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Geosynthetics, Forging a Path to Bona Fide Engineering Materials: Honoring Robert M. Koerner

EDITED BY Y. Grace Hsuan, Ph.D.; Shobha K. Bhatia, Ph.D.; and Te-Yang Soong, Ph.D., P.E.

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GEOSYNTHETICS, FORGING A PATH TO BONA FIDE ENGINEERING MATERIALS

HONORING ROBERT M. KOERNER

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Geo-Institute of the American Society of Civil Engineers

EDITED BY
Y. Grace Hsuan, Ph.D.
Shobha K. Bhatia, Ph.D.
Te-Yang Soong, Ph.D., P.E.

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Preface

Dr. Robert M. Koerner's interest in geosynthetic spans almost thirty-five years of teaching, research, writing and consulting. He holds his Ph.D. in Geotechnical Engineering from Duke University. He is a registered Professor Engineer, a Distinguished Member of ASCE, a Geotechnical Engineering Diplomat, an Honorary Member of the International Geosynthetics Society and a member of the U.S. National Academy of Engineering. Bob has authored and co-authored approximately 650 papers on geosynthetics and geotechnical topics in journals and offered presentations at national and international conferences. His most widely used publication is his book entitled *"Designing with Geosynthetics"* now in its sixth edition.

Robert (Bob) Koerner has been instrumental in the development and growth of the field of Geosynthetics. His pioneering work has not only created an understanding of the design and manufacture of hundreds of geosynthetic products worldwide, but has helped generations of educators, researchers, designers, manufacturers, and regulators address countless geo-environmental and civil engineering challenges using geosynthetics. His research and development efforts have resulted in two notable organizations: the Geosynthetic Research Institute (GRI) and the Geosynthetic Institute (GSI), which have brought owners, consultants, laboratories, manufacturers, and installers together to develop and transfer knowledge related to geosynthetics. Bob is a member of the National Academy of Engineering (NAE) and a recipient of a "Hero" award from the ASCE Geo-Institute. This mini-symposium honors Robert Koerner's contribution to geosynthetics engineering through a series of papers from his former students, colleagues, practitioners, manufacturers, and researchers worldwide.

A series of papers included in the proceedings features a wide selection of currently relevant topics such as, the long term performance of geosynthetic products, innovative applications, new modeling techniques, centrifuge testing of geosynthetic systems, and green geosynthetics. These papers address issues that range from basic research to application, highlighting research findings that span the globe. They engage both the researcher's perspective and the practitioner's point of view and they involve both the user's and producer's ideas.

All papers included in this volume were peer reviewed by at least two anonymous, qualified, technical reviewers (and in some cases three or four reviewers) and selected for publication by the volume editors. An advanced document management service was utilized in order to assure anonymity and to maintain uniformity of standards. The standards of practice of the Geo-Institute of the American Society of Civil Engineers were followed. As such, the papers contained in this volume are eligible for discussion in the ASCE Journal of Geotechnical and Geoenvironmental Engineering and for ASCE awards.

The Editors
Y. Grace Hsuan, PhD., Drexel University
Shobha K. Bhatia, PhD., M.ASCE, Syracuse University
Te-Yang Soong, PhD., P.E., M.ASCE, CTI and Associates, Inc

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First and foremost, we would like to thank Dr. Robert (Bob) Koerner for accepting our idea to organize a mini-symposium in order to produce this volume, "Geosynthetics – Forging a Path to Bonafide Engineering Materials." We deeply appreciate the enormous support and encouragement he offered throughout the planning until the final stage of the proceedings.

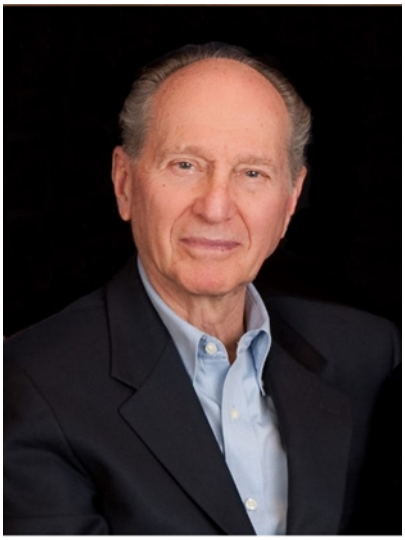
We received enthusiastic support from the entire geosynthetic community, including practitioners, manufacturers, and researchers worldwide. We thank all the contributors and many others who helped us with the reviews that make this volume possible.

The editors sincerely appreciate the help and patience of Ms. Donna Dickert, Ms. Helen Cook and Mr. Brad Keeler of Geo-Institute of the ASCE for their help in managing the paper submissions and organization of the conference.

We hope that these Geotechnical Special Publications will serve as valuable references to all working in geosynthetics and geoengineering.

The Editors
Y. Grace Hsuan, PhD., Drexel University
Shobha K. Bhatia, PhD., M.ASCE, Syracuse University
Te-Yang Soong, PhD. P.E., M.ASCE, CTI and Associates, Inc.

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Robert M. Koerner, Ph.D., P.E., D.GE, CQA

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