GPP 11

IFCEE 2018

Recent Developments in Geotechnical Engineering Practice

Papers from Sessions of the International Foundation Congress and Equipment Expo 2018

Orlando, Florida • March 5–10, 2018

Edited by

Anne Lemnitzer, Ph.D.
Armin W. Stuedlein, Ph.D., P.E.
Muhannad T. Suleiman, Ph.D.

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GEOTECHNICAL PRACTICE PUBLICATION NO. 11

IFCEE 2018

RECENT DEVELOPMENTS IN GEOTECHNICAL ENGINEERING PRACTICE

SELECTED PAPERS FROM SESSIONS OF THE INTERNATIONAL FOUNDATION CONGRESS AND EQUIPMENT EXPO 2018

March 5–10, 2018
Orlando, Florida

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International Association of Foundation Drilling
Deep Foundations Institute
Pile Driving Contractors Association
The Geo-Institute of the
American Society of Civil Engineers

EDITED BY
Anne Lemnitzer, Ph.D.
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Preface

This is the sixth volume of six Geotechnical Special Publications (GSPs) and one Geotechnical Practice Publication (GPP) containing papers from the 2018 International Foundations Congress and Equipment Expo (IFCEE18) held in Orlando, Florida on March 5–10, 2018. The IFCEE conference series combines a technical conference and equipment show dedicated to the design and construction of foundation systems, using the latest geo-engineering and geo-construction technologies and practices. The IFCEE conference series is a one of a kind event that attracts attendees from around the world for the world's largest equipment exposition dedicated solely to the deep foundations industry. This Congress combined the 2018 annual meetings of ASCE's Geo-Institute, the International Association of Foundation Drilling (ADSC), the Pile Driving Contractors Association (PDCA) and the Deep Foundations Institute (DFI). This event was the third Congress in the IFCEE conference series, following the successful 2009 and 2015 meetings, in which these leading geotechnical and geotechnical-related organizations joined together for a single and singular annual congress. IFCEE18 provided an international forum to discuss technological advances, case histories, and present challenges related to geotechnical and foundation engineering. The Congress was attended by a wide range of geo-professionals including engineers, contractors, academicians, equipment manufacturers, geo-technologists, researchers, and service, material and tooling suppliers.

This publication culminates two years of effort by the technical planning committee whose focus has been to continue the success of the previous meetings in the IFCEE conference series. Many individuals are responsible for the content of this volume, all of whom served in the efforts to maintain the standard set by previous proceedings. An international call for papers and a rigorous peer review process yielded 280 accepted technical papers, that were presented in 47 sessions, in addition to invited keynote presentations. Papers were reviewed in accordance with ASCE GPP standards. Accordingly, each paper was subjected to technical review by one or more independent peer reviewers. Geotechnical Practice Publication requires at least one peer reviewer.

The Editors would like to express their appreciation for having been provided the opportunity to be a part of this Congress' organization, their sincere thanks to the numerous session chairs and reviewers, and we hope that these proceedings will be of use to the geotechnical engineering community for many years to come.

The Editors,

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