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the dynamic analysis of MDOF elastoplastic systems; Chapter 10. Free vibration analysis of slantlegged skew bridge; PART 3: VIBRATION CONTROL AND SEISMIC ANALYSIS

Chapter 11. Placement and elimination of vibration controllers in buildings

Chapter 12. Viscous damping system for optimal structural seismic design; Chapter 13. Reducing vibratory screen structural loading using a vibration absorber; Chapter 14. Acceptability vibration criterion for floors with walking occupants; Chapter 15. A comparative study of a storey vs. element hysteretic nonlinear model for seismic analysis of buildings; Chapter 16. Predicting earthquake ground motion descriptions through artificial neural networks for testing the constructions

PART 4: SEISMIC DESIGN OF STEEL STRUCTURES

Chapter 17. Contributing effect of cladding panels in the seismic design of MR steel frames; Chapter 18. Ductility formulations of steel structural members;

Chapter 19. Seismic analysis of MR steel frames accounting for connection topology; Chapter 20. A survey of ductile design of MR steel frames; PART 5: SEISMIC DESIGN OF CONCRETE STRUCTURES;

Chapter 21. Behavior of rectangular columns with low lateral confinement ratio;

Chapter 22. Behavior of full-scale lightly reinforced concrete interior beam-column joints under reversed cyclic loading

Chapter 23. Experimental and analytical assessment of simple bridge structures subjected to near-fault ground motions

Chapter 24. Seismic response of reinforced concrete frames using nonlinear macro-element behaviour; Chapter 25. Designing the concrete dual system;

PART 6: ANALYSIS AND DESIGN FOR BLAST AND IMPACT; Chapter 26. Parametric study on the drop-impact behaviour of mini hi-fi audio products;

Chapter 27. Deformation and tearing of uniformly blast-loaded quadrangular stiffened plates; Chapter 28. Non linear response and energy absorption of vehicle frontal protection structures

Chapter 29. Non-linear design of blast/containment reinforced gunite walls for coal mines in SA

Sommario/riassunto

Following on from the International Conference on Structural Engineering, Mechanics and Computation, held in Cape Town in April 2001, this book contains the Proceedings, in two volumes. There are over 170 papers written by Authors from around 40 countries worldwide. The contributions include 6 Keynote Papers and 12 Special Invited Papers. In line with the aims of the SEMC 2001 International Conference, and as may be seen from the List of Contents, the papers cover a wide range of topics under a variety of themes. There is a healthy balance between papers of a theoretical nature, concerned wit
