

# **Geo-Environment**

## **Monitoring, Simulation and Remediation of the Geological Environment**

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GEOLOGICAL ENVIRONMENT

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Published by

**WIT Press**  
Ashurst Lodge, Ashurst, Southampton, SO40 7AA, UK  
Tel: 44 (0) 238 029 3223; Fax: 44 (0) 238 029 2853  
E-Mail: [witpress@witpress.com](mailto:witpress@witpress.com)  
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For USA, Canada and Mexico

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25 Bridge Street, Billerica, MA 01821, USA  
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E-Mail: [infousa@witpress.com](mailto:infousa@witpress.com)  
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British Library Cataloguing-in-Publication Data

A Catalogue record for this book is available  
from the British Library

ISBN: 1-85312-723-X

Library of Congress Catalog Card Number: 2004100692

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## Preface

This book contains the edited versions of the papers presented at the first international conference on Monitoring, Management, Simulation and Remediation of the Geological Environment, called **Geo-Environment 2004**, held in Segovia, Spain.

The basic idea for launching the first conference on this topic was our perception that the role of geosciences in environmental management has been underestimated and is still far from being at its full potential. We strongly believe that the geosciences' understanding of natural systems and their processes is totally relevant for a proper use of the land.

An understanding of the properties of Earth's materials and their dynamics is essential for unravelling environmental problems in varying fields, such as air, soil or water pollution, soil erosion, waste disposal, water resources, building materials and foundations, and many others. Understanding geological processes is also essential to other fields of study, such as the evaluation and mitigation of natural and man-induced hazards and risks, engineering, land preservation and restoration, landscape and urban planning, ecosystem inventories and natural heritage assessments.

Based on these principals, this book contains important contributions by researchers, engineers, planners, decision-makers, consultants and other professionals interested in the contribution of geosciences and geo-information to sustainable development.

The editors of this book are grateful to all authors for their outstanding contributions. We especially would like to thank all the distinguished scientists who supported our efforts by serving on the International Scientific Advisory Committee, promoting the conference and reviewing the submitted abstracts and papers. We thank the Municipality of Segovia, the Regional Government of Castilla y León, the Complutense University of Madrid, the University of Cantabria, the USDA Forest Service and the Commission on Geological Sciences for Environmental Planning of the International Union of Geological Sciences (COGEOENVIRONMENT) for the support of the conference. We are finally indebted to the staff of the Wessex Institute of Technology and WIT Press for their job in organizing the meeting and producing this excellent book.

The Editors  
Segovia, Spain  
2004



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