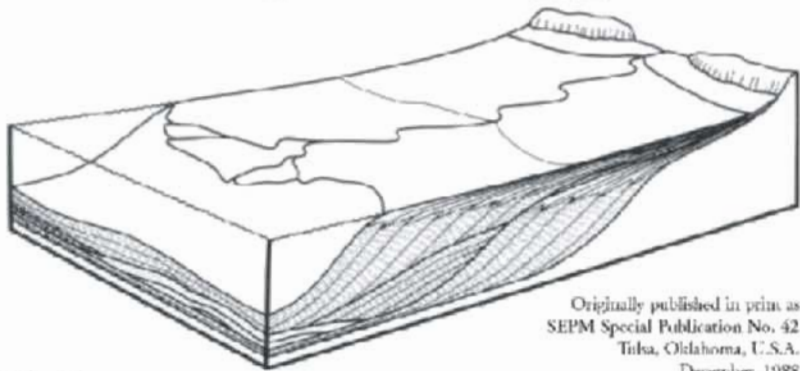


# Sea-Level Changes: An Integrated Approach



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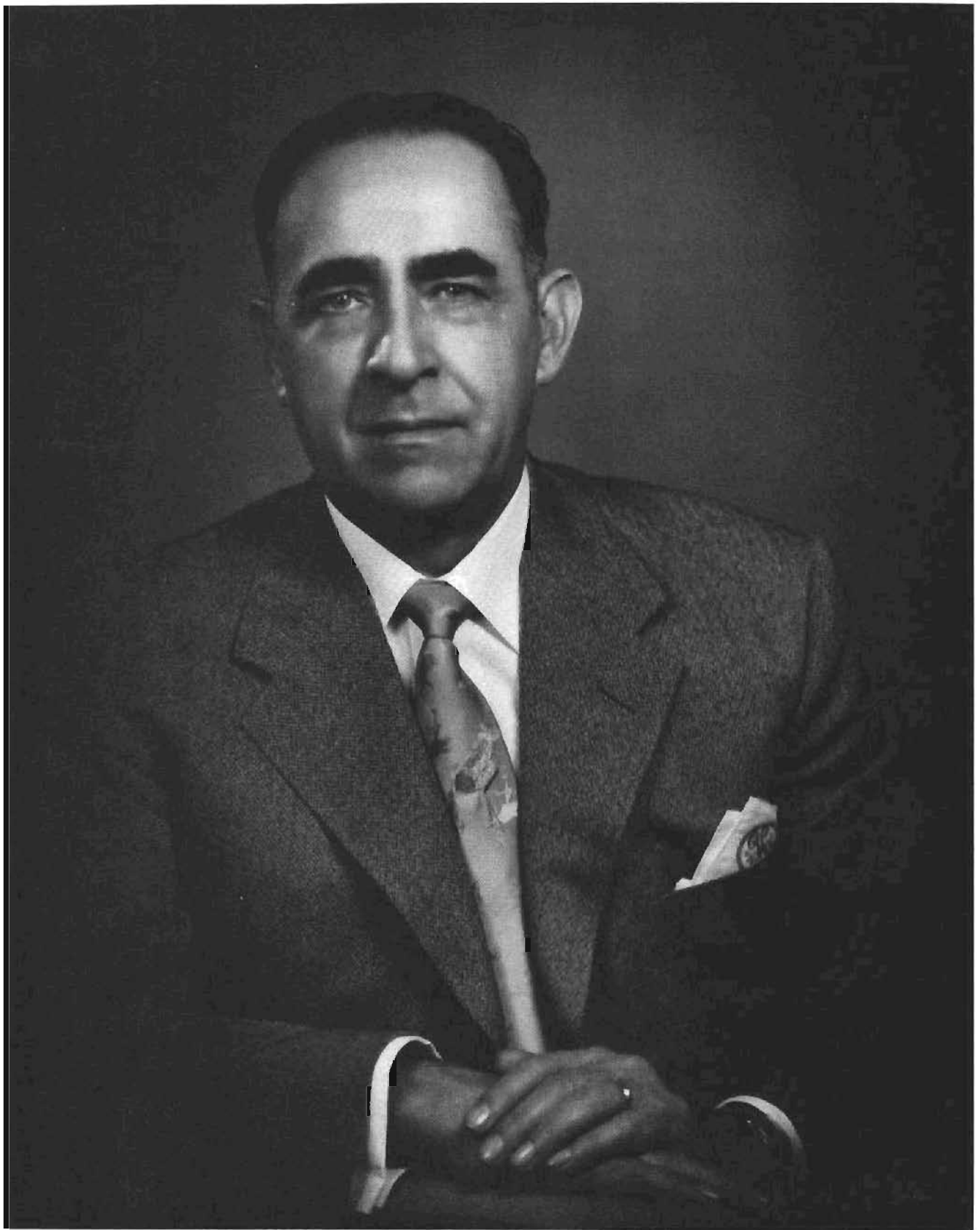
## PREFACE

