinCheng Yang Ground motion estimation using front site wave form data based on sparse Bayesian model for earthquake early warning	24-084-Joon-Ho Choi Horizontal stiffness evaluation on roller bearing support based on failure tests and application to dynamic analyses of curved bridges	36-099-Yuan-Sen Yang A case study of measuring vibrating of a rotating blade in a reduce-scale wind turbine	21-247-Alex Shegay Dynamic tests on concrete floors with constrained layer damping
	6-177-Shieh-Kung Huang Predicting peak ground acceleration using artificial neural network with p wave features for on-site earthquake warning system in Taiwan	24-211-Daichi Ariyama Seismic response analysis of cross frame with bracings in inverted v-shape at girder end	36-071-Hanhui Zhang Mitigating seismic damages of RC frames caused by structural interaction of frame and infill wall: shake table tests	26-133-Jingchang Kong (may not attend) Effect of vertical arrangement of infill wall on the seismic behaviour of RC frame

13:20 ~ 15:20	6-231-Kazuaki Masaki Earthquake early warning system to mitigate earthquake damage in facilities in the Tokai industrial region, central Japan	24-263-Yan Xu Shaking table test of a cable stayed bridge model with double concrete pylons	(Move to R202-3)	26-179-Osamu Furuya Study on seismic safety improvement of hanging type mechanical structure in industrial facilities
	36-037-Yuki Shirai Experimental study on mechanical behavior of anchor bolts and surrounding concrete under combined loading	24-269-Chia-Ming Uang Testing and modeling of A36 and stainless steel buckling-restrained braces under near-fault loading conditions		36-285-Hsin-Ning Chang Structural health monitoring of the tower structure of a parked 3KW wind turbine
15:40 ~ 17:40	R101-7 / Others	R103-7 / Seismic evaluation and retrofit of existing structure	Topics List: 1 Engineering seismology: Source characterization and simulation 2 Engineering seismology: Hazard assessment 3 Engineering seismology: Ground motion studies 4 Engineering seismology: Seismic networks and monitoring 5 Engineering seismology: Site effects 6 Engineering seismology: Early warning 7 Engineering seismology: Near fault effect 8 Engineering seismology: Earthquake precursor 9 Tsunamis: Hazard assessment 10 Tsunamis: Earthquake sources 11 Tsunamis: Wave propagation 12 Tsunamis: Impact 13 Tsunamis: Early warning 14 Geotechnical earthquake engineering: Ground failure and liquefaction 15 Geotechnical earthquake engineering: Soil-structure interaction 16 Geotechnical earthquake engineering: Seismic design of foundations 17 Innovative Design of new structures: Materials 18 Innovative Design of new structures: Buildings 19 Innovative Design of new structures: Bridges 20 Innovative Design of new structures: Critical facilities 21 Innovative Design of new structures: Non-structural components 22 Seismic evaluation and retrofit of existing structures: Materials 23 Seismic evaluation and retrofit of existing structures: Buildings 24 Seismic evaluation and retrofit of existing structures: Bridges 25 Seismic evaluation and retrofit of existing structures: Critical facilities 26 Seismic evaluation and retrofit of existing structures: Non-structural components 27 Infrastructures and lifeline systems: Risk Assessment 28 Infrastructures and lifeline systems: Multi-hazards 29 Urban risk assessment and emergency management: Social and economic aspects 30 Urban risk assessment and emergency management: Rapid structural assessment 31 Urban risk assessment and emergency management: Management policies 32 Urban risk assessment and emergency management: Loss estimation 33 Urban risk assessment and emergency management: Vulnerability analysis 34 Urban risk assessment and emergency management: Risk assessment and management 35 Seismic issues on nuclear power plants 36 Others	
	Chairs: Ting-Yu Hsu Akira Sone	Chairs: Tzu-Hsiu Wu Juin-Fu Chai		
	36-043-Yin-Han Yang Mathematical modeling and experimental validation for hysteresis behavior of high-damping rubber bearings	24-277-Tzu-Hsiu Wu Comparative study on on-line parameter estimation with adaptive forgetting factors		
	36-061-Akira Sone Study of base isolated structure with tuned mass damper subjected to long-period earthquake motions	25-169-Yudai Tanaka Fundamental study on seismic behavior of escalator		
	36-062-Akira Sone Seismic response analysis of high-speed-moving railway vehicles using multibody dynamics	25-170-Masahiro Hirai Experimental study on improvement of earthquake resistant of high rate plate settler module against sloshing		
	36-281-Ting Yu Hsu Experimental studies of damage diagnosis of rotating wind turbine blades using local flexibility method	25-171-Takuya Nakajima Fundamental study on response analysis of elevator rope during earthquakes		
	36-085-Seyed Omid Hashemi Parast Reconstruction monitoring of bam city after the 2003 earthquake based on satellite images, statistical data and field observations	26-030-Fan-Ru Lin Shaking table tests for seismic improvement of a typical sprinkler piping system in hospitals		
	36-103-Chung-Che Chou Seismic tests of large-scale energy dissipating braces: dual-core self-centering brace and sandwiched buckling-restrained brace	26-031-Zhen-Yu Lin A study on seismic behavior of mechanical couplings for fire protection sprinkler piping systems in hospital		
	36-112-Yasushige Mori How people behaved during two of the most recent major earthquakes on Awaji Island, Japan --- based on the survey of the Awaji Island earthquake in 2013 and the southern Hyogo prefecture earthquake in 1995	26-042-Tzu-Chieh Chien Development of simplified seismic evaluation program for equipment in hospitals		
	36-138-Umut Hasgul Impact of initial and tangent stiffness proportional damping models on ductility demands on SDOF systems	26-082-Juin-Fu Chai Seismic evaluation and strengthening guidelines for hospital buildings		