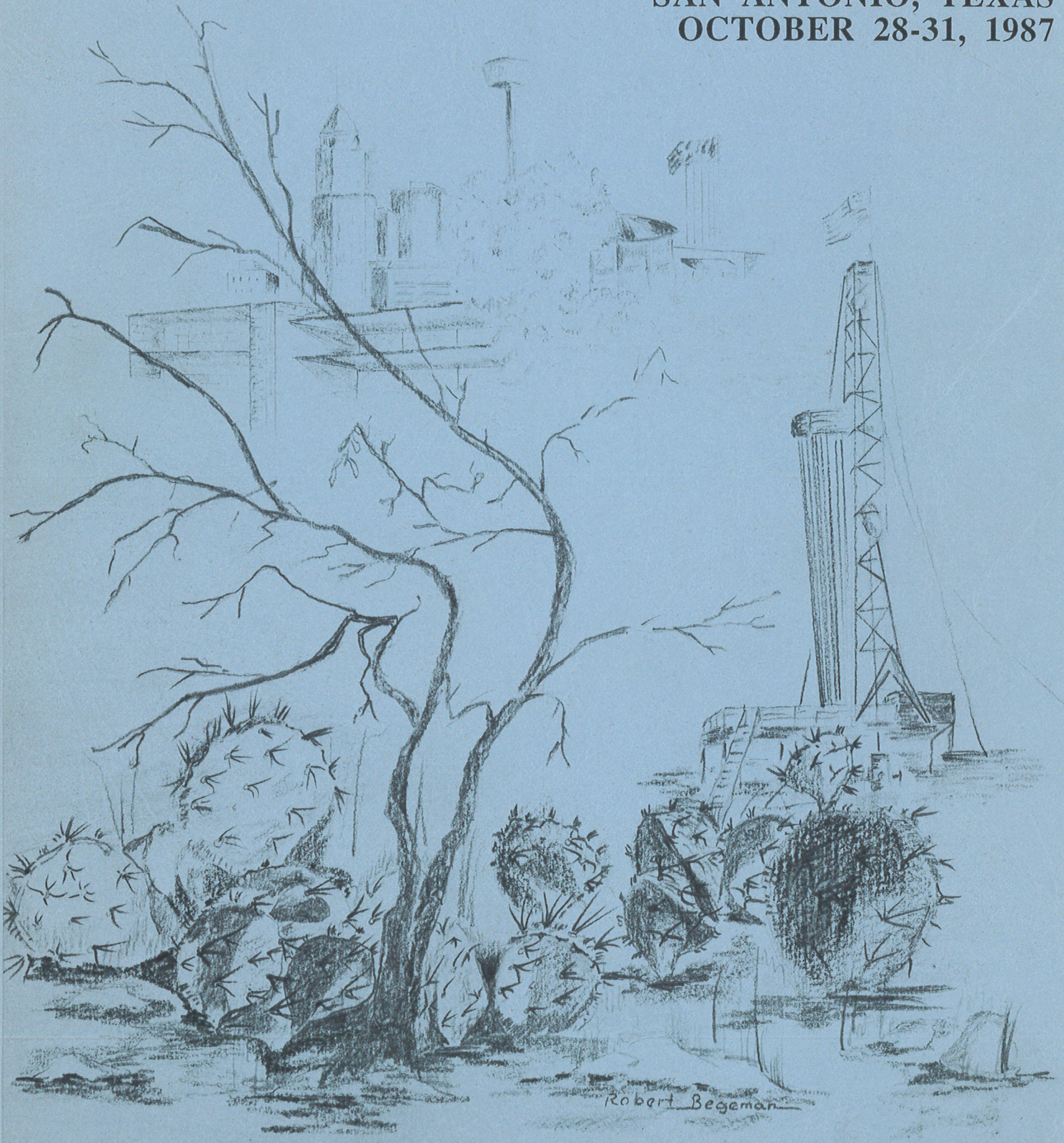


GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES

Transactions of the 37th ANNUAL MEETING

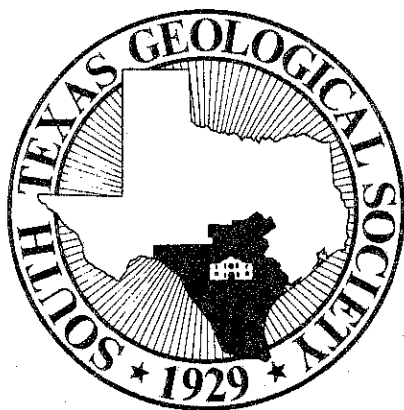
SAN ANTONIO, TEXAS
OCTOBER 28-31, 1987



TRANSACTIONS

GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES

A SECTION OF THE AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS



VOLUME XXXVII, 1987

WILLIAM P. WILBERT
(GCAGS)

and

LESLIE P. JONES
(GCS-SEPM)

EDITORS

Prepared for

The Thirty-seventh Annual Meeting of the
GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES
AAPG REGIONAL MEETING

and

The Thirty-fourth Annual Meeting of the
GULF COAST SECTION OF THE
SOCIETY OF ECONOMIC PALEONTOLOGISTS AND
MINERALOGISTS

October 28-31, 1987

Published at San Antonio, Texas

*Copyright 1987 by the Gulf Coast Association of Geological Societies.
No reproduction without permission of the President of GCAGS.*

COVER: The late Robert Louis Begeman (1920-1985) was a member of the South Texas Geological Society for 40 years. Two of his mission sketches appeared on the covers of 1967 and 1979 GCAGS *Transactions*.

TABLE OF CONTENTS

Dedication		Honorary Members, GCS-SEPM	xviii
<i>M.O. Turner</i>	vi	1986-1987 Officers, GCS-SEPM	xix
Report of the President, GCAGS	viii	1986 Best Paper Awards, GCAGS	xx
Report of the President, GCS-SEPM	ix	Best Paper Awards & A.I. Levorsen Memorial	
Report of the General Chairman	x	Awards, GCAGS	xxii
Report of the Editor, GCAGS	xi	1986 Best Paper Awards, GCS-SEPM	xxiv
Report of the Editor, GCS-SEPM	xi	Best Paper Awards, GCS-SEPM	xxvi
Officers and Committees	xii	1987 Executive Committee, GCAGS	xxviii
Honorary Membership, GCAGS		1986-1987 Executive Council, GCS-SEPM	xxix
<i>John J. Amoroso</i>	xiv	Officers of Member Societies, GCAGS	xxx
Honorary Members, GCAGS	xv	Standing Committees, GCAGS	xxxii
Distinguished Service Awards, GCAGS	xv	Past Officers, GCAGS	xxxii
Honorary Membership GCS-SEPM		Past Officers, GCS-SEPM	xxxiii
<i>Don G. Bebout</i>	xvi	Constitution and By-Laws, GCAGS	xxxiv
Honorary Membership GCS-SEPM		By-Laws, GCS-SEPM	xxxvii
<i>David E. Pope</i>	xvii		

Technical Papers GCAGS

Postdevelopment Analysis of Producing Shelf-Slope Environments of Deposition, High Island Area <i>D. H. Anspach, S. E. Tripp, R. E. Berlitz, and J. A. Gilreath</i>	1	Depositional Environments of A.W.P. Olmos Field, McMullen County, Texas <i>J. Greg Dennis</i>	55
Petrology and Hydrocarbon Reservoir Potential of Subsurface Pottsville (Pennsylvanian) Sandstones, Black Warrior Basin, Mississippi <i>Russell H. Beard and Maurice A. Meylan</i>	11	Organic Geochemistry of the Lower Cretaceous Travis Peak Formation, East Texas Basin <i>Shirley P. Dutton, Robert J. Finley, and Karen L. Herrington</i>	65
Comparison of Petrographic Characteristics of Selected Carbonate Rocks to Their Petrophysical Log Response—Smackover Formation (Upper Jurassic) <i>Alfred A. Biehle and Carey M. Crocker</i>	25	Pathways of Migration of Oil and Gas in the South Mississippi Salt Basin <i>Robert Evans</i>	75
Fan-Delta Reservoirs in the Lower Cotton Valley Group (Jurassic), Kildare Field, Northeast Texas <i>Cynthia E. Black and Robert R. Berg</i>	35	The Frio River Line in South Texas—Transition From Cordilleran to Northern Gulf Tectonic Regimes <i>Thomas E. Ewing</i>	87
Characterization of Fractures in Limestones, Northern Segment of the Edwards Aquifer and Balcones Fault Zone, Central Texas <i>Edward W. Collins</i>	43	Sandstone Petrology and Diagenesis of Lower Tuscaloosa Formation Reservoirs in the McComb and Little Creek Field Areas, Southwest Mississippi <i>Kenneth H. Hamlin and Christopher P. Cameron</i>	95

Technical Papers

GCAGS (continued)

- | | | | |
|--|-----|---|-----|
| Exploration Methods—Lower Tuscaloosa Trend,
Southwest Mississippi
<i>James B. Hersch</i> | 105 | Geochemical Studies of Crude Oil Generation, Migration,
and Destruction in the Mississippi Salt Basin
<i>Roger Sassen, C.H. Moore, J.A. Nunn, F.C. Meendsen,
and Ezat Heydari</i> | 217 |
| Structural Evolution of Grand Lake Field,
Cameron Parish, Louisiana
<i>David B. Johanson</i> | 113 | The Depositional Environments, Diagenetic History, and
Porosity Development of the Upper Smackover
at Eustace Field, Henderson County, Texas
<i>Jose J. Sequeira, Jr. and Wayne M. Ahr</i> | 225 |
| Seismic Stratigraphic Investigation of the West
Florida Basin
<i>Jacques P. Lord</i> | 123 | Depositional Environments and Sedimentary
Tectonics of the Subsurface Cotton Valley Group
(Upper Jurassic), West-Central Mississippi
<i>Ben D. Sydboten, Jr. and Richard L. Bowen</i> | 239 |
| Model of Upper Cenozoic Geologic Evolution of the
Louisiana Slope
<i>Allen Lowrie</i> | 139 | Isotope Chronostratigraphy: High Resolution
Stratigraphic Correlation in Deep-Water Exploration
Tracts of the Northern Gulf of Mexico
<i>Dwight M. Trainor and Douglas F. Williams</i> | 247 |
| Recoverable Natural Gas Reserves From the Jurassic
Norphlet Formation, Alabama Coastal Waters Area
<i>Ernest A. Mancini, Robert M. Mink, Bennett L. Bearden,
and Richard P. Hamilton</i> | 153 | Regional Stratigraphy of the Smackover Limestone
(Jurassic) in South Arkansas and North Louisiana,
and the Geology of Chalybeat Springs Oil Field
<i>Arthur R. Troell and J. D. Robinson</i> | 255 |
| Upper Jurassic Depositional Systems and Hydrocarbon
Potential of Southeast Mississippi
<i>Fred C. Meendsen, Clyde H. Moore, Ezat Heydari,
and Roger Sassen</i> | 161 | Mini-Shelves in the Taylor Shale: Stratigraphy of
the Late Cretaceous and Early Tertiary Units of
Bastrop County, Texas
<i>Delos R. Tucker and Daniel P. Hency</i> | 263 |
| Basin Analysis by Model Simulation: Effects of
Geologic Parameters on 1-D and 2-D Fluid Flow
Systems with Application to an Oil Field
<i>K. Nakayama and I. Lerche</i> | 175 | Stratigraphy and Source Potential of the Smackover
Formation of the Northern Manila Embayment,
Southwest Alabama
<i>William J. Wade, Roger Sassen, and
Elizabeth W. Chinn</i> | 277 |
| Use of Thermal and Epithermal Neutron
Measurements in Shaly Sand Evaluation
<i>John Puffer, Gerrit d'Ablaing IV, Tim Toth, and
Harold Darling</i> | 185 | Carbon Isotope Signals for Chemical Stratigraphy
and Hydrocarbon Exploration in the Northern
Gulf of Mexico
<i>Douglas F. Williams and Dwight M. Trainor</i> | 287 |
| East Taft Field, San Patricio County, Texas:
A Subtle Stratigraphic Trap—Implications for
Exploration in a Supermature Province
<i>R.R. Railsback</i> | 195 | A Subsurface Study of the Lower Tuscaloosa
Formation at Olive Field, Pike and Amite
Counties, Mississippi
<i>Gary J. Wiygul and Leonard M. Young</i> | 295 |
| ★ Structural Framework and Sand Genesis of the
Wilcox Group, Travis Ward Field, Jim Hogg
County, Texas
<i>E. Gerald Rolf</i> | 207 | | |

