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# Underground Spaces

Design, Engineering and  
Environmental Aspects

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## Preface

This book contains some of the papers presented at the International Conference on Underground Spaces – Design, Engineering and Environmental Aspects, held on the Campus of the Wessex Institute of Technology in the New Forest. The Conference was launched to discuss not only the structural and environmental material characterization aspects but also the trends regarding the development of underground spaces.

Underground spaces are becoming increasingly important for a wide diversity of uses. They range from classical excavations to subway constructions, underground sports halls, power stations, waste repositories, underground cities and many others. The construction techniques are also very varied, from open air excavation to newly developed injection methods.

The use of underground spaces is challenging to a wide spectrum of engineers, designers and builders. Structures constructed below the terrain require special attention in their design and safety assessment. This means that the degree of knowledge needs to be significantly different than for surface structures and hence the importance of conferences like Underground Spaces to reach a better understanding of the issues involved. This is particularly the case when preparing to build chemical, nuclear or toxic waste repositories, where serious environmental issues can arise.

The papers presented at the Conference described a variety of problems related to underground spaces. The Editors are grateful to all contributors for their papers and particularly to the members of the International Scientific Advisory Committee who helped to select the material published in this book.

The Editors  
The New Forest, 2008

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