

BULLETIN OF EARTHQUAKE RESISTANT STRUCTURE RESEARCH CENTER

No.39
MARCH 2006

Contents

Foreword	K. Konagai	1
Papers		
Damage and Rehabilitation in Areas Affected by the October 8, 2005 Kashmir Earthquake, Pakistan	K. Konagai, K. Oguni, A. Akbar, H. Kodama and T. Ikeda	3
Damage to Building Structures due to 2005 October 8 Pakistan Earthquake	Y. Nakano, T. Nishikawa, Y. Tsuchiya, Y. Sanada and H. Sameshima	15
Residual Seismic Capacity of RC Frames with Unreinforced Block Wall based on their Crack Widths	H. Choi, Y. Nakano and N. Takahashi	33
Analytical Study on Behavior of Extremely Small Scaled RC Models under Seismic Loadings	N. Tokui, Y. Nakano and N. Takahashi	49
Comprehensive Active Microvibration Control System Using Piezoelectric Actuators for Base-Isolated Precision Manufacturing Facilities (PART II)	M. Shimazaki, T. Fujita, Y. Hashimoto, H. Yoshioka, T. Kitahara and T. Ogawa	59
Applications of Roller Type Isolation Device for Works of Art	S. Ueda, T. Enomoto and T. Fujita	69
Damage to Roads Caused by Oct.8, 2005 North Pakistan Earthquake	O. H. Qureshi and J. Koseki	79
Dynamic and Static Measurements of Small Strain Moduli of Toyoura Sand	Y. Tsutsumi, M. Builes, T. Sato and J. Koseki	91
Survey on Residents' Attitudes toward Retrofitting of Existing Seismic Vulnerable Houses in Japan	M. Yoshimura, K. Meguro and M. Kohiyama	105
Development of Possible Tsunami Exposure Estimation Module Disaster Response	M. Takashima, S. Koshimura and K. Meguro	115
Voronoi Applied Element Method for Structural Analysis: Theory and Application for Linear and Non-linear Materials	K. Worakanchana and K. Meguro	121
PP-Band Retrofitting Technique: Affordable, Acceptable and Feasible Method for Developing Countries	K. Meguro, P. Mayorca, R. Guragain, N. Sathiparan and K. Nasrollahzadeh Nesheli	141
Spatially Dispersed TMDs based on MTMD Method for Vibration Control of Multi-modes of Large Span Structures	S. Yoshimaka and K. Kawaguchi	149
List of Papers by Members of Earthquake Resistant Structure Research Center	159
News	169
Meetings of Earthquake Resistant Structure Research Center	175



**INSTITUTE OF INDUSTRIAL SCIENCE
UNIVERSITY OF TOKYO**

<http://shake.iis.u-tokyo.ac.jp/ERS/>