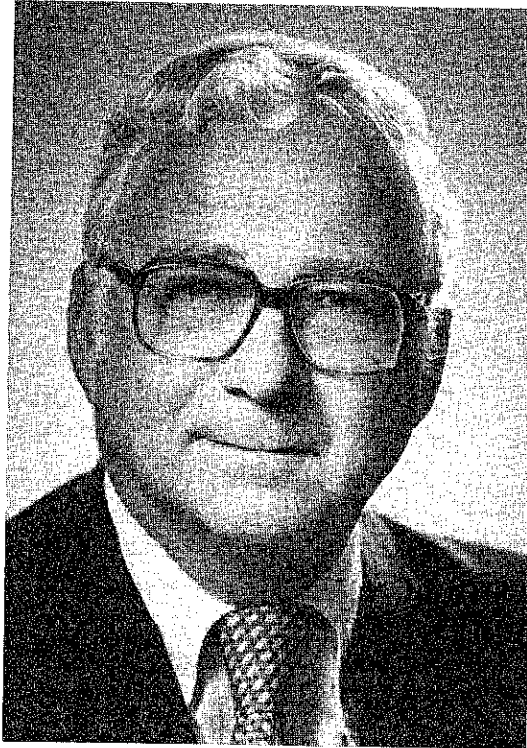
Technical Papers GCS-SEPM

- | | |
|--|---|
| <p>Engineering, Economic, and Environmental Assessment of a Lower Wilcox Lignite
<i>Paul E. Albertson</i> 303</p> <p>Clay Mineral Variations in a Marginal Deltaic Plain, Coastal Hancock County, Mississippi
<i>Gregory N. Bonn and David M. Patrick</i> 313</p> <p>Diagenesis and High Fluid Pressures in the Frio and Vicksburg Shales, Brooks County, Texas
<i>Winston F. Bott, Jr. and Thomas T. Tieh</i> 323</p> <p>Facies Analysis, Sea-Level History, and Platform Evolution of the Jurassic Smackover Formation, Conecuh Basin, Escambia County, Alabama
<i>Richard A. Esposito, Jr. and David T. King, Jr.</i> 335</p> <p>Morphology and Evolution of a Shale-Filled Paleo-Channel in the Wilcox Group (Paleocene-Eocene), Southeast Texas
<i>Peter J. Hutchinson</i> 347</p> <p>Storm-Related Rejuvenation of a Northern Gulf of Mexico Estuary
<i>Wayne C. Isphording, Dewayne Imsand, and George C. Flowers</i> 357</p> <p>Lower Cretaceous Barrier Reef and Outer Shelf Facies, Sligo Formation, South Texas
<i>Brenda L. Kirkland, Robin G. Lighty, Richard Rezak, and Thomas T. Tieh</i> 371</p> <p>Ostracode Shells as Indicators of Thermal History
<i>Mervin Kontrovitz</i> 383</p> <p>Coastline Development and Change in Alabama and the Florida Panhandle
<i>George M. Lamb</i> 393</p> <p>Compaction of Norphlet Sandstones, Rankin County, Mississippi
<i>Earle F. McBride</i> 399</p> <p>Pisoids in the Jurassic Smackover Formation (Alabama-Florida): Evidence of Marine Vadose Diagenesis
<i>Faye F. Melas and Gerald M. Friedman</i> 405</p> | <p>Application of the Tidal Mudflat Model to the Sunniland Formation of South Florida
<i>Hugh J. Mitchell-Tapping</i> 415</p> <p>Occurrence of a <i>Pseudophragmina (Proporocyclina) zaragosensis</i> Bank in the Upper Wilcox (Lower Eocene), Pointe Coupee Parish, Louisiana
<i>Lori L. Nunn and Rowdy C. Lemoine</i> 427</p> <p>Late Quaternary Development of the San Jacinto River Valley Margin at Peggy Lake, Upper Texas Coast
<i>Jeffrey G. Paine</i> 433</p> <p>The Effects of Fluvial Abrasion on the Shapes of Quartz Sand Grains
<i>Mark Peterson and Jim Mazzullo</i> 443</p> <p>A Palynological Age Determination for the Dorcheat and Hosston Formations: the Jurassic-Cretaceous Boundary in Northern Louisiana
<i>Robert Rogers</i> 447</p> <p>Provenance of the Norphlet Sandstone, Northern Gulf Coast
<i>W. P. Ryan, W. C. Ward, and R. L. Kugler</i> 457</p> <p>Coiling Patterns and Their Relationships to Shell Architecture in the Foraminiferida
<i>Hubert C. Skinner</i> 469</p> <p>Lithology and Strontium Distribution of the De Queen Formation at the Main Highland Gypsum Quarry, Highland, Arkansas
<i>Thad A. Slaughter, Ernest B. Ledger, and Austin A. Sartin</i> 479</p> <p>Origin and Timing of Seafloor Erosion on the Louisiana Continental Slope
<i>Michiel C. van den Bold, Thomas F. Moslow, and James M. Coleman</i> 487</p> <p>Vertical Grain Size Progressions as an Aid in Interpreting Depositional Environments, Queen City Formation (Eocene), East Texas
<i>Elizabeth Ann Watkins and John B. Anderson</i> 499</p> <p>Depositional Environment of Downdip Yegua (Eocene) Sandstones, Jackson County, Texas
<i>Christopher J. Whitten and Robert R. Berg</i> 513</p> |
|--|---|

DEDICATION

Transactions Volume 37

M. O. Turner



It is with distinct pleasure that the Executive Committee of the South Texas Geological Society dedicates the 1987 volume of the Gulf Coast Association of Geological Societies *Transactions* to M.O. Turner.

For more than four decades Mo Turner has been a strong force in the energy industry of Texas and America. His dedication to the science of geology, to the profession of petroleum geology, and to service and political organizations reflects a

model that we should all strive to achieve.

Mo was born in 1923 in Magnolia, Texas, but soon moved with his family to Houston where he attended public school and business college prior to enlisting in the U.S. Navy. He served in both the North Atlantic and Pacific theaters before continuing his education at the University of Houston from which he graduated in 1948.

In 1947, he married Margaret Ann Collins. Mo and Margaret have two children, Kathleen Turner Willoughby and Timothy Jay Turner.

For seven years Mo worked with the Stanolind Oil and Gas Company in the Corpus Christi, San Antonio, and Houston districts before resigning in 1954 as Senior Division Staff Geologist to enter consulting practice in San Antonio. He continues an active exploration program in South Texas; the

majority of his production and operations are in Karnes, Live Oak, Frio, and Wilson counties.

During his professional career, he has dedicated a tremendous amount of time and effort toward the scientific and professional goals of numerous organizations. For more than 20 years Mo has distinguished himself in the activities of the American Association of Petroleum Geologists; he served as General Chairman of the 1974 national AAPG/SEPM meeting in San Antonio, Chairman of the Committee on Conventions (1977-1980), Chairman of the International Science and Engineering Fair Award Committee (1978) and memberships on the Ethics and Discipline Committee, Honors and Awards Committee, and Nominations Committee. In 1980, he was awarded the AAPG Distinguished Service Award.

Mo Turner has also provided leadership to the American Institute of Professional Geologists. He served as President of the Texas Section in 1973, during which time he aided in formulating a model "Law for Texas Registration of Geologists/Geophysicists." In 1982 he was elected National President of the AIPG and served as Chairman of the AIPG Founda-

tion in 1983. He was honored in 1984 as the recipient of AIPG's highest award, the Ben Parker Memorial Medal. In addition, he served as President of the American Geological Institute in 1986.

The talents and energies of Mo Turner have generously been contributed to the South Texas Geological Society and to the Gulf Coast Association of Geological Societies. He was President of the South Texas Geological Society in 1975 and through the years has guided the Society's growth and development as it became one of the strongest in the Gulf Coast Region. In 1967, he served as General Chairman of the annual meeting of the GCAGS. His contributions within the GCAGS include the chairmanship of the Awards and Nominations Committee and as representative of the GCAGS to AAPG Advisory Council.

Mo willingly contributes to public and civic activities on the local, state, and national level. He has served as a State Republican Party officer and as a delegate to numerous state and national conventions. The city of San Antonio has benefited from his service as a member of the City Planning Commission, the San Antonio

Industrial Development Authority, Board on Science Energy Study Commission, and several Citizens Advisory Boards on San Antonio's energy supply. He has served as President and Lieutenant

Governor of Kiwanis International, and President of the both the San Antonio and the Texas Right to Life Committees.

M.O. Turner is widely recognized by his peers for his many contributions to the profession of petroleum geology. This recognition is distinctly manifested by the many awards and honors that he has received including honorary memberships in the American Associa-

tion of Petroleum Geologists, Gulf Coast Association of Geological Societies, and the South Texas Geological Society.

We are all pleased to honor Mo for his many years of service to the profession of petroleum geology and for the energy and vision which he gave to the offices he held and the activities in which he was engaged. These *Transactions* are, therefore, dedicated to M.O. Turner, geologist, oil finder, public servant, and gentleman.

REPORT OF THE PRESIDENT

Gulf Coast Association of Geological Societies

Richard H. Sams

In spite of the petroleum industry's deep depression, the Association's membership has recorded only a 12% loss and two of our member societies have actually reported gains. We remain above the 9,000 membership mark and are financially sound, even though at Baton Rouge last year, we had to absorb \$10,000 loss, our first convention net loss in many years. Thanks to some farsighted planners in years past, our reserve funds are sufficient to overcome this loss as well as a decline in revenues from book sales over previous years, a main source of our non-convention revenue.



hope you will plan to attend. As in years past, through our Student Aid Committee, we have also been able to make grants to 21 students at 12 educational institutions throughout the Gulf Coast in support of graduate thesis research on Gulf Coast geological subjects. Finally, we have published Volume 5 of the Bibliography of Gulf Coast Geology, which covers the literature for 1980-1984.

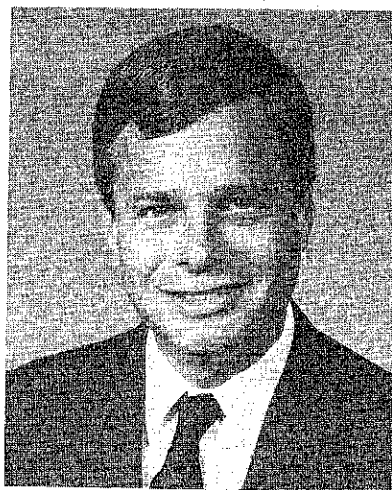
I welcome you to this 37th Annual Convention of the Gulf Coast Association of Geological Societies. Don Tobin and his committee members, together with the AAPG support staff, have worked very hard to bring you once again an instructive and delightful time in the Alamo City. We hope you will be pleased in every way.

Your Association, through its Executive Committee, has voted to lend financial support towards the 28th International Geological Congress to

be held in Washington, D.C. in 1989. This will be the first such meeting to be held in this country since 1933, and is worldwide in its geological scope. I



VICE PRESIDENT
James A. Hartman



SECRETARY
Mark T. Tobin



TREASURER
Taliaferro Cooper

REPORT OF THE PRESIDENT

Gulf Coast Section

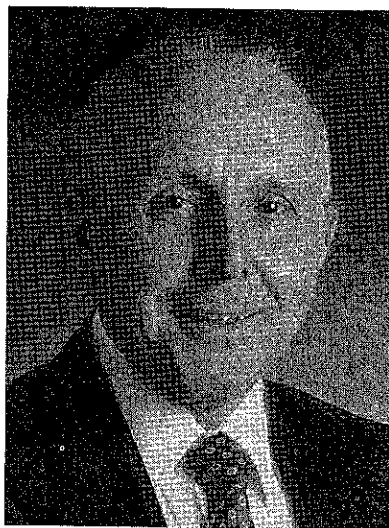
Society of Economic Paleontologists and Mineralogists

Charles L. McNulty

Since late 1985, the beginning of its 1985-86 year, the Gulf Coast Section SEPM has fought to counter the threats to its solvency, programs, and existence. Even late in 1986, at the beginning of the 1986-87 year, trends in falling membership, decreasing contributions, and declining support of field trips, annual meetings, and research conferences continued without abatement. The 1986 Research Conference on shelf sands had so little preregistration that a substantial financial loss seemed inescapable and postponement seemed probable.

But belief in the quality of the program and the responsibility of the Section led to the decision to continue. Efforts to expand notice of the Conference were increased, particularly through personal contact, notably by Susan Morris and Bob Perkins. Ultimately the registration rose to break-even level, and the Conference was the professional success anticipated. The Proceedings of it are in preparation, and they will be a prestigious and remunerative addition to the publication list.

