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Preface

This book contains papers presented at the first International Seminar on the Art of Resisting Extreme Natural Forces, held at the Wessex Institute of Technology in 2007.

According to the ancient Greeks, nature was composed of four elements: air, fire, water and earth. Engineers are continuously faced with the challenge imposed by those elements, in activities such as the design of bridges and high buildings to withstand high winds; the construction of fire resistant structures, the control of floods and wave forces; the minimisation of earthquake damage; prevention and control of landslides and a whole range of natural forces.

Advances in engineering design and the quest for optimal and more efficient structures have highlighted the importance of those natural forces with regard to the safety and durability of all forms of construction.

Natural disasters occurring in the last few years have stressed the need to achieve more accurate and safer design against extreme natural forces. At the same time, structural projects have become more challenging. Because of this, it is important to provide information on the current capabilities and problems in this field and the Editors hope that this book will help in this regard.

The Editors are grateful to all authors for their contribution as well as to the colleagues who helped to review them.

The Editors
The New Forest, UK
2007

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