

# Earthquake Resistant Engineering Structures IV

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# **Advances in Earthquake Engineering**

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The objectives of this series are to provide clear accounts of both basic and applied research in the various fields of earthquake engineering with particular reference to earthquake resistant analysis and the design of structural systems.

The series consists of books concerned with state-of-the-art developments in earthquake engineering and as such comprises several volumes every year covering the latest developments and applications. Each volume is composed of authored works or edited volumes of several chapters written by leading researchers in the field.

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# Earthquake Resistant Engineering Structures IV

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## Preface

This book presents some of the latest research related to the protection of the built environment in earthquake prone regions of the world, this involves not only finding ways of determining the optimal design and construction of new facilities, but also of upgrading or rehabilitating existing structures.

Contained in this volume are most of the papers presented at the 4<sup>th</sup> International Conference on Earthquake Resistant Engineering Structures held in Ancona with the support of the University of La Marche, Italy and the Wessex Institute of Technology, UK. The Conference attracted a number of delegates from industry as well as academic and research institutes from around the world.

The papers were classified in accordance with the sections in the book:

- Earthquake Resistant Design
- Bridges
- Seismic Behaviour and Vulnerability Analysis
- Seismic Isolation and Control
- Monitoring and Testing
- Passive and Active Control
- Ground Conditions and Site Effects

The Editors are grateful to all authors for their excellent papers and in particular to the members of the International Scientific Committee for their help in reviewing the papers. Their work has been essential to ensure the quality of this book.

G. Latini  
C.A. Brebbia

Ancona 2003



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