Thereafter, measures begun in 1985 and others taken in 1986 began to change the situation. Among those in the realm of membership were efforts to identify and drop those of definite intent to withdraw, to identify and notify those of apparent unintentional delinquency, and to seek new members, primarily by a selected mailing of a new brochure prepared by Art Waterman. The last reversed the trend of falling membership and produced a ten percent increase over the nadir.



Another important change developed in the procedure for producing the newsletters. These had been prepared from typescript by conventional commercial press. Through efforts of Bob Perkins, a new procedure of micro-computerized editing, formatting, and typesetting was devised. This change provided a substantial saving which, combined with the economies and increased income reported above, changed the fiscal outlook in mid-1987 from one of deficit to one of modest gain.

The 1986-87 year has been gratifying also in plans for and progress on meetings and conferences. Under the guidance of the experienced and competent local committee, implementation of the 34th Annual Meeting has been steady and professional. The 1987 Research Conference on biostratigraphic methods in sequence analysis has aroused wide interest,

resulting in a full and diverse program of outstanding national and international speakers and indicating a return to the maximum registration of 300. Although properly the purview of Art Waterman and the 1987-88 leadership, mention of the 1988 Research Conference in New Orleans is irresistible because of the timeliness and promise of its theme, "Geochemistry of Gulf Coast Oil and Gases," and the stature of its organizers, Dietmar Schumacher and Mahlon Kennicutt.

But problems remain. The student grant program was suspended for 1986-87. When and to what extent shall it be resumed? At any size, it is one of the largest items in our budget and one that cannot be maintained without substantial contributions or profits on the research conferences. Institutional and individual contributions remain at a low level, although some of both continue. Loss of the services of Gene Martin, who so long and successfully chaired the contributions committee, has complicated the situation. For information on contributions, see Bill Ventress' comments in the July issue of the Section newsletter. Also unrecovered is our field trip program. Revival here may lie partly in revised procedures for seeking, selecting, and pricing trips.

So the Gulf Coast Section SEPM has been scathed, but it has adjusted. It is fiscally sound. It has excellent meetings and conferences ahead, superior publications in progress, and an energetic, resourceful, judicious leadership for the future.

REPORT OF THE GENERAL CHAIRMAN

Thirty-Seventh Annual Meeting – 1987

Don F. Tobin

As you receive the *Transactions* and this report upon registering at the 37th annual meeting of the GCAGS, your convention will at last be underway. The committee chairmen and members are starting to relax, knowing that two years of effort have been well spent and the goal of putting together a well organized and well presented convention has been reached. It is our hope that all who attend this convention will both enjoy it and profit from it.

Putting together a convention like this is a labor of love by the countless people who gave of their time and efforts at considerable personal cost so that we all might enjoy the final product of their energies. May I express my deep thanks to all of the committee chairmen and members and to the many sponsors, advertisers, exhibitors, and donors who so generously contributed to and supported this 37th annual meeting. My special thanks go to technical program chairmen Edward C. Roy and Robert K. Smith, to editors William P. Wilbert and Leslie P. Jones, to advertising chairman George L. "Jack" Richards who had to



pick up a dropped ball, to Ray Jones for getting out the announcement, to Tom Ewing for organizing the field trips, to Baylor Eidelbach for putting the ladies' activities together, and to Mark T. Tobin who coordinated all our efforts, all of whom together are responsible for much of the work and quality of this convention. I also thank the officers of the GCAGS and the GCS-SEPM members who contributed generously to the success of this project.

This past year has not been an easy one for many of the members of our profession. The near total destruction of some segments of our profession both operationally and academically has left many in the geologic profession, as well as in the petroleum industry, with a feeling of both frustration and futility. Yet most of us have survived, overcome our problems, and once again moved ahead with drive and determination to achieve new successes. As geologists and scientists we need not lament the present or recent past, but look forward to the future with renewed courage dedicated to improving our profession and the industries which we serve. My philosophical admonition is to hang tough and look ahead, not behind, and my hope is that this convention will give you inspiration to do this.

All of us with the South Texas Geological Society join in welcoming you to "Fiesta San Antonio," to our social events and the technical program. May you be imbued with the warm spirit of our city and return to visit us often.

REPORT OF THE EDITOR GCAGS

William P. Wilbert



In 1956, while a sophomore at LSU, one of my geology professors "suggested" that I might be better prepared for an upcoming field trip if I went to the library and read an article in something called the *Transactions*. It was the first geologic article I had ever read. Throughout graduate school at both The University of Texas and Tulane, and during most of my professional life, copies of the *Transactions* have seldom been far from my desk. The letters GCAGS, to which I was initiated back in the library at LSU have become as familiar to me as RSVP and OPEC. The *Transactions* has become the most widely used and often-quoted annual publication in this part of the "oil patch";

if anyone doubts that, one need look no further than his own files to check and see how many *Transactions* articles are photocopied versus those of any other publication.

One of the reasons for the *Transactions'* utility is the fact that it is almost as often assigned in the classroom as it is used in prospect brochures. This volume should be no exception. Its twenty-nine papers in the GCAGS section run the geologic gamut from heat flow and hydrocarbon migration studies, through

geochemistry (both organic and inorganic) and seismic stratigraphy, to the more conventional petrographic and field studies; geographically, they range from the West Florida Basin westward to Jim Hogg County in South Texas.

I wish to thank the authors who have shared their data and ideas, my colleagues on the GCAGS Editorial Committee who volunteered their time just as they were starting to become gainfully active again after months in an economic trough, and most of all, the SEPMEditor of this volume of *Transactions*, Leslie Jones, who lent freely her editorial expertise in converting the manuscripts to the printed page. Finally, I would be remiss if I did not thank the many authors and editors of the thirty-six volumes of the *Transactions* which preceded this one for (1) introducing me to the geologic literature, (2) helping me through all of my academic and much of my professional life, and (3) year after year turning out the most significant annual publication in the Gulf Coast area. I hope this 37th *Transactions* will be as useful and widely used as its predecessors.

REPORT OF THE EDITOR GCS-SEPM

Leslie Jones



In the SEPM portion of the 1987 *Transactions*, we have 22 technical papers. Since the program committee this year adopted a policy of publishing full papers only, all papers presented at the convention are represented here, complete with illustrations. SEPM lost very few papers because of this policy, and the usefulness of the *Transactions* is greatly improved.

Speaking of its usefulness, one of our authors, Hugh Mitchell-Tapping of Sun International, returned recently from a trip to China, and reports seeing the GCAGS *Transactions* in use there.

Publishing is entering a new era, and the *Transactions* this year is right up to date. Typesetting and page layout were done on a state-of-the-art desktop publishing system. About half the papers were received on 5 1/4" or 3 1/2" disk, and

most of the other half were scanned into the computer on an Abaton flatbed scanner with optical character recognition. The front matter and three papers out of 51 had to be typed in. Editing, cleanup, and formatting were done in Microsoft Word on a Sperry IT with a 40-MB hard disk. The papers were then transferred to an Apple Macintosh SE or a Mac II over a TOPS network, where file conversion and final formatting were done in Microsoft Word, and page layout was done in Aldus PageMaker. "Knockouts" were left in the page layouts for illustrations and tables, and the print shop did the camerawork and pasted in

the finished illustrations. This book is archived on 15 3 1/2" diskettes. If the host societies in future years desire to continue with automated production, there will be some savings in time and money since the page format is set up, and certain portions (such as past officers and awards) can be reused.

The SEPM authors, whose papers I edited with the help of my committee, turned in high-quality work and were a delight to work with in the editing process. I contacted authors of nearly all the papers, GCAGS included, to request disks or scannable copy from them, and all were most pleasant and helpful in the face of that added inconvenience. I applaud all of them for giving their time and effort to share the results of their work. I also wish to extend special thanks to the people who helped me: Bonnie Weise, Tom Ewing, Bro. David Fitzgerald, Wayne Jones, and Laurie Dutton gave generous amounts of time for editing and proofreading. John Christian of Custom Copy donated his time to lay out the advertising pages. I also thank the respective staffs of Pipe Creek Publications and Aus-Tex Printing & Mailing for their excellent work in the production of this volume.

OFFICERS AND COMMITTEES

37th Annual Meeting

OFFICERS

President	Richard H. Sams, Independent Geologist
Vice President	James Hartman, Independent Geologist, New Orleans, LA
Secretary	Mark T. Tobin, Rio Bravo Royalty Co.
Treasurer	Taliaferro Cooper, Independent Geologist

1987 CONVENTION CHAIRS

General Chairman	Don F. Tobin, Rio Bravo Royalty Co.
Vice Chairman GCAGS	Richard H. Sams, Independent Geologist
Vice Chairman SEPM	Bonnie Weise, Consulting Geologist
Convention Coordinator	Mark T. Tobin, Rio Bravo Royalty Co.

TECHNICAL PROGRAM

Co-Chairman GCAGS	Edward C. Roy, Jr., Trinity University
Co-Chairman GCAGS	Robert K. Smith, UTSA
Chairman SEPM	Walter Coppinger, Trinity University
	Lee T. Billingsley, Sandia Oil and Gas

1987 CONVENTION COMMITTEES

Advertising	George L. (Jack) Richards , Bright & Co.	Finance	Taliaferro Cooper , Ind. Geologist Tom Green , Independent Geologist Charles Kimmell , Independent Geologist Bob Staewen , Independent Geologist
Arrangements	Doug Toepperwein , Panhandle Prod. Co. Douglas A. Draves , Ind. Geologist Mark A. Norville , Stallion Oil Co.	Golf Tournament	George L. Long , Independent Curtis R. Golson , Ind., St. Hedwig, TX
Audio-Visual & Speakers Assistance	Richard N. Hargis , Stratex Petroleum John M. Currie , Independent Geologist Joby Sawyer , Independent Geologist	Housing	Wes Franklin , Tenneco Oil Co.
Crisis	George His , Petrolero Corp. Roberta Coppinger , Petrolero Corp. Alvin Schultz , Petrolero Corp.	Job Interview	Ernest H. Horton , Ind. Geologist
Distinguished Visitors	M.O. Turner , Independent Geologist Hyman Corman , Independent Geologist Mark Eidelbach , Mark IV Energy R.H. Engelke , Independent Robert Gowdy , Independent	Judging and Awards GCAGS	Don A. Urbanec , Independent Geologist Robert Marshall , Independent Geologist Margaret Perales , MPG Petroleum Stanley Perkins III , Independent Geologist Linda Son-Ewing , Frontera Expl. Services
Editing GCAGS	Wm. P. Wilbert , Independent Geologist Bobby H. Bammel , Seewald Energy Thomas E. Ewing , Frontera Expl. Svcs. Martha Guethle , Independent Geologist Wayne Jones , Villa Enterprises Robert Marshall , Independent Geologist Robert Pace , Independent Geologist John Quick , Midstates Oil Co. Kenneth O. Seewald , Seewald Energy Dianne Smith , Trinity University Joe L. Terry , Durst Energy Corp. Don F. Urbanec , Independent Geologist Dixon N. White , Ind. Geol., Helotes, TX James A. Wolleben , Advanced Micromagnetics, Austin, TX	Judging and Awards SEPM	Michael Nault , Tenneco Oil Co., Lafayette, LA
Editing SEPM	Leslie P. Jones , Consultant John Christian , Custom Copy Laurie Dutton , Wilford L. Stapp Thomas E. Ewing , Frontera Expl. Svcs. David Fitzgerald , St. Mary's University Wayne Jones , Villa Enterprises Bonnie Weise , Consulting Geologist	Mini-Marathon	Gene Ames III , Sandia Oil & Gas Barry A. Brooner , Frank I. Brooner
Entertainment	G. Milton Johnson , Ind. Geologist Walter Buzzini III , Independent	NIOSA	Elmer H. Dolch , Independent Leonard C. Bryant , Independent Geologist Richard D. Lathrop , Ind. Geologist Joe L. Terry , Durst Energy Corp.
Exhibits	Charles J. Worrell , Ind. Geologist Arthur R. Troell , Independent Geologist	Printing	Rick Debus , Tesoro Petroleum John Christian , Custom Copy
Field Trips	Thomas E. Ewing , Frontera Expl. Svcs.	Publicity	Ray Jones , Bright & Co. Joan Falkenberg , Independent Geologist
		Registration	Victor King , Ind. Geologist, Comfort, TX John Morris , Independent Howard Semler , Independent
		Spouses Activities	Baylor (Mrs. Mark) Eidelbach Carol Clevenger —Courtesy Booth Dottie Crues —Hospitality Doris Currie —Registration Gift & Favors Ellen Johnson —Luncheon Jeanette Kelley —Laredo Bus Trip Roxana McGregor —Museum Tour Sandy Perkins —Registration
		Tennis Tournament	W. Grant Ferguson , Venus Oil Co.
		Tobin Theatre	John M. Long , Independent Geologist John Bissell , Tesoro Petroleum Joan Falkenberg , Independent Geologist Alf Hawkins , Hawkins Remote Sensing
		Transportation	Robt. L. Huffman , Knight Mud Logging

HONORARY MEMBERSHIP

GCAGS

John J. Amoruso

John J. Amoruso was selected for Honorary Membership in the Gulf Coast Association of Geological Societies for his dedication to the geological profession and to GCAGS in particular.

