

Contents

	Page
Introduction to the State Key Laboratory for Disaster Reduction in Civil Engineering Li-chu Fan	1
Introduction to the Seismicity of China Luo Qi-feng & Li Shi-dong	3
Performance-Based Seismic Design of Highway Systems Ian G. Buckle	15
Mitigate Earthquake Hazard & Risk for Highway Bridges Through Planning, Design and Retrofitting W. Philip Yen and James D. Cooper	27
Seismic Safety Evaluation of Large Scale Interchange System in Shanghai Li-chu Fan, Jian-zhong Li, Shi-de Hu, Gui-ping Bi and Li-ying Nie	31
A New Approach to Analysis of Soil-Pile-Structure Interactions for Long-Span Bridges Seung-Il Nam & Jamshid Ghaboussi	43
Preliminary Study of Hydrodynamic Effects on Seismic Response of Bridges Jun-jie Wang, Wei Lai, Ning-yong Zhang, Li-min Sun and Li-chu Fan	55
Observed Pile and Pipeline Performance in the Full-scale Lateral Spread Experiment Scott A. Ashford & Teerawut Juirnarongrit	69
Seismic Response of Railway Bridges Considering Track Restriction Gui-ping Yan, Yan Huang and Guanyuan Zhao	81
Seismic Design and Retrofit Guidelines for Bridges in New Jersey, A Low-To-Moderate Seismic Hazard Area Harry Allen Capers, Jr	95
Generation of Spectral Compatible Non-stationary Ground Motions based on Phase Difference Spectra Qing-shan Yang & Hai-peng Jiang	107
The Seismic Retrofit of the Golden Gate Bridge Charles Seim, P.E.	119

	Page
Response of Seismic Isolated Bridges using M-DOF Model and 2D Excitation George C. Lee & Zach Liang	129
Seismic Conceptual Design for Bridge Tower of a Long-span Cable-stayed Bridge Ai-jun Ye, Shi-de Hu & Li-chu Fan	141
Analytical Investigation of the Response of Lu-Pu Bridge with Added Viscous Dampers She-de Hu, Zhi-qiang Wang & Li-chu Fan	151
Seismic Performance and Retrofit of a 24-Span Freeway Bridge M. Saiidi, A. Itani, Q. Yang & T. Isakovic	161
Nonlinear Seismic Response Analysis of Effects of Sliding and Pounding of Urban Interchange Bridges with Rubber Bearings Li-ying Nie, Jian-zhong Li & Li-chu Fan	173
Seismic Design and Analysis for Urban Viaducts with a Double Deck Jian-zhong Li, Shi-de Hu and Li-chu Fan	183
A Pseudodynamic Test of an Urban Viaduct with a Double-Deck Tian-bo Peng, Shi-de Hu, Jian-zhong Li and Li-chu Fan	193
Seismic Design and Retrofit Strategies of Cable-Supported Bridges: An Overview of Current U.S. Practice George C. Lee, John Sun and Chuck Seim	203
Seismic Response Analysis of Wuhu Yangtze River Bridge Xi Zhu	215
A Study on Shear Strengthening of Reinforced Concrete Beams Using $\pm 45^\circ$ Glass Fiber Reinforced Polymer Jie Li, Yuan-de Xue and Wen-xiao Li	231
Research on Flexural Properties of Hybrid GFRP/CFRP Tube Confined Concrete Beams Hua Yuan, Yuan-de Xue and Wen-xiao Li	241
PRC-US Workshop Agenda	255
Participants	257