# GEOCONGRESS 2012

# State of the Art and Practice in Geotechnical Engineering

March 25-29, 2012 Oakland, California

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### **Preface**

The Geo-Institute of the American Society of Civil Engineers has a rich history of publishing papers from annual Geo-Congresses and Specialty Conferences. Since 1986, these Proceedings have been published in volumes termed "Geotechnical Special Publications". This volume is GSP No. 225, the Proceedings of GeoCongress 2012 "State of the Art and Practice in Geotechnical Engineering", held March 25 to 29, 2012 in Oakland, California.

This conference had a somewhat broader scope and a program distinctly different from recent Geo-Congresses. It aimed to provide a forum for the interaction among geotechnical engineers and the integration of research and practice. This was accomplished through a program that included the honorary Terzaghi, Seed and Peck Lectures, 16 State-of-the-Art and 14 State-of-the-Practice keynote lectures, technical sessions, panel sessions, a range of student activities, short courses and workshops.

Another departure from recent Geo-Congresses was a strong emphasis on poster presentations. In these Proceedings, papers presented as posters are indistinguishable from papers that were presented orally during traditional conference sessions. Authors were asked to indicate their preferred mode of presentation and the conference organizers tried to meet these requests to the extent possible by the program. Over 1100 abstracts were originally submitted from which approximately 650 full manuscripts materialized. Of these, 462 papers were ultimately accepted for publication in this GSP.

The conference sessions listed in the Table of Contents were proposed and organized by 75 session chairs. In this volume, the reader will find them listed as Members of the Review Board. They were assisted by several hundred professional colleagues to guarantee that each published paper received a minimum of two anonymous positive reviews by experts on the respective subjects. The editors grouped the sessions into broader tracks so that papers on common themes would appear side-by-side in this GSP.

On behalf of the conference organizers and the Geo-Institute at-large, we wish to express our gratitude to all of the session chairs and reviewers for their diligent and tireless efforts to make these Proceedings a reality. We also wish to extend our thanks to Helen Cook, the Geo-Institute's Conference Specialist. Helen rapidly became an expert on the intricacies and unforeseen quirks of the on-line review system and fielded hundreds of questions pertaining to it. Finally, we would like to thank the authors for their contributions to the Proceedings. We continue to be impressed and inspired by the work conducted by our colleagues.

While this GSP is published in electronic format only, the companion GSP (No. 226) edited by Professors Kyle Rollins and Dimitrios Zekkos is a printed volume containing the keynote State-of-the-Art and State-of-the-Practice Lectures.

The Editors Roman D. Hryciw Adda Athanasopoulos-Zekkos Nazli Yesiller

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