John has been active in service to the geological community since 1968 when he served on a Houston Geological Society Stratigraphic Study Group. From that time until the present John has been in continuous and multiple positions of responsibility to the geologists of the Gulf Coast.

John joined Pan American Petroleum Corporation (now Amoco Production Co.) in 1957, having worked for its predecessor, Stanolind, in Oklahoma during the summer of 1956. During the period 1957-1969 with Pan American Petroleum Corporation, he held widely varied petroleum exploration assignments in the Four Corners Area, Uinta Basin, West Texas and the East Texas-North Louisiana Area. In 1969, he opened offices in Houston as an Independent Petroleum Geologist and since that time has been actively engaged in petroleum exploration.

During the 12 years John worked for Pan American he contributed significantly to the



successful exploration efforts of his company, first as a surface geologist in southern Utah, then in subsurface exploration in Farmington, New Mexico, Fort Worth, Tyler and Houston, Texas.

Since becoming an Independent in 1969, John has continued to contribute to successful exploration programs in Texas, Arkansas, Louisiana, Colorado, Wyoming, and Nebraska. One of John's more significant accomplishments was to organize and supervise a group that managed the collection and evaluation of geologic data from the first "C.O.S.T." (Continental Offshore Stratigraphic Test) wells drilled in the Atlantic Ocean off the East Coast of the United States. John has

proven by performance that he is a capable and successful petroleum exploration geologist as well as a competent administrator in both professional societies and in business.

John served as President of the Gulf Coast Association of Geological Societies during the 1981-82 term after previously serving a term as Vice President. He first became active in the GCAGS by presenting a paper at the 1970 convention in Shreveport and since that time has maintained his involvement in the Association. During the 1973-74 term, John was the Houston Geological Society Representative on the GCAGS Executive Committee, and from 1975-77 he served on the GCAGS Long Range Planning Committee. After his term as President, John served on the Awards and Honors Committee from 1982 to 1985.

He was president of the Houston Geological Society, 1972-73, and President of the American Association of Petroleum Geologists, 1983-84. Since his term as AAPG president he has continued his activities by serving on the AAPG Advisory Council during the 1984-87 period, first as Chairman, followed by yearly terms as Chairman of the Honors and Awards Committee and Chair-

man of the Nominating Committee. He is also Chairman of the AAPG 75th, Diamond Jubilee, Anniversary Committee to commemorate, in 1991, AAPG's beginning. John served on the Executive Committee of the Texas Section of AIPG in 1972 and was President of the Society of Independent Professional Earth Scientists for the 1980-81 term.

Since 1968, John has served all these professional organizations in many capacities. In addition, he is also Chairman of the Geoalumni Advisory Committee of the Department of Geological Sciences of the University of Michigan.

John is an accomplished lecturer, having been twice awarded the AAPG A. I. Levorsen Memorial Award, for presentations to the GCAGS in 1970 and to the Southwest Section of the AAPG in 1973. In addition, he traveled throughout the United States and Canada as a Distinguished Lecturer for the AAPG. John has also served the geologic profession by presenting the views of his profession through interviews on both radio and television. John has made presentations to many local geological societies as well as the Houston Association of Petroleum Landmen, the International Oil Scouts Annual

Convention, and the "Living Texas" program at Rice University.

John has given, and continues to give, unselfishly of his time and talents to geologists of the Gulf Coast, particularly to the Houston Geological Society, the American Association of Petroleum Geologists and the Gulf Coast Association of Geological Societies. There is no one more deserving and no one more appreciative of being awarded Honorary Membership in the GCAGS.

— James O. Lewis, Jr.

HONORARY MEMBERS

GCAGS

J.J. Amoruso (1987)
R.R. Berg (1985)
D.R. Boyd (1982)
J. Braunstein (1982)
W.L. Fisher (1986)
M.T. Halbouty (1982)

F.W. Harrison, Jr. (1982)
H.N. Hickey (1982)
R.J. LeBlanc, Sr. (1984)
S.J. Lysinger (1983)
J.O. Lewis (1983)
L.H. Meltzer (1982)

W.R. Paine (1984)
E.C. Roy, Jr. (1983)
C.L. Sartor, (1986)
F.L. Smith, Jr. (1983)
P.M. Strunk (1983)
M.O. Turner (1984)

DISTINGUISHED SERVICE AWARDS

GCAGS

1982	R.E. Boyer	P.B. Souders	B.C. Tucker
1983	none awarded		
1984	A.T. Green, Jr.	DeWitt C. Van Sicken	
1985	C.E. Harrison	R.W. Stephens, Jr.	
1986	none awarded		
1987	none awarded		

HONORARY MEMBERSHIP

GCS-SEPM

Don G. Bebout

Don Gray Bebout is well known for his scientific publications and for his outstanding record of service to geological organizations. In recognition of his many accomplishments, the Gulf Coast Section of SEPM has selected him for honorary membership.

Don was born and raised in western Pennsylvania and attended Mount Union College, where he received his undergraduate training. Later he received a Master's degree from the University of Wisconsin and a Ph.D. from the University of Kansas. Don's ties with the petroleum industry were established early as he began his geological career with Exxon Production Research. During a twelve-year period he examined well cuttings, cores, and outcrops from the Gulf Coast, from the Mid-continent, and from around the world; he also completed brief assignments in Libya, Canada, and Venezuela. This extensive industrial experience would later prove invaluable as a foundation for both research and teaching in the public sector.

In 1972, Don's career entered a second phase that resulted in consecutive, nearly parallel positions at two geological surveys, both affiliated with major universities. First he moved to Austin, where he joined the Bureau of Economic Geology at the University of Texas as a Research



Scientist. In that capacity he conducted studies of carbonate and evaporite facies, depositional environments, and diagenesis and later directed an assessment of Gulf Coast geopressured-geothermal energy. Because of the latter work he toured the nation as an AAPG distinguished lecturer describing the exploration program that resulted in the first large-diameter test well. In addition to his research responsibilities, he taught a graduate-level course in UT's Department of Geological Sciences and supervised the work of graduate students. In 1979, other challenging opportunities attracted Don and his wife Lois to Baton Rouge, where he became Director of Research at the Louisiana Geological Survey and Professor in the Department of Geology at Louisiana State University. There

he continued conducting investigations of alternate energy resources, teaching subsurface methods, and supervising students. After holding these joint appointments for three years, Don returned to the Bureau of Economic Geology and resumed his investigations of carbonate and clastic reservoirs. Shortly thereafter he was promoted to Senior Research Scientist, the highest research position within the Bureau.

Many company geologists have gained a better understanding of carbonate reservoirs from Don's extensive knowledge offered through short courses, core workshops, and field trips. Professional societies have also benefited from Don's generous contributions; his record of service is as long and varied as his scientific accomplishments. He has either chaired or been a member of numerous standing committees, helped organize research conferences, and served as President Elect or President of the Austin Geological Society, the Baton Rouge Geological Society, and the Gulf Coast Section of SEPM. By receiving honorary membership in GCS-SEPM, Don joins a select group of individuals who clearly have demonstrated their commitment to maintaining high scientific standards and advancing the geological profession.

— *Robert A. Morton*

HONORARY MEMBERSHIP

GCS-SEPM

David E. Pope

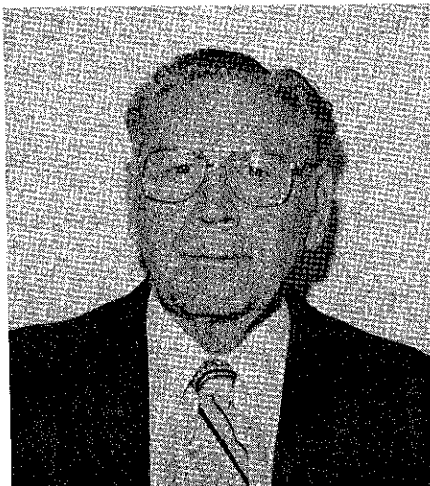
David E. Pope was born December 20, 1920, in Forrest City, Arkansas. An athletic scholarship took him to Louisiana State University in 1939; his interest in the rocks and topography of Crowley's Ridge near his home led him to the Geology Department.

David was commissioned Second Lieutenant in 1942, and served in the U.S. Army during World War II, advancing to the rank of Captain. He was awarded the Silver Star with Oak Leaf Cluster, Purple Heart, Combat Infantryman's Badge, and the AIME Theater Ribbon with three Battle Stars.

In 1946, David resumed his studies in geology at LSU, receiving his B.S. degree in 1947. He selected micropaleontology as his major, and received his M.S. degree in 1948. His thesis was published by the Louisiana Geological Survey as part of Bulletin No. 26, *The Harang Fauna of Louisiana*.

David was then employed by Union Producing Company as a paleontologist. He was transferred to New Orleans in 1949, and was promoted to District Paleontologist in 1956. After transferring to Lafayette in 1963, he left Union in 1967 to become a full-time consultant. In 1975 he accepted his present position as Senior Research Geologist with the Louisiana Geological Survey.

David always has been active in all of his professional affiliations in the Gulf coastal area. He has chaired diverse committees including technical



program and sessions, editor, business representative, secretary, judge of papers presented at conventions, historian, and others. He joined the New Orleans Geological Society in 1949, and was elected Vice President in 1962. He was elected President of: LSU Geology Alumni Association, 1958 and 1984; GCS-SEPM, 1959; Baton Rouge Geological Society, 1980; LSU Museum of Geoscience Associates, 1981; and GCAGS, 1985.

David is a charter member of the Section and of the Baton Rouge Geological Society. He also holds memberships in the American Institute of Professional Geologists (1985) and the AAPG (1949), and is an AAPG Certified Petroleum Geologist.

David's contributions to geology include "Comparison of the Harang and Hackberry Facies in South Louisiana," published in Vol. 5 of the *Transactions*, a report on lignite in

Louisiana (Co-author, 1976), LGS Folio No. 3, *Basic Mesozoic Study in Louisiana*, (Editor, 1979); *Geological Map of Louisiana* at a scale of 1:500,000 (Project Coordinator, 1984); and in 1987 he began editing an LGS Bulletin on Cotton Valley stratigraphy and ostracodes, by F.M. Swain and E.G. Anderson. In press, co-authored with E.G. Anderson, are four (Louisiana) columns of AAPG's COSUNA Correlation Chart of the Gulf Coast. He also co-authored "A Radiometric Investigation Relative to a Gamma-Ray Log, and its Geologic Implications," published in Vol. 28 of the *Transactions*. He has contributed Louisiana data to the U.S. Geological Survey's Quaternary Mapping Project of the U.S., and to GSA's DNAG *Geologic Map of North America*.

David was President of the Section in 1959-60. It had almost expired due to inactivity during the preceding year, but David, with the help of his elected officers, rebuilt the membership with a 50% increase, to its then highest level. He secured a loan from GCAGS to finance and publish the Section's Type Localities Project, and caused publication of the first directory of the Section's membership along with all known Gulf Coast micropaleontologists and their specialties.

These contributions to the Gulf Coast Section of SEPM alone make it appropriate that David E. Pope be made one of its Honorary Members.