In October 1985, SEPM sponsored a four-day conference entitled "Sea-Level Changes—An Integrated Approach." The conference was organized by Everest Geotech, Inc., and hosted by Transco Exploration Company in Houston, Texas. Co-conveners of the conference were Dr. Cheryl Wilgus of Everest Geotech, Inc., Dr. Walter C. Pitman of Lamont-Dougherty Oceanographic Institute, and Dr. Christopher G. St. C. Kendall of the University of South Carolina. The purpose of the conference was to provide a forum for an interdisciplinary exchange of ideas on sea-level changes and to provide an opportunity for integrating various types of evidence in approaching unresolved issues.

The conference was successful in bringing together scientists from industry, academia, and government, repre-

senting all of the major geoscience disciplines. Presentations of many new papers, plus significant releases of data that were previously held proprietary, provided fertile ground for discussion in the workshop environment of the conference. This volume represents the best of the material presented at the conference, plus some additional papers on sea-level changes that were subsequently released.

The editors appreciate the patience of the authors in awaiting the publication of this volume, but we believe that the wait was more than justified by the quality and significance of the final product. If this publication even begins to generate the kinds of ideas, interdisciplinary discussions, and inquiries that arose during the SEPM conference, we will consider its purpose to be accomplished.



## BRUCE H. HARLTON (1890–1983)

Bruce Harlton was of noble European birth, and he fought heroically in the skies over Europe during World War I. He was gravely wounded in an airplane crash, which affected his speech and arm muscles for the rest of his long, productive life. In spite of this handicap, he persevered in acquiring the best geological education possible in the leading universities of Europe and America. Bruce was graduated with high honors from Columbia University and, years later, he was awarded an honorary doctorate from that institution. He collaborated with Dr. J. J. Galloway, the famous micropaleontologist, on two outstanding papers on foraminifera, published in the *Journal of Paleontology*. One of his classmates at Columbia was the late Marshall Kay, well known for his innovative studies of geosynclines.

During his college days in New York, Bruce became devoted to the Ziegfield Follies and was proud of the fact that he dated many of the beautiful performers; however, his great romantic attachment was to Lucille Hardy, who consented to become his wife and whom he dearly loved all the rest of his life. Her death was a shock to him from which he never fully recovered.

Bruce's first professional employment was as a geologist for the Aguila Oil Company in the jungles of eastern Mexico in 1922. Later, he joined the geological staff of the Amerada Petroleum Corporation in Tulsa and was instrumental in that company's growth and its acquisition of large reserves of oil and gas. Southern Oklahoma became his Mecca, and Bruce contributed much to our understanding

of that area by publishing numerous descriptions of its minerals and new fossils, naming new mappable formations and members, exploring its complex tectonic history, drawing numerous geologic maps and cross sections, and leading field trips into the area. Up to the time of his last illness, he was laboriously preparing a comprehensive manuscript on the tectonics of the Arkoma Basin. This would have been his fifty-seventh published article.

Bruce also had time for less scientific pursuits, such as polo, flying, gardening, and stamp collecting. In all of these avocations, he exhibited the proud stamp of excellence that characterized all of his endeavors. He was a long-time, active member of Trinity Episcopal Church in Tulsa.

After his retirement from Amerada Petroleum Corporation, he formed the Harlton Exploration Company and established an office in the Beacon Building in downtown Tulsa. It was at that time that I formed a friendship of many years with Bruce, owing to our many common interests.

Bruce became a charter member of the Society of Economic Paleontologists and Mineralogists in 1927. He contributed the first article in the first issue of the fledgling *Journal of Paleontology*. Inasmuch as he was proud of having 56 articles published on many phases of the geosciences, nothing would have pleased him more than a publication fund established in his name. He set a high standard for all of us to emulate.

Allan P. Bennison

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