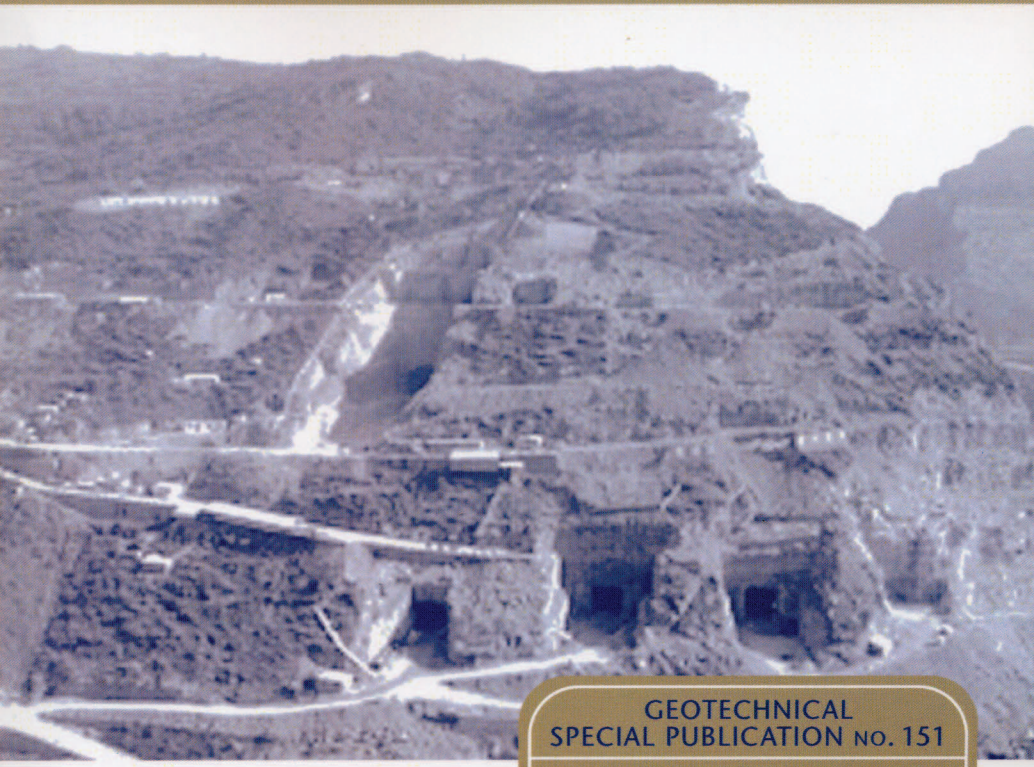


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Advances in Earth Structures

Research to Practice

上海

EDITED BY Jie Han, Ph.D., P.E.
Jian-Hua Yin, Ph.D.
David J. White, Ph.D.
Guoming Lin, Ph.D., P.E.

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RESEARCH TO PRACTICE

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Preface

This special publication contains 42 technical papers which cover recent advances in research and practical applications in earth structures including slope stability, embankments and dams, and earth retaining walls. Two invited keynote papers by Professor Z-Y. Chen (co-authored with Professors J-H. Yin and Y-J. Wang) and Professor D. Leshchinsky summarize recent advances in three-dimensional slope stability analysis and geosynthetic-reinforced earth structures, respectively. Eighteen technical papers in the slope stability section present technologies for stabilizing, monitoring, and analyzing slope movement and stability. Thirteen technical papers in the embankment and dam section focus on performance of embankments and dams, particularly on pile-supported embankments. The earth retaining wall section contains nine technical papers presenting analytical and/or numerical methods for different earth retaining wall systems.

Each paper published in this ASCE Geotechnical Special Publication (GSP) was evaluated by at least two reviewers including the editors. The authors of the accepted papers have addressed all the reviewers' comments to the satisfaction of the editors. All published papers are eligible for discussion in the Journal of Geotechnical and Geoevironmental Engineering and are also eligible for ASCE awards.

The papers in this publication were presented during the GeoShanghai International Conference held in Shanghai, China, June 6 – 8, 2006. This conference was hosted by Tongji University and the Shanghai Society of Civil Engineering, China in cooperation with ASCE Geo-Institute, the Georgia Institute of Technology, the University of Kansas, the University of Tennessee, International Association of Foundation Drilling, Deep Foundation Institute (USA), Saga University (Japan), Delft University of Technology (Netherlands).

We are thankful to Professor Yongsheng Li, the chair of GeoShanghai, and Professors Hehua Zhu and Paul W. Mayne, the co-chairs, for their leadership in organizing this conference, and Drs. Baoshan Huang, Dongmei Zhang, Yu Huang, and the local organizing committee for their diligent and tireless work for this conference. Thanks are extended to the former and current chairs of Technical Coordination Council of ASCE Geo-Institute, Professors Edward Kavazanjian and Barbara A. Luke, and the council members for their support to the publication of the GSPs as proceedings of this conference. Thanks are also due to Carol Bowers at ASCE Geo-Institute for her enthusiastic support to this conference. In producing this Geotechnical Special Publication, the editors also would like to acknowledge the assistance of Donna Dickert at ASCE.

The editors wish to thank the following individuals who reviewed one or more papers for this geotechnical special publication.

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For any reviewers whose names were inadvertently missed, we offer our sincere apologies. We also appreciate Prof. Renpeng Chen's assistance in managing the reviews of papers for the embankment and dam session.

Editors:

Jie Han, the University of Kansas
Jian-Hua Yin, the Hong Kong Polytechnic University
David J. White, Iowa State University
Guoming Lin, WPC, Inc.

January 10, 2006

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