— Harold V. Andersen

HONORARY MEMBERS

GCS-SEPM

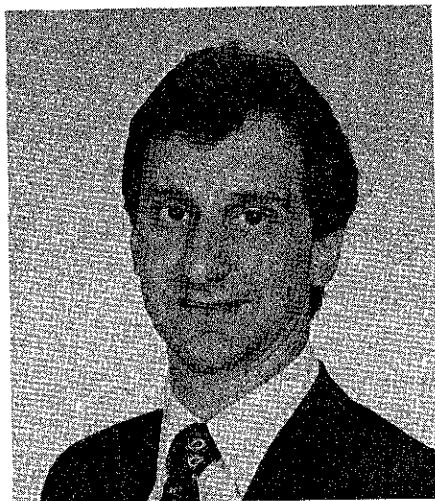
Esther Applin (1964)†	Doris M. Curtis (1977)
Alva C. Ellisor (1964)†	Stuart A. Levinson (1978)
Marcus A. Hanna (1964)†	Fred L. Smith, Jr. (1978)
Henry V. Howe (1964)†	Charles W. Stuckey (1978)
Hedwig T. Kniker (1964)†	William R. Paine (1980)†
Winnie McGlamery (1964)	Frank E. Lozo, Jr. (1981)†
John R. Sandidge (1964)†	Gene B. Martin (1984)
J.B. Garrett, Jr. (1965)†	Bob F. Perkins (1984)
E.H. Rainwater (1966)†	Edward B. Picou, Jr. (1984)
Henryk Bronislaw Stenzel (1971)†	Claude M. Quigley (1986)
Jules Braunstein (1973)†	William P.S. Ventress (1986)
Grover E. Murray (1973)	Don G. Bebout (1987)
Harold V. Andersen (1975)	David E. Pope (1987)
Lyman D. Toulmin (1975)†	

† Deceased

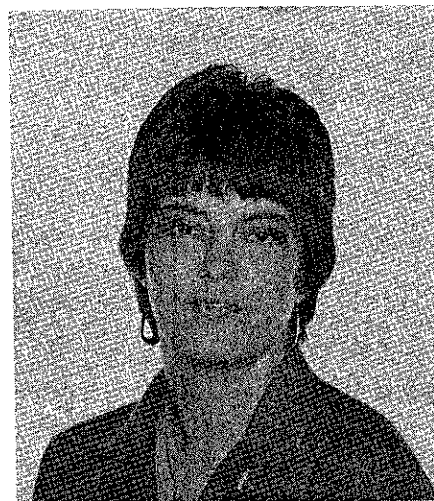
1986-1987 OFFICERS GCS-SEPM



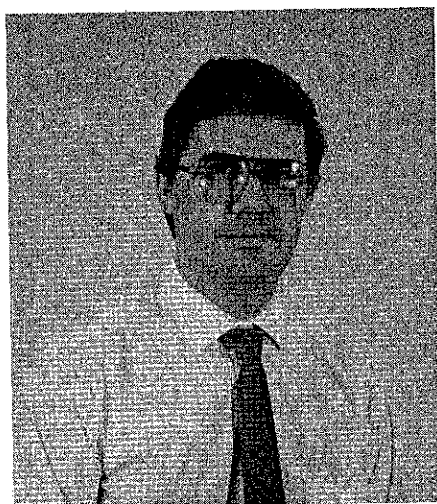
VICE-PRESIDENT
Denise M. Butler



PRESIDENT-ELECT
Arthur S. Waterman



PAST PRESIDENT
Susan J. Conger Morris



SECRETARY
Kurt R. Geitzenauer



TREASURER
Sylvester Q. Breard, Jr.

1986 BEST PAPER AWARDS GCAGS

First Place and the A. I. Levorsen Memorial Award

Awarded to:
Shirley P. Dutton

For:
*"Petrography and Diagenesis
of Lower Cretaceous Travis
Peak (Hosston) Formation,
East Texas"*



Shirley P. Dutton

Shirley P. Dutton is a Research Scientist at the Bureau of Economic Geology, The University of Texas at Austin. A native of Schenectady, NY, she received a B.A. in geology from the Uni-

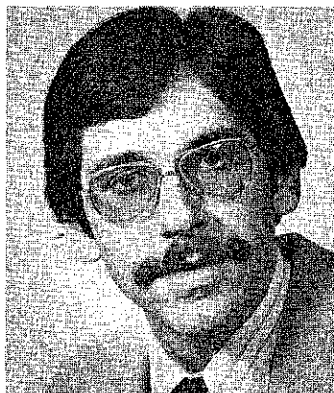
versity of Rochester in 1975 and did graduate work at the University of Texas at Austin, receiving an M.A. in 1977 and a Ph.D. in 1986. The subject of her dissertation research was diagenesis

and burial history of the Travis Peak Formation, East Texas. Dutton has been with the Bureau of Economic Geology since 1977, where her research projects have included diagenetic studies of Travis Peak sandstones and Pennsylvanian sandstones of North-Central Texas and the Texas Panhandle; subsurface stratigraphic and geochemical analysis of the Pennsylvanian section, Palo Duro Basin; study of the formation and diagenesis of salt dome caprock; and analysis of geologic and engineering properties of abandoned oil fields of the Gulf Coast and East Texas Basins. She participated in the 1986-87 AAPG Distinguished Lecture Tour, discussing diagenesis of Pennsylvanian granite wash in the Anadarko Basin.

Second Place Award

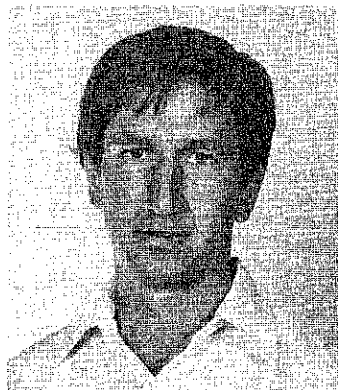
Awarded to:
**Arthur H. Saller and
Billy R. Moore**

For:
*"Dolomitization in the
Smackover Formation,
Escambia County, Alabama"*



Arthur H. Saller

Arthur H. Saller is presently a research geologist with Union Oil Company in Brea, California. He attended the University of Kansas from 1974 to 1978 and received a B.S. degree with Honors in Geology in 1977. Art received an M.S. degree from Stanford University (1980) and a Ph.D. from Louisiana State University (1984). His Master's thesis (under the direction of W. R. Dickinson and J. C. Ingle) was a field study of Pennsylvanian conglomerates, sandstones, and carbonates in north-central Nevada. His Ph.D. thesis (under the direction of C. H. Moore) involved diagenesis of Cenozoic car-



Billy R. Moore

bonates from a Pacific atoll. Art worked as a research geologist for Cities Service Oil Company in Tulsa from 1984 to 1986, and in 1986 joined Union Oil. His main research interests involve carbonate sedimentation and diagenesis. In 1979, he married Julia Gray who has helped complete two theses and several manuscripts and company reports.

Billy R. Moore, a native Virginian, is an exploration geologist with Cities Service Oil and Gas Corporation in Houston. He has been with Cities since 1980, and has worked the Jurassic and Cretaceous from Florida to East Texas.

He received a B.S. in Geology from James Madison University in Harrisonburg, Virginia in 1976, and a M.S. in Geology in 1980 from North Carolina State University in Raleigh. Between degrees he was a coal geologist for North American Exploration.

He is a member of the AAPG and the Houston Geological Society.

Third Place Award

Awarded to:
James M. Coleman,
David B. Prior,
 and
Harry H. Roberts

For:
**"Geologic Development and
 Characteristics of the
 Continental Margin,
 Gulf of Mexico"**

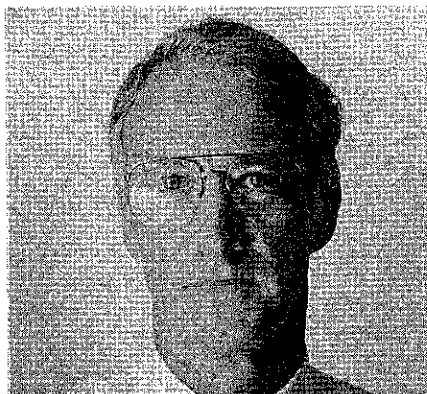
James M. Coleman, Head of the School of Geoscience and Chairman of the Department of Geology at Louisiana State University in Baton Rouge, has established an international reputation as one of the world's foremost authorities on deltas and on mass movement processes and slope instability in nearshore waters. He has been associated with LSU since his undergraduate days; he served the Coastal Studies Institute as Assistant Director for four years and as Director for 10 years before assuming his present position in 1985.

In 1983 Dr. Coleman was chosen co-chief scientist on Leg 96 of the Deep Sea Drilling Project, one of the largest international cooperative oceanographic programs ever undertaken in the world's oceans. He has received: the Shepard Award for Excellence in Marine Geology from the Society of Economic Paleontologists and Mineralogists; the A. I. Levorsen Award, presented to the authors of the paper presented at the Gulf Coast Association of Geological Societies annual meeting which most exemplifies creative ideas for oil and gas exploration; the Boyd Professorship, the highest honor LSU gives its faculty members; the LSU Distinguished Research Master Award; and the LSU Foundation Distinguished Faculty Fellow award.

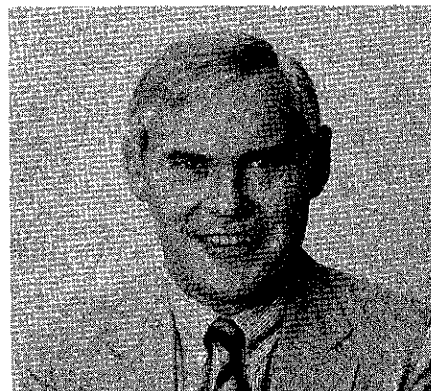
The author of approximately 120 papers published in scientific journals, Dr. Coleman also lectures frequently and leads numerous field trips. He was chosen an American Association of

Petroleum Geologists Distinguished Lecturer in 1976 and 1977.

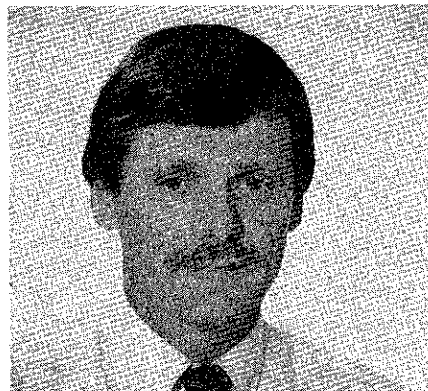
David B. Prior is a professor in Coastal Studies Institute and the Department of Geology and Geophysics at Louisiana State University. He received his B.A. and Ph.D. degrees at the Queen's University of Belfast, Northern Ireland. His research interests include both marine geology and geomorphology. He is the author and co-author of more than 90 publications dealing with sediment



James M. Coleman



David B. Prior



Harry H. Roberts

transport dynamics, submarine landslides in deltaic, fjord, and continental slope environments. A particular specialty is the interpretation of high-resolution geophysical data and bore-hole data for the evaluation of geologic hazards to offshore engineering. Currently, in addition to his university duties, he is chairman of the National Academy of Sciences Ground Failure Hazards Committee, a member of a National Research Council (Marine Board) committee on utilization of the Exclusive Economic Zone, and chief technical advisor to a People's Republic of China marine geology program supported by the United Nations.

Harry H. Roberts received his B.S. degree in Physics (1963) from Marshall University in Huntington, West Virginia, and M.S. (1966) and Ph.D. (1969) degrees in Geology from Louisiana State University. He joined the Coastal Studies Institute in 1968 and advanced to the rank of Professor in 1978. Since 1968, he has been designing and conducting field-oriented research projects in carbonate and terrigenous settings. These studies relate to a wide variety of coastal and shelf problems, including physical processes, sedimentation, and geomorphology. Field investigations have been conducted domestically and along a variety of foreign coasts, including Grand Cayman, Barbados, Nicaragua, Brazil, Oman, Egypt, St. Croix, and Indonesia. In addition, he has been active as a consultant to the oil industry on problems of geological hazards, sedimentation, and high-resolution geophysical data interpretation. He has worked for engineering firms and consulting agencies on problems of coastal sedimentation and sediment stability. Commonly, in conjunction with other members of the Coastal Studies Institute, he has taught applied geology short courses on deltas and carbonate environments. Roberts has authored or co-authored more than 80 professional papers and technical reports on basic and applied coastal geoscience and has presented invited lectures domestically and in foreign countries.

