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Foundation Analysis and Design

Innovative Methods

EDITED BY Robert L. Parsons
Limin Zhang
Wei Dong Guo
K. K. Phoon
Michael Yang

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INNOVATIVE METHODS

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Preface

This special publication contains 44 technical papers which cover recent advances in the research, design, and construction of shallow foundations, pile foundations and limit state design. An invited keynote paper by Professor Harry Poulos summarizes recent advances in the settlement of pile groups. Fifteen technical papers address statistical applications and the use of limit state design for foundations. Twenty-five technical papers in the deep foundations section describe a series of advances in the estimation of pile capacity and pile installation issues. Three papers describe advances in the estimation of settlement associated with shallow foundations.

Each paper published in this ASCE Geotechnical Special Publication (GSP) was submitted for peer review. The authors of the accepted papers have addressed the comments of the reviewers to the satisfaction of the editors. All published papers are eligible for discussion in the Journal of Geotechnical and Geoenvironmental Engineering and 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, Georgia Institute of Technology, University of Kansas, University of Tennessee, International Association of Foundation Drilling, Deep Foundation Institute (USA), Saga University (Japan) and Delft University of Technology (Netherlands).

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The editors thank the ASCE Risk Assessment and Management Committee and ISSMGE Technical Committee 23 for sponsoring the session on limit state design.

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Sarvesh Chandra Ron Xia

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January 13, 2006

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