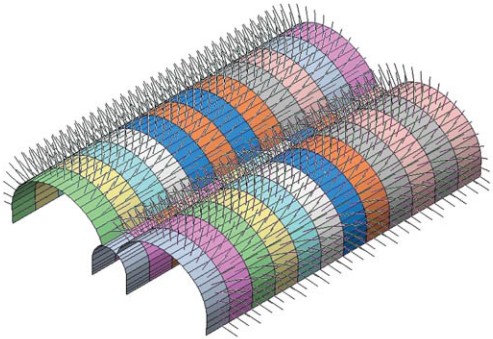
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Recent Advancement in Soil Behavior, In Situ Test Methods, Pile Foundations, and Tunneling



Edited by
Liaqat Ali, Ph.D.
António Gomes Correia, Ph.D.
Junsheng Yang, Ph.D.
Mingjiang Tao, Ph.D.

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Foreword

An international conference titled, *"Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics"* was held in China during 3 – 6 August 2009. The conference was hosted by Changsha University of Science and Technology, China and co-sponsored by ASCE Geo-Institute, Asphalt Institute, Central South University, Chinese Society of Pavement Engineering, Deep Foundation Institute, Federal Highway Administration, US Department of Transportation, Hunan University, China, International Society for Asphalt Pavements, Jiangsu Transportation Research Institute (JSTRI), China, Korea Institute of Construction Technology, Korean Society of Road Engineers, Shanghai Highway & Transportation Society, Texas DOT, Texas Transportation Institute, and Transportation Research Board (TRB).

This geotechnical special publication constitutes the proceedings of the four sessions of the conference: Soil Behavior and Laboratory Testing, In-situ Test Methods for Site Characterization, Design and Quality Control of Earth Structures and Subgrades, Pile Foundations in Subgrade, and Tunnel Engineering.

Whilst soil has been used as construction material since ancient times, technological advances continue to be made in the means of exploring, testing and in the geotechnical methods for planning and designing. The knowledge and awareness of soil behavior is fundamental to all aspects of geotechnical engineering. The objective of this publication is to provide the reader with information and foster the data on recent advances in the in-situ and laboratory testing, pile foundation systems, tunneling and design procedures for earth structures. The collection of peer-reviewed papers accumulated here synthesizes the current and future progression in respective geotechnical fields.

Papers in this volume were reviewed by professional geotechnical engineers with expertise in the subject area. Each paper included in this publication has received at least two positive examine reviews. Authors were given the opportunity to modify their papers based on reviewer's suggestions prior to final submittal of the papers. The ideas in the papers are those of authors and do not necessarily represent the views of reviewers, editors and ASCE. All papers are eligible for discussion in the Journal of Geotechnical and Geo-environmental Engineering and are eligible for ASCE awards.

The editors of this publication express appreciation to all the reviewers and authors who made this publication possible. We are grateful to Donna Dickert, of ASCE, for her prompt and willing support.

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