BEST PAPER AWARDS AND A. I. LEVORSEN MEMORIAL AWARDS GCAGS

	First Place	Second Place	Third Place	Levorsen Award†
1959	J.E. Walters	R.L. Oakes	H.A. Bernard C.F. Major, Jr. B.S. Parrott	
1960	Not awarded			
1961	R.D. Ocamb	D.I. Andrews J.C. Stipe	R.P. Fietz K.R. Scott W.E. Hayes	
1962	D.R. Tucker	R.J. Granberry R.C. Wilshusen	G.C. Glaser (tie)†† W.R. Walton (tie)	
1963	E.H. Rainwater	V. Peppard	S.L. Blanton, Jr.	
1964	E.H. Rainwater	D.R. Boyd B.F. Dyer	J.L. Arps	
1965	C.R. Kolb J.R. van Lopik	G.R. Kellough	Not awarded	
1966	B.J. Sloan, Jr.	W.R. Paine	R.E. Gernant R.V. Kesling	B.J. Sloan, Jr.
1967	H. Yarborough, Jr.	W.A. Price	J. Ewing (tie) J.C. Meyers (tie)	H. Yarborough, Jr.
1968	J.D. Myers	E.H. Rainwater	D.J. Hughes	J.D. Meyers
1969	P.O. Roehl	J.K. Rogers	D.F. McNamee (tie) L. F. Brown (tie)	J.K. Rogers
1970	J.J. Amoruso	R.R. Berg	J.F. Harris	J.J. Amoruso
1971	H. Yarborough, Jr.	D.A. Reel (tie) G.M. Griffin B.J. Sloan (tie) J.A. Hartman (tie)	Not awarded	H. Yarborough, Jr.
1972	R.R. Berg	M.T. Halbouty	J.J. Amoruso	R.R. Berg
1973	R.D. Woods J.W. Addington	R.D. Otman P.L. Keyes M.A. Ziegler	R.R. Berg R.L. Findley	J.M. Coleman L.D. Wright

S

	First Award	Second Award	Third Award	Levorsen Award†
1974	D.H. Kupfer	J.M. Coleman L.D. Wright J.N. Schyda T. Whelan	C.A. Parker	D.H. Kupfer
1975	W.L. Seal J.A. Gilreath	J.D. Meyers	B.P. Baganz J.C. Horne J.C. Fern	J.D. Meyers
1976	J.D. Robinson A.R. Troell	J.W. Becher C.H. Moore	N. Neel	J.D. Robinson A.R. Troell
1977	D.K. Davies W.R. Almon	J.O. Lewis	J.O. Snowden W.B. Simmons E.B. Troughber R.W. Stephens	D.K. Davies W.R. Almon
1978	C.T. Siemers	J.W. Lund J.S. King R.E. Berlitz J.A. Gilreath	E.F. McBride	C.T. Siemers
1979	C.D. Winker	R.R. Berg	C.C. Christina K.G. Martin	R.R. Berg
1980	E.A. Mancini D.J. Benson	F.W. Harrison, Jr.	G.M. Gatenby	E.A. Mancini D.J. Benson
1981	E.C. Roy, Jr. M. Eidelbach N. Trumbly	J.L. Coleman, Jr. C.J. Coleman	G.J. Grabowski, Jr.	E.C. Roy, Jr. M. Eidelbach N. Trumbly
1982	T.E. Ewing S.C. Caran	D.J. Benson E.A. Mancini	R.R. Berg M.F. Habeck	T.S. Ewing S.C. Caran
1983	J.W. Cagle M.A. Khan	W.M. Ahr H.B. Hull, Jr.	T.E. Ewing (tie) C.H. Moore (tie)	J.W. Cagle M.A. Khan
1984	G. Kinsland	S.K. Stewart	C.L. Sartor S.R. Howard	G. Kinsland
1985	C.C. Walter M.R. Cassa	E.A. Mancini R.M. Mink B.L. Bearden	A.L. Workman J.S. Hanor	W.E. Galloway
1986	S.P. Dutton	A.H. Saller B.R. Moore	J.M. Coleman D.B. Prior H.H. Roberts	S.P. Dutton

† - This award is given by the AAPG to the paper that best exemplifies creative ideas in oil and gas exploration (first award, 1966).

†† - Glaser and Walton received First Place in the Paleontology Division for their 1962 paper.

1986

BEST PAPER AWARDS

GCS/SEPM

Best Published Paper Award

Awarded to:
*Douglas F. Williams and
Dwight M. Trainor*

For:
*"Applications of Isotope
Chronostratigraphy in the
Northern Gulf of Mexico"*



Douglas F. Williams



Dwight M. Trainor

Doug Williams is Professor of Geology and Marine Science and Chairman of the Department of Geology at the University of South Carolina. He received his B.A. from Brown University and his Ph.D. from the University of Rhode Island in 1976. He joined the USC faculty in 1977 where he has established a state-of-the-art Stable Isotope Laboratory. With this facility he and the Isotope Stratigraphy Group have been pioneering the development of new types of chemical stratigraphy using oxygen and carbon isotopes. Over the last four years, the Isotope Stratigraphy Group has successfully used the oxygen and carbon isotope records of foraminifera and carbonate minerals to achieve a high resolution stratigraphy of exploration

wells in the Gulf Coast offshore. He and his students are also working on studies of the Delaware Basin Group of the Permian Basin, West Texas and the Monterey Formation, Southern California.

Doug has co-authored over 60 scientific publications dealing with micropaleontological, geochemical and paleoceanographic studies of foraminifera and marine deposits. He is also a member of the AAPG, SEPM, and GSA.

Dwight M. Trainor received his B.S. and M.S. degree in Geology from the University of South Carolina. He is currently enrolled in the Ph.D. program at the University of South Caro-

lina working with Dr. Don Williams. Over the past several years, starting with his Master's degree, he has worked with Doug Williams to develop the models used to apply isotope chronostratigraphy to exploration wells in the Northern Gulf of Mexico. Presently, Dwight is working on further development and refinement of Isotope Chronostratigraphy in exploration areas such as the deep water Gulf of Mexico and offshore California. This work involves the determination and evaluation of regional biostratigraphic zonations, and the relationship of the isotopic record to seismic stratigraphy. Dwight Trainor is a member of the American Association of Petroleum Geologists, Sigma Xi, and the South Carolina Academy of Science.

**Excellence of
Presentation Award**

Awarded to:
Robert R. Berg

For

*"Slump, Delta-Front Reservoir
Sandstone in the Eocene
Yegua Formation,
East Sour Lake Field,
Southeast Texas"*



Robert R. Berg

Robert R. Berg is Professor of Geology and holds the Michel T. Halbouty Chair at Texas A&M University. His academic experience was preceded by industrial experience totaling 16 years. From 1951 to 1956, he was employed as a geologist by the California Company (Standard Oil Company of California), from 1957 to 1959 by Cosden Petroleum Corporation, and from 1959 until 1966 he was a consulting geologist in the Rocky Mountain area. Industrial work was primarily exploration for oil and gas which included interpretations from subsurface data and geophysical surveys. In 1967 he became Professor and Head of the Department of Geology at Texas A&M University, and in

July 1972, he was named Director of the Office of University Research, a position he held for 10 years. Berg's studies have included petroleum geology, subsurface stratigraphy, and sedimentology. Publications describe geophysical interpretations and origins of Rocky Mountain structures; studies of reservoir sandstones in California, Montana, Wyoming, Mississippi, West Texas, New Mexico, and in the Texas Gulf Coast; and the role of hydrostatic and hydrodynamic pressures in oil accumulation.

He received his B.A. and Ph.D. degrees in Geology from the University of Minnesota (1948, 1951). He has served as Presi-

dent of the Rocky Mountain Association of Geologists (1966) and as Secretary-Treasurer (1969) and President (1971) of the American Institute of Professional Geologists. He is Fellow of the Geological Society of America, a member and Certified Petroleum Geologist (No. 1832) of the American Association of Petroleum Geologists, and a Certified Professional Geologist (no. 35) of the American Institute of Professional Geologists. He has been Distinguished Lecturer of the AAPG, has received the Association's A.I. Levorsen Memorial Award, and for the past 10 years has been a lecturer in the Continuing Education Program of the AAPG. He has also been a consultant for more than twenty corporations, both major companies and independents, for evaluation of sandstone reservoirs. In 1981 he was awarded the AIPG's Ben H. Parker Medal for "Outstanding Service to the Profession," and in September, 1982, he was appointed to the Michel T. Halbouty Chair in Geology. He was a candidate for the office of President Elect, American Association of Petroleum Geologists, for 1984-85, was awarded Honorary Membership in the AAPG during 1984.

BEST PAPER AWARDS

GCS-SEPM

	Best Published Paper	Excellence of Presentation
1986	Douglas F. Williams Dwight M. Trainor	Robert R. Berg
1985	Paul A. Thayer Harry H. Roberts	Gordon W. Fielder
1984	M.J. Ulrich J.R. Kyle P.E. Price	M. Kontrovitz
1983	E.C. Kusters A. Bailey	D.B. Prior
1982	J. Mazzullo	C.D. Winker
1981 [†]	T.A. Daws A.V. Applegate J.C. Palacas	C.R. Handford

	First Place	Second Place	Third Place
1980	A.W. Cleaves	J.L. van Heerden H.H. Roberts	T.A. Hansen
1979	L.C. Price J.L. Clayton L.L. Rumen	C.W. Poag R.C. Tresslar	R.E. Casey L.W. Gust R.A. Reynolds D.H. Williams A. Leavesley T. Duis J.M. Spaw
1978	A. Thomson	C.W. Poag	J.A. Schiebout
1977	C.D. Winker J.D. Howard	W.C. Isphording	R.M. Looney V.R. Baker
1976	C.J. Stuart C.A. Caughney	R.R. Berg R.R. Powell	C.W. Poag P.C. Valentine

	First Place	Second Place	Third Place
1975	J.L. Wilson	K.F. Wantland M.E. York	W. C. Isphording
1974	G.M. Friedman	W.F. Tanner C.R. Berquist	R.J. Moiola D. Weiser A.B. Spencer
1973	W. F. Tanner	R.J. Moiola A.B. Spencer	P.A. Thayer (tie) W.J. Cleary E. O'Donnell (tie) A.P. Wright
1972	W.F. Tanner	A.E. Weidie J.L. Wolleben E.F. McBride	P.A. Thayer D.A. Textoris
1971	R.W. Maxwell, Jr.	C.W. Poag	E.A. Shinn
1970	W.W. Hay S.W. Wise, Jr. R.D. Stieglitz	J.B. Dunlap, Jr.	W.L. Fisher C.V. Proctor, Jr. W.E. Galloway J.S. Nagle

† - and Best Poster Award to E.A. Mancini

†† Before 1981, awards were given for first, second and third place.

1987
EXECUTIVE COMMITTEE
GCAGS

PRESIDENT

Richard H. Sams
9009 Great Hills Trails, #2412
Austin, Texas 78759

**VICE
PRESIDENT**

James A. Hartman
234 Loyola Building, #924
New Orleans, Louisiana 70112

SECRETARY

Mark T. Tobin
1530 Milam Building
San Antonio, Texas 78205

TREASURER

Taliaferro Cooper
1015 Milam Building
San Antonio, Texas 78205

**PAST
PRESIDENT**

David E. Pope
Louisiana Geological Survey
Box G, University Station
Baton Rouge, Louisiana 70893

**REPRES-
ENTATIVES
FROM
MEMBER
SOCIETIES**

Thomas J. Carrington—Alabama Geological Society
Chet Garrett—Austin Geological Society
Arnold C. Chauviere—Baton Rouge Geological Society Inc.
Duncan Chisholm—Corpus Christi Geological Society
Richard Griffin—East Texas Geological Society
Daniel L. Smith—Houston Geological Society
David M. Etienne—Lafayette Geological Society
Harry Spooner—Mississippi Geological Society
Richard A. Edmund—New Orleans Geological Society
Rick Turner—Shreveport Geological Society
W. Grant Fergeson—South Texas Geological Society
Richard A. Davis—Southeastern Geological Society

**1986-1987
EXECUTIVE COUNCIL
GCS-SEPM**

PRESIDENT

Charles L. McNulty
Department of Geology
The University of Texas at
Arlington
UTA Box 19049
Arlington, Texas 76019

**PRESIDENT
ELECT**

Arthur S. Waterman
Paleo-Data Inc.
6619 Fleur De Lis Drive
New Orleans, Louisiana 70124

**VICE
PRESIDENT**

Denise M. Butler
Standard Oil Production Co.
9401 Southwest Fwy., Ste. 1200
Houston, Texas 77074

SECRETARY

Kurt R. Geitzenauer
Arco Oil & Gas Co.
P.O. Box 1346
Houston, Texas 77251

TREASURER

Sylvester Q. Breard, Jr.
Amoco Production Co.
Box 50879, Rm. 1106
New Orleans, Louisiana 70150

**PAST
PRESIDENT**

Susan J. Conger Morris
Morris Geological Enterprises
11422 Hornbrook Dr.
Houston, Texas 77099

OFFICERS OF MEMBER SOCIETIES

GCAGS

ALABAMA GEOLOGICAL SOCIETY

P.O. Box 6184, University, AL 35486

President Thomas J. Carrington
Auburn University

Vice President Philip E. La Moreaux
P.E. La Moreaux & Associates

Secretary Enid I. Bittner
Auburn University

Treasurer Lawrence J. Rheams
Geological Survey of Alabama

AUSTIN GEOLOGICAL SOCIETY

P.O. Box 1302, Austin, TX 78767

President Chet Garrett
Bureau of Economic Geology

Vice President Mary McBride
Bureau of Economic Geology

Secretary Diana Slagle
U.S. Geological Survey

Treasurer Peter Boone
General Land Office

President Elect Bruce Fink
Texas Water Commission

BATON ROUGE GEOLOGICAL SOCIETY INC.

