## Contents

**First China-US Workshop on Protection of Urban Infrastructure and Public Buildings against Earthquakes and Manmade Disasters**

01-01: Urbanization and Disaster Mitigation of Infrastructures and Public Buildings  
(Abstract only)  
*Xiyuan Zhou*

01-02: Study on Protection Measures for Seismic Isolation Rubber Bearings  
*Xiyuan Zhou, Miao Han and Lin Yang*

01-03: Renewal Precise Time Step Integration Method for Structural Dynamic Analysis  
*Mengfu Wang and Xiyuan Zhou*

01-04: An Integrated Platform for Seismic Disaster Mitigation of Critical Hospital Facilities  
(Abstract only)  
*George C. Lee and Mai Tong*

01-05: Intelligent Health Monitoring Advances of Civil Infrastructures in HIT  
(Abstract only)  
*Jinping Ou*

01-06: Seismic Response of Curved Bridge  
*Li Wang, Xiyuan Zhou and Chunnong Zhang*

01-07: Comprehensive Disaster Resistance Analysis of Tangshan City Based on GIS  
*Jing Chen, Jingyu Su and Qingjie Zhu*

01-08: Seismic Behavior of Asymmetric Structures Tested on the Shaking Table  
*Junwu Dai, Minzheng Zhang, Xun Guo and Xiaozhai Qi*

01-09: Distribution of Underground Natural Fracture and its Controlling of Liquid Movement  
*Youpo Su, Qingjie Zhu and Jingyu Su*

01-10: Geological Disaster Environment Analysis of Tangshan and City Planning  
*Qingjie Zhu, Yongduo Liang and Youpo Su*

01-11: Is H/V of Microtremors on the Rock Surface Equal to Unity  
*Mingzhu Guo, Zeqing Song, Fenghua Ren and Du Peng*

01-12: Investigation of Composites Debonding Under Cycle Loading  
*Yanhua Chen, Tingquan Liu and Qingjie Zhu*
01-13: Saturation Stability of Controlled Building Structures  
*Dongdong Liu*

01-14: Experimental Study on Seismic Behavior of RC Frame Columns Bilaterally Lateral Load Reversals  
*Hongzhen Kang and Jianjing Jiang*

01-15: No Pestilence Following Serious Earthquake Disaster  
*Jingyu Su, Youpo Su and Yajie Ma*

01-16: Ductility Analysis of Composite Steel-Concrete Girder for Bridge  
*Yuping Cui, Dangqi Yang and Jianguo Nie*

01-17: Measures of Rescuing and Treating the Seriously Injured in Great Tangshan Earthquake  
*Youpo Su, Jing Chen, JunJun Yang and Ruixing Liu*

01-18: Vibrational Analysis of Friction Pendulum Systems  
*Dawang Li, Dongwei Wang and Xiaodong Jiang*

01-19: A Computer Procedure for Seismic Assessment of Curved Bridges & Seismic Analysis of Curved Bridges (Abstract only)  
*Xiaoan Gao, Xiyuan Zhou, Lou Lin and Houyuan Zhang*

01-20: The Off-and-Towards Equilibrium Control Methodology and Its Application (Abstract only)  
*Runlin Yang, Xiyuan Zhou and Xihui Liu*

01-21: Macroscopic Analytical Model of Fluid Viscous Damper (Abstract only)  
*Weiming Yan, Tongzhong Zhang, Qiaozhen Sun and Haohua Huang*

01-22: Experimental Study on Seismic Performance of Corroded Reinforced Concrete Members Subject to Flexure and Compression  
*DiTao Niu, XinXiao Chen and Xuemin Wang*

01-23: Damage Identification of RC Frame by Wavelet Approach  
*Hongquan Li, Weiming Yan and Qiaozhen Sun*

01-24: The Construction of the Simple City in Tangshan after the Strong Earthquake  
*Jianxin Xu, Youpo Su and Tianshi Liu*

