GEO-CONGRESS 2024

FOUNDATIONS, RETAINING STRUCTURES, GEOSYNTHETICS, AND UNDERGROUND ENGINEERING

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Preface

This Volume is the third of six Geotechnical Special Publications (GSPs) containing papers from Geo-Congress 2024: Bridging Government, Industry, and Academia for Resilient Mega-Communities, held in Vancouver, British Columbia, Canada on February 25-28, 2024. Notably, this was the first Geo-Congress held outside of the United States, and the Canadian Geotechnical Society and Vancouver Geotechnical Society served as partnering organizations. The conference hosted the Terzaghi, Peck, Seed, and Prakash Lectures, numerous invited presentations on selected topics addressing the state of the art and practice in geotechnical engineering, and many technical sessions, panel sessions, short courses, and student competitions.

The call-for-papers was distributed internationally and resulted in 885 submissions. Several strong technical themes were observed in the submissions. These included cold regions engineering, machine learning and artificial intelligence, and sustainability, in addition to other traditionally strong tracks such as deep foundations, geosystems, and geoenvironmental engineering. We see these tracks as a reflection of both the location of the Geo-Congress and the topics currently at the forefront of geotechnical research and practice.

This volume includes a collection of papers in the fields of Deep Foundations, Earth Retaining Structures, Geosynthetics, Shallow Foundations, and Underground Engineering. Each paper was subjected to a rigorous technical assessment by two or more independent peer reviewers. Acceptance required concurrence by at least two peer reviewers, and final decisions were made only after review coordinators confirmed that authors satisfactorily addressed any reviewer comments on their original submission. Ultimately, this resulted in acceptance of 366 papers in total, 53 of which are in this volume. All accepted papers are presented at the conference as posters or technical talks and are eligible for applicable ASCE Awards.

The success of this conference and proceedings would not have been possible without the participation and collaboration of many individuals, including the tireless staff at the Geo-Institute: Barbara Curtis, Lucy King, Krystina Scott, Sean Herpolsheimer, and Brad Keelor. We would also like to extend our gratitude to the Session Chairs and Reviewers, who provided thorough reviews and assessments of the submissions in a timely manner.

The Editors,

T. Matthew Evans, Ph.D. Nina Stark, Ph.D. Susan Chang, Ph.D., P.E.

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