P.O. Box 19151, University Station
Baton Rouge, LA 70893

President Arnold C. Chauviere
Consultant

Vice President Richard P. McCulloh
Louisiana Geological Survey

Secretary Bill Walter
Louisiana Office of Conservation

Treasurer Bradford C. Hanson
Louisiana Geological Survey

Past President Charles G. Groat
Louisiana Geological Survey

CORPUS CHRISTI GEOLOGICAL SOCIETY

P.O. Box 1068, Corpus Christi, TX 78403

President Duncan Chisholm
Suemaur Exploration

President Elect Tom Henderson
Henderson Exploration

Vice President Pat Nye
Trace Exploration

Secretary Bill Walker
Tana Oil & Gas

Treasurer E. Gaynell Meij
Royal Oil & Gas

EAST TEXAS GEOLOGICAL SOCIETY

P.O. Box 216, Tyler, TX 75710

President Richard Griffin
Independent Geologist

Vice President Russell W. Jackson
Kalos Corp.

Secretary/Treasurer Phillip Shoemaker
Independent Geologist

HOUSTON GEOLOGICAL SOCIETY

6916 Ashcroft, Houston, TX 77081

President Daniel L. Smith
Texoil Co.

President Elect Dietmar (Deet) Schumacher
Pennzoil Co.

Vice President Edward (Ted) McFarlan, Jr.
Consultant

Secretary Steve Thornhill
Wing Corp.

Treasurer Tammy Braun
Lignum Oil Co.

LAFAYETTE GEOLOGICAL SOCIETY

P.O. Box 51896, Oil Center Station
Lafayette, LA 70505

President David M. Etienne
Convexx Oil & Gas

1st Vice President Philip C. Jutice
Bass Enterprises

2nd Vice President Paul J. Atwood
Independent Geologist

Secretary Mike Mathy
Mathy Exploration

Treasurer Gary Huffman
Taurus Petroleum

MISSISSIPPI GEOLOGICAL SOCIETY

P.O. Box 422, Jackson, MS 39205

President Harry Spooner
Spooners Petroleum

1st Vice President Stanley King
Independent Geologist

2nd Vice President Stan Galicki
Union Oil Co. of California

Secretary Steve Champlin
Independent Geologist

Treasurer Jim Files
Pruett Oil Co.

NEW ORLEANS GEOLOGICAL SOCIETY

Box 52172, New Orleans, LA 70152
 President Richard A. Edmund
 Independent Geologist
 Vice President Carlo C. Christina
 C & R Exploration Co.
 Secretary Theresa N. Witherington
 Minerals Management Service
 Treasurer John C. Langford
 Geo Lab
 President Elect M.R. Douglass
 Independent Geologist

SHREVEPORT GEOLOGICAL SOCIETY

P.O. Box 750, Shreveport, LA 71162
 President Rick Turner
 Independent Geologist
 1st Vice President Gary Boland
 Arkla Exploration
 2nd Vice President Mike Umphress
 McGoldrick Oil Co.
 Secretary Jim Black
 Paul O'Brian, Jr.
 Treasurer Alan Brittain
 David Crow Interests

SOUTH TEXAS GEOLOGICAL SOCIETY

D-100 Petroleum Center, San Antonio, TX 78209
 President W. Grant Fergeson
 Venus Oil Co.
 Vice President William T. Maloy
 Clayton Williams, Inc.
 Secretary Robert T. (Bob) Jones
 Harper and Light, Inc.
 Treasurer Douglas N. Toepperwein
 Panhandle Producing Co.

SOUTHEASTERN GEOLOGICAL SOCIETY

Box 1634, Tallahassee, FL 32302
 President Richard A. Davis
 University of South Florida
 Vice President Fred Perkle
 Dupont
 Secretary/Treasurer Donnie McCleoughy
 Florida Department of
 Environmental Regulation

STANDING COMMITTEES
GCAGS

Advisory (Representative to the AAPG Advisory Council)
 Robert E. Boyer, University of Texas, Austin, TX

Awards and Nominations
 Scott Lysinger, Independent, Carrolton, TX
 E.G. Wermund, Jr., Bureau of Economic Geology, Austin, TX
 John T. Palmer, Palmer Petroleum, Inc., Shreveport, LA
 Sarah C. Childress, Consultant, Houston, TX
 David E. Pope, Louisiana Geological Survey, Baton Rouge, LA

Finance
 Clifford S. Foss, Jr., Cockrell Oil Corp., Houston, TX
 Bob Ardell, Samedan Oil Corp., Houston, TX
 Douglas C. Ratcliff, Bureau of Economic Geology, Austin, TX

Financial Aid to Students
 Edward C. Roy, Jr.†, Trinity University, San Antonio, TX
 Danny W. Harrelson, Army Corps of Engineers, Vicksburg, MS
 Richard W. Boebel, Independent, New Orleans, LA
 Claude C. Rust, Independent, Houston, TX

Historical
 David E. Pope, Louisiana Geological Survey, Baton Rouge, LA

Long Range Planning
 Edward C. Roy, Jr., Trinity University, San Antonio, TX
 David E. Pope, Louisiana Geological Survey, Baton Rouge, LA
 E.G. Wermund, Jr., Bureau of Economic Geology, Austin, TX
 John T. Palmer, Palmer Petroleum, Inc., Shreveport, LA
 Clifford S. Foss, Jr., Cockrell Oil Corp., Houston, TX

Publications
 Robert E. Boyer, University of Texas, Austin, TX
 Edward C. Roy, Jr., Trinity University, San Antonio, TX
 Raymond W. Stephens, Jr., Independent, New Orleans, LA
 E.G. Wermund, Jr., Bureau of Economic Geology, Austin, TX

† Temporary Chairman

PAST OFFICERS AND CONVENTION CHAIRMEN

GCAGS

	HOST CITY	PRESIDENT	VICE PRESIDENT	SECRETARY	TREASURER	CONV. CHM.N.
1951	New Orleans	L. Bowling	T.H. Philpott	J.S. Spencer	E.M. Baysinger	W.J. Nugent
1952	Corpus Christi	W.M. Chaddick, Jr.	W.A. Gorman	W.A. Peterson	T.D. Barber	
1953	Shreveport	R.T. Wade	D.D. Uterback	F.H. Webster	K. Carter	R. D. Sprague
1954	Houston	W.R. Canada	W.H. Knight	C.W. Holcomb	E.W. Kimball	G.J. Joyce
1955	Biloxi	A.E. Blanton	L.D. Traupe	R.A. Davis	C.C. Barber	T.H. Philpott
1956	San Antonio	R.L. Layden	M.W. Beckman	E.T. Musselman	K.C. Anderson	R.C. Wilshusen
1957	New Orleans	H.N. Hickey	P. Montgomery	J.F. Moss	W.H. Wallace, Jr.	O.G. Bell
1958	Corpus Christi	E.A. Lohse	R.W. Grayson	W.W. Woolfolk	I.A. Wheeler	A.E. Blanton
1959	Houston	G.C. Hardin, Jr.	L. Harvey	A.W. Wood	E.L. Ames	L.L. Palmer
1960	Biloxi	M.F. Kirby	D.N. Osburn	H.O. Woodbury	K. Soule	L.H. Meltzer
1961	San Antonio	D. Dassow	E.P. Roth	W.E. Bancroft	R.E. Rogers	H.J. Tyler
1962	New Orleans	T.H. Philpott	J.C. Byrd	R.W. Luker	D.A. Pedrotti	B.F. Dryer
1963	Shreveport	J.C. Byrd	E. Knott	K.C. Harkins, Jr.	J.L. George, Jr.	E.A. Lohse
1964	Corpus Christi	E. Knott	R.E. Fairchild	W.A. Robbins, Jr.	J.S. Schoelen	R.R. Copeland
1965	Houston	R.E. Fairchild	A.M. Borland	M.L. Frazier, Sr.	L.C. Bryant	M.O. Turner
1966	Lafayette	A.M. Borland	J.H. Hensley	L.G. Hughes	E.D. Minihan	L.E. Warren
1967	San Antonio	W.L. Stapp	M.D. Horton	J.W. Yon, Jr.	C.W. Hendry, Jr.	H.S. Puri
1968	Jackson	M.D. Horton	R.O. Vernon	C.E. Brown	B.C. Tucker	J.O. Goffe
1969	Miami	R.O. Vernon	H.J. Tyler	M.L. Dwight	P.G. Gray	R.G. Williamson
1970	Shreveport	H.J. Tyler	L.H. Meltzer	M.H. Oakes	J.E. Melton	J.M. Sides
1971	New Orleans	L.H. Meltzer	D.R. Boyd	M.E. Hole, Jr.	P.W. Cawthon, Jr.	C.E. Harrison
1972	Corpus Christi	D.R. Boyd	F.M. Schall, Jr.	T.J. Eby, Jr.	J.L. Bellamy	F.W. Harrison, Jr.
1973	Houston	F.M. Schall, Jr.	S.J. Lysinger	W.E. Taylor	H.L. Ladner	C.H. Williams, Jr.
1974	Lafayette	S.J. Lysinger	W.H. Moore	J.T. Palmer	C.E. Brown	L.E. Jordan
1975	Jackson	W.H. Moore	C.L. Sartor	A.E. Bell	F.L. Osborne, Jr.	E.G. Wermund, Jr.
1976	Shreveport	C.L. Sartor	R.E. Beyer	R.M. Swords	C.J. Corona	J. Braunstein
1977	Austin	R.E. Beyer	P.G. Gray	S.L. Perkins	L.C. Bryant	G. His
1978	New Orleans	R.W. Stephens	E.C. Roy, Jr.	J.W. Shirley	R.A. Anderson	M.A. Munchrath
1979	San Antonio	E.C. Roy, Jr.	F.W. Harrison, Jr.	T.J. Wintermute	W.R. Payne	W. Humphrey
1980	Lafayette	F.W. Harrison, Jr.	P.M. Strunk	C.G. Beckwith	C.A. Baird	J.O. Lewis
1981	Corpus Christi	P.M. Strunk	J.J. Amoruso	S.A. Horton	P.D. Cate	J.C. Marble
1982	Houston	J.J. Amoruso	S.C. Childress	C.S. Cook	E.W. Saye	J.M. Forgotson, Jr.
1983	Jackson	S.C. Childress	J.T. Palmer	R. Everett	D.C. Ratcliff	L.E. Garner
1984	Shreveport	J.T. Palmer	E.G. Wermund	B.D. David	F.E. Lindfors-Kearns	H.L. Roland
1985	Austin	E.G. Wermund	D.E. Pope	M.T. Tobin	T. Cooper	D.F. Tobin
1986	Baton Rouge	D.E. Pope	R.H. Sams			
1987	San Antonio	R.H. Sams	J.A. Hartman			

PAST OFFICERS GCS-SEPM

H.L. Roland
 D.F. Tobin
 F.E. Lindfors-Kearns
 T. Cooper
 B.D. David
 M.T. Tobin
 R.H. Sams
 J.A. Hartman
 D.E. Pope
 R.H. Sams
 Baton Rouge
 San Antonio
 1986
 1987