01-25: An Analysis of Failure and Failure Dependencies of RC Frame Structures Based on the Pushover Method  
*Dongwei Wang, Junfeng Zhu and Fang Fu*
01-26: Seismic Retrofit of Rectangular Reinforced Concrete Column with FRP Plates
A. Pore, A.N. Nayak and J.B. Bandyopadhyay

01-27: Seismic Performance of Highway Transportation Networks (Abstract only)
Masanobu Shinozuka, Yuko Murachi, X. Dong and Michal Orlikowski

01-28: Feasible Route Storage Based on Fuzzy Analysis During Earthquake Emergency Stage
Yanyan Chen

01-29: Analysis on Seismic Performance of Secondary Structures with Base Isolation
Miao Han and Liang Wang

01-30: Analysis Methods for Determining Characteristics of Microtremor Wave Field
Mingzhu Guo, Shaofeng Chen, Xiaokui Zhang and Qiaozhen Sun

01-31: Pall Friction Dampers for Seismic Control of Buildings
Avtar Pall and Rashmi Pall

01-32: Wireless Links Between Sensor-Device Control Stations in Buildings
Fabio Casciati, Lucia Faravelli and Andrea Fornasari

01-33: Behavior of Concrete Beam with Embedded Shape Memory Alloy Wires
ZongCai Deng

01-34: Damage Localization in Ambient Vibration by Constructing Proportional Flexibility Matrix
Zhongdong Duan, Guirong Yan, Jinping Ou and B.F. Spencer, Jr.

01-35: Experimental Research and Analysis on Seismic Behavior of Eccentric RC Beam-Column Joint (Abstract only)
Zhen Qi, Ehua Fang, Changhua Ke, Qingchang Hu, Meili Zhang and Jinchi Sun

Sushmita Mitra and Yoichi Hayashi

01-37: Performance-Based Design of Transportation Systems (Abstract only)
Ian G. Buckle

01-38: An Integrated Framework for Earthquake Damage Assessment of Reinforced Concrete Building (Abstract only)
Zengping Wen Mentan Gao, Fenxing Zhao, Xiaojun Li and Hongshan Lu

01-39: Experimental Study on Dynamic Behavior of MR Damper for Semi-Active Vibration Control of Civil Infrastructures (Abstract only)
ZongXian Li and LongHe Xu
01-40: Passive and Wireless Sensors for Infrastructure Application (Abstract only)
Peter C. Chang

01-41: Smart Structures Technology for Disaster Mitigation (Abstract only)
B.F. Spencer, Jr.

01-42: Numerical Modeling of the Shaking Table Test of Soil-Structure Interaction System (Abstract only)
Guoxing Chen, Zhihua Wang and Jinmin Zai

01-43: Numerical Simulation of High-Rise Building with Pile-Box Foundation on Deep Soft Soil Deposits (Abstract only)
Guoxing Chen and Jingli Zhang

01-44: The Developing Regulations Study on Dynamic Porewater Pressure in Silty Clay and Fine Sand Interbedded Strata and Fine Sand of Nanjing (Abstract only)
Guoxing Chen and Xuezhu Liu

01-45: Seismic Design, Test and Analysis of Public Buildings using Passive Control Technology
Fulin Zhou, Wen Guang Liu and Zhong Gen Xu

01-46: Advances of Wavelet-based Approach for Health Monitoring of Buildings (Abstract only)
F.G. Yuan and Z. Hou

01-47: Study on the Behavior of Polyethylene Pipeline Under Fault Movement in Ji-Ji Earthquake (Abstract only)
Aiwen Liu and Shiro Takada

01-48: Three-Dimensional Finite-Difference Simulations of Strong Ground Motions in the Beijing Metropolitan Area (Abstract only)
GuoQuan Wang, Heiner Igel, XiYuan Zhou and HaiJiang Wang

01-49: Recent Advances on Performance-Based Earthquake Engineering (Abstract only)
Helmut Krawinkler

