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Gian Paolo Cimellaro
Editor

Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures

17th World Conference on Seismic Isolation
(17WCSI)

 Springer

Editor

Gian Paolo Cimellaro 

DISEG

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Preface

Many new seismic protection systems have been developed in the last decades, either to reduce the earthquake forces acting on the structure or to absorb a part of the seismic energy. Among them, base isolation is one of the most widely accepted and implemented seismic protection system. It consists of a method in which the structure (superstructure) is separated from the base (foundation or substructure) by introducing a suspension system between the base and the main structure.

The World Conference on Base Isolation (WCSI) is an international event that started right after the Anti-Seismic Systems International Society (ASSISI) was founded on October 5th, 2001 in Assisi (Italy). The WCSI Conference represents the major event of the ASSISI's activity and is focused on fostering development and acceptance of seismic protection solutions and techniques. After 21 years in 2022 the conference has been organized in Italy by the Politecnico di Torino and it has been hosted in the Department of Structural, Geotechnical & Building Engineering (DISEG).

The 17th edition (WCSI2022) has brought in Turin prestigious speakers from all over the World for days of exciting lectures on various aspects of the current seismic protection technologies, addressing the most important advances of our discipline in major countries around the World. The conference has allowed a constructive sharing of ideas, opportunities, and knowledge to contribute to build disaster resilient societies and to create new directions of research and technology implementation.

This book features chapters based on accepted papers from the World Conference on Base Isolation, WCSI 2022, held in Turin, Italy, from 12 to 16 September 2022. The variety and quality of the papers are a testament of the very stimulating event that the WCSI 2022 represents. Overall, the Proceedings include the latest advances in the widely popular research areas of seismic protection techniques, such as base isolation and are organized in one volume and several chapters. Each chapter represents a special session organized by international experts in their respective fields. The first chapter includes the invited and keynote lectures.

The book is of interest to a wide range of professionals in earthquake engineering, including designers, researchers, and graduate students working in the field of seismic protection systems.

September 2022

Gian Paolo Cimellaro
WCSI 2022 Chair

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