01-50: Implementation of Earthquake Disaster Mitigation Strategy in Slovenia - Civil Engineering Aspects
Miha Tomazevic

01-51: The Probability Density Evolution Analysis on the Seismic Response of Nonlinear Stochastic Structures (Abstract only)
Jie Li and Jian-Bing Chen
01-52: Smart Vibration Control and Health Monitoring of Stayed-Cables for an Actual Bridge: Analysis (Abstract only)
Jinpeng Ou, Hui Li and Min Liu

01-53: Progress on Study and Application of Smart Health Monitoring using Fiber Optic Sensor in Civil Engineering
Hongnan Li and Dongsheng Li

01-54: Experimental Study on Seismic Responses of Two Adjacent Buildings Linked by High Efficient Dampers
Weiming Yan, Yingqi Lu, Lingyun Peng and Chunnong Zhang

01-55: A Simplified Approach to Vulnerability Analysis for Earthquake-Resistant Frame Structures
Hongjing Li, Qimin Feng and Deling Zong

01-56: An Inverse Method About Structural Physical Parameter Based on Evolutionary-Simplex algorithm and Structural Modal Parameter (Abstract only)
Xiuli Du, Zeng Di

01-57: The Research for the Aseismic Behavior Evaluation of Masonry Structure Based on Pulsating-Method (Abstract only)
Yueqiang Zhang, Hongyu Zhou, Chunnong Zhang and Qiaozhen Sun

01-58: The Principle of Risk Partnership and the Role of Insurance in Risk Mitigation
Anselm Smolka

01-59: Study on Slope Stability by FEM and Prestress of Anchor Lines
Jianxun Ma, Qing’e Cai and Zhisheng Lai

01-60: Seismic Analysis for New Planetarium of Beijing
Yongmei Li and Guofu Sun

Second China-US Special Workshop on Multiple Hazards Resistant Strategy and Monitoring Technologies for Large Public Buildings

02-01: Comparative and Integrative Study of Ransom Responses in Multiple Disaster Engineering
Xiyuan Zhou

02-02: Sensors and Smart Structures Technology: NSF Perspective
S.C. Liu

02-03: Strain History Monitoring for Steel Buildings
G.C. Lee
02-04: The Performance-Based Approach for Fire-Resistant Design of Steel Structures
Guo Qiang Li

02-05: Wireless Sensor Networks for Monitoring of Large Public Buildings
Murat Demirbas

02-06: Seismic Performance and Structural Control Study of High-rise Buildings
Xilin Lu and Huanjun Jiang

02-07: Smart Buildings and Risk Management: The Expected and Unexpected
Weimin Dong and Glenn Katz

02-08: Passive and Semi-active Control of Wind Induced Vibration of Bridges (Abstract only)
Ming Gu

02-09: Ionic Polymer Based Chemical Sensors for Potential Use in Environmental Monitoring Applications
Kwang J. Kim and Chung-Hwan Je

02-10: Application of Performance-Based Structural Fire-Resistant Design in Olympic Venues
Yinqing Li and Lei Li

02-11: State-of-the-Art and State-of-the-Practice of Bridge Health Monitoring in Mainland China (Abstract only)
Jinpeng Ou and Hui Li

02-12: Study on Performance-based Seismic Design of Complex Steel Structures
Song Bo

02-13: Building Evacuation Models for Hazard Events (Abstract only)
Mai Tong and Jincheng Qi

02-14: A New Laced-Reinforcement Foam Core Sandwich Panel for Blast-Resistant Structures
Zhimin Tian and Charles H. Dowding

02-15: Indoor Air Quality Monitoring System Design for Occupant Health and Safety (Abstract only)
Jin Wen
China-US Cooperative Demonstration Project

International Collaboration on Disaster Prevention for Large Public Buildings

Cooperative Project Between BJUT and UB on Multiple Hazard Protection of Critical Facilities