	PRESIDENT	VICE PRESIDENT	SECRETARY	TREASURER
1953-1954	Stuart A. Levinson	Grover E. Murray	William H. Akers	Frank V. Stevensen
1954-1955	Charles W. Stuckey, Jr.	E.H. Rainwater	William H. Akers	Fred L. Smith, Jr.
1955-1956	E.H. Rainwater	Frank S. Westmoreland	Hugh A. Bernard	Eleanor T. Caldwell
1956-1957	Lloyd M. Pyeatt	J.O. Colle	H. Dillingham, Jr.	Eleanor T. Caldwell
1957-1958	J.O. Colle	Fred L. Smith, Jr.	Harold V. Andersen	William G. Parker
1958-1959	Marcus A. Hanna	Claude M. Quigley	Fred E. Smith	Bernard L. Hill, Jr.
1959-1960	David E. Pope	A.D. Ellis, Jr.	Gordon C. Munsey	H.A. Chun
1960-1961	Claude M. Quigley	Harold V. Andersen	E. Ann Butler	Edward Marks
1961-1962	Harold V. Andersen	Theodore D. Cook	Benjamin J. Petrusek	Albert D. Warren
1962-1963	Albert D. Warren	Ernest H. Horton	Blair S. Parrott	Henry H. Phillips
1963-1964	Lyman D. Toulmin	E. Ann Butler	Charles C. Albers	John E. Kilgore
1964-1965	Howard L. Tipsword	Benjamin J. Petrusek	D. Jeter Smith	Emmett R. Adams
1965-1966	John B. Dunlap, Jr.	John J.W. Rogers	M. Ray Bane	Charles B. Morris
1966-1967	Hubert C. Skinner	Richard P. Zingula	Gene Ross Kellough	Gene B. Martin
1967-1968	Benjamin J. Petrusek	Dan McGregor	Garrett Briggs	Herbert A. Elliott, Jr.
1968-1969	William A. Atlee	Edgar B. O'Quinn	James W. Fowler	William E. Steinkraus
1969-1970	Fred L. Smith, Jr.	Kenneth L. Loep	Robert K. Sylvester	C. Wylie Poag, Jr.
1970-1971	Jules Braunstein	Douglas E. Jones	Walter H. Trenchard	Robert N. Davids
1971-1972	William W. Hay	William E. Steinkraus	Karl J. Koenig	Gerald R. Stude
1972-1973	C. Wylie Poag, Jr.	Emmett R. Adams	Gerald R. Stude	Joan B. Stough
1973-1974	Edward B. Picou, Jr.	Walter H. Trenchard	Lawrence C. Menconi	J. Loyd Tuttle, Jr.
1974-1975	Emmett R. Adams	Clifton A. Couture	Herbert A. Elliott, Jr.	Doris M. Curtis
1975-1976	James L. Lamb	Lawrence C. Menconi	William S. Grubb	John L. Carney
1976-1977	Clifton A. Couture	Eleanor T. Caldwell	Sherwood W. Wise, Jr.	Joseph E. Boudreaux
1977-1978	Gerald R. Stude	William P.S. Ventress	Gary R. Roberson	George C. Esker, III
1978-1979	Willard P. Lutz	Bob F. Perkins	Walter P. Kessinger	Kenneth A. Hodgkinson
1979-1980	Gene B. Martin	John L. Carney	Mary Ann Raffle	Arthur S. Waterman
1980-1981	Bob F. Perkins	Don G. Bebout	Sheila C. Barnette	Ted Karmen
1981-1982	William P.S. Ventress	Kenneth A. Hodgkinson	Brian J. O'Neill	Kurt Geitzenauer
1982-1983	John L. Carney	Ernest A. Mancini	Susan J. Conger Morris	Kevin C. Kilmartin
1983-1984	Don G. Bebout	Michael J. Nault	Susan J. Conger Morris	Nelson B. Yoder
1984-1985	Ernest A. Mancini	J.M. Crosbie	John G. McPherson	John B. Anderson
1985-1986	Susan J. Conger Morris	Arthur S. Waterman	John G. McPherson	Richard E. Constans
1986-1987	Chalres L. McNulty	Denise M. Butler	Kurt R. Geitzenauer	Sylvester Q. Breard, Jr.

CONSTITUTION AND BYLAWS

GCAGS

CONSTITUTION

ARTICLE I—Name

This is a non-profit organization and shall be known as the "Gulf Coast Association of Geological Societies." It is hereinafter referred to as "This Association."

ARTICLE II—Object

The object of This Association is to provide for discussion and publication of papers on subjects and problems coming within the scope of the Geological profession and with particular emphasis on Gulf Coast geology.

ARTICLE III—Organization

The Association is an organization of AAPG-affiliated Geological Societies in the Gulf Coast area.

Section 1.

The business of This Association shall be transacted by an Executive Committee composed of one representative from each member society and the President, Vice-President, Secretary, Treasurer, and Past President. The Vice-President, Secretary, and Treasurer shall be elected by the Executive Committee at the annual meeting. The Secretary and Treasurer shall be non-voting members of the Executive Committee. The Secretary and Treasurer shall be nominated by the Executive Committee of the local Geological Society next in line to host the annual meeting. The Vice-President shall be nominated by the Executive Committee of the host society for the annual meeting two years hence and shall accede to the Presidency. Thus each year the President, Secretary and Treasurer will be from the host society with the Vice-President providing continuity with the Executive Committee as he assumes the Presidency in the ensuing year. The duties of these officers shall be those customary to their respective offices.

The GCAGS representative to the Advisory Council of American Association of Petroleum Geologists shall be selected by the Executive Committee of GCAGS and shall be an *ex officio*, non-voting member of the GCAGS Executive Committee.

Each member society shall designate a representative to the Executive Committee and in the event the chosen representative cannot attend any given Executive Committee meeting, an alternate representative shall be appointed by the member society to attend and vote in the absence of the representative. The representative, when practicable, shall be an officer or past officer of the society he represents.

Each society shall have one vote on actions taken by the Executive Committee with the exception that the host society, the next annual host society and the immediate past host society will be entitled to two votes by virtue of their members holding the offices of President, Vice-President and Past President.

The officers of the Executive Committee shall be elected for a term of one year. They shall be elected and assume their duties as soon after the annual meeting of This Association as is practicable. Any vacancies shall be filled by the Executive Committee as provided above in Paragraph 1.

Section 2.

The business of This Association shall be conducted by the Executive Committee. A simple majority vote of the members present at meetings is required to effect decisions, except in those matters which require a greater majority, as set forth in the Constitution and Bylaws.

A quorum shall consist of more than one-half of the voting members of the Executive Committee.

ARTICLE IV—Meetings

There shall be an annual meeting of This Association, the time and place of which shall be determined by the Executive Committee.

ARTICLE V—Publications

There shall be an annual *Transactions* published by This Association, which shall contain papers presented at the annual meeting, and such other material as selected by the Executive

Committee. The Executive Committee is authorized to have published additional bulletins, and other material which they feel will further the object of This Association.

ARTICLE VI—Funds

The funds of This Association shall be deposited in any national bank or Federally insured Savings and Loan Association selected by the Finance Committee, to the credit of This Association, or invested in U.S. Government Bonds at the discretion of the Finance Committee.

ARTICLE VII—Amendments

Amendments to this Constitution may be proposed by the Executive Committee, or by any two member societies. Proposed amendments shall be submitted to each of the member societies in writing. It shall require an affirmative vote of three-fourths of the member societies to ratify an amendment to this Constitution.

ARTICLE VIII—Later Affiliation

Non-member Geological Societies in the Gulf Coast Area which are affiliated with AAPG may petition the Executive Committee for membership and shall be accepted by an affirmative vote of three-fourths of the Executive Committee.

AMENDMENT I

Any member society may resign from This Association at any time by written notice to the Executive Committee. There shall be no obligation to transfer to such resigning society any portion of This Association's funds.

AMENDMENT II

This Association shall terminate at such time as a majority of the member societies shall so vote. Upon dissolution all funds and other property shall be divided equally among the member societies.

BYLAWS

I. COMMITTEES

The President, with the approval of the Executive Committee, shall appoint the Annual Meeting Chairman, and the following permanent committees:

- A. Publications
- B. Advertising
- C. Publicity

Appointment to these committees shall be for a term of one year.

1. Annual Meeting Chairman

The Annual Meeting Chairman shall direct the staging of the annual meeting, and shall have the authority to appoint such additional committees as he deems necessary.

2. Publications

The Publications Committee shall be responsible for obtaining papers for presentation at the annual meeting, and editing and publishing the annual *Transactions*. It shall endeavor to stimulate geologists in the Gulf Coast to prepare papers which can be collected and published in the *Transactions*, symposium or other form in order to further the object of This Association as set forth in Article II of the Constitution. This committee shall be composed of one member from each of the affiliated societies.

3. Advertising

The Advertising Committee shall be responsible for obtaining advertisements in the publications of This Association, as directed by the Executive Committee. This committee shall be composed of one member from each of the member societies.

4. Publicity

The Publicity Committee shall be responsible for obtaining maximum national and local publicity of the activities of This Association. Also it shall be the responsibility of this committee to stimulate interest and participation in association affairs. The Executive Committee shall function as the Publicity Committee.

The President, with the approval of the Executive Committee, may appoint such additional committees as are necessary to conduct the business of This Association.

II. TREASURER

The Treasurer shall have the authority to issue checks against the Annual Meeting bank account of This Association on his sole signature, but in the event of his absence or incapacity to act, withdrawals or payments by checks may be made on the signature of the President during the continuance of the absence, or incapacity, of the Treasurer. In this event, the identity and authority of the President, and the circumstances

relating to the absence or incapacity of the Treasurer shall be certified by the Executive Committee, if so required by the depository. The Treasurer shall submit a financial report on the Annual Meeting at each meeting of the Executive Committee and shall keep a set of books in accordance with good accounting practices. He shall submit the books of the Annual Meeting to the Finance Committee by March 1st following the Annual Meeting. The office of Treasurer shall be bonded as directed by the Executive Committee.

III. FINANCE COMMITTEE

The Finance Committee shall be responsible for investing and managing the funds of the Association. They shall be responsible for advancing to the Treasurer the necessary funds for operating the Annual Meeting and shall disburse funds for expenses and projects not related to the Annual Meeting as directed by the President upon approval by the Executive Committee. The Committee shall have authority to invest the funds as outlined in Article VI. They shall prepare a financial report on the Association's funds and submit it at each meeting of the Executive Committee. They shall also keep an inventory

and storage of publications and equipment owned by the Association. They will keep a set of books in accordance with good accounting practices and will submit the books for auditing as requested by the Executive Committee. The Committee will oversee the preparation and submittal of the Association's Annual Income Tax Return. The committee will also keep a file of these financial reports, as well as the report of the Treasurer for each Annual Meeting, for access by officers and representatives of the annual meetings for future years. The Committee shall consist of three members serving staggered three-year terms, such that each year one member will complete his term and a new member will be appointed in his place. The President of the Association, with the approval of the Executive Committee, shall appoint the members of the Finance Committee and they shall elect their own Chairman. Members of the Finance Committee shall be bonded as directed by the Executive Committee.

IV. These Bylaws may be amended by an affirmative vote of three-fourths of the Executive Committee.

V. There shall be no dues.

BYLAWS

GCS-SEPM

ARTICLE 1.—OBJECT

1.01—The object of the Gulf Coast Section of the Society of Economic Paleontologists and Mineralogists is to promote the science of stratigraphy in the Gulf Coast states through research in paleontology and sedimentary petrology, especially as it relates to petroleum geology. The Corporation, herein referred to as the "Section," will be closely associated with the Gulf Coast Association of Geological Societies and will cooperate with it and with the local geological societies of which it is composed for the furtherance of mutual objectives.

ARTICLE 2.—MEMBERS

2.01—The Section shall have members, associate members, charter members, and honorary members.

2.02—Members shall be persons engaged in paleontologic, petrographic or stratigraphic studies that have application to the geology of petroleum, who are members or associate members of the Society of Economic Paleontologists and Mineralogists and who work or reside in the Gulf Coast province of the states of Texas, Louisiana, Mississippi, Alabama, Georgia or Florida, or whose interest or work is principally within these states. Membership, once obtained, shall not be dependent upon continued residence in the aforementioned states.

2.03—Associate members shall be persons engaged in paleontologic, petrographic or stratigraphic studies that have application to the geology of petroleum, who work or reside in the Gulf Coast province of the above mentioned states, and who are not members or associate members of the Society of Economic Paleontologists and Mineralogists. Associates shall enjoy all the privileges of membership, save that they shall not hold office. Election to membership in the Society of Economic Paleontologists and Mineralogists will automatically advance associates to members.

2.04—Charter members are those whose application for membership were received before the first nomination of officers. They shall enjoy all the privileges of members and, hereinafter, are included in all references to "members."

2.05—The Council may elect as honorary members persons who have contributed distinguished service to the science of stratigraphy, paleontology or sedimentary petrology, especially as they relate to petroleum geology in the Gulf Coast.

Honorary members shall not be required to pay dues.

2.06—Each candidate for membership shall submit to the Secretary an application on a form authorized by the Council for this purpose.

2.07—New members and associates enrolled after September 15 shall be considered as having paid their dues for the next calendar year.

ARTICLE 3.—COUNCIL AND OFFICERS

3.01—Executive authority of the Section is vested in a board of directors known as the "Council" consisting of six members who are duly elected by the members, as follows: President, President-Elect, Secretary, Treasurer, and the most recently retired Past President.

3.02—The President shall discharge the usual duties of a president, as well as act as presiding officer at all meetings of the Section and Council. He shall appoint an Editor, Program Chairman, Committee Chairmen and Business Representatives.

3.03—The Vice-President shall assume the duties of the President in the case of the absence or disability of the latter. He shall also be Chairman of the Membership Committee and Chairman of the Employment Counseling Committee.

3.04—The Secretary shall keep records of the proceedings of the Section and a complete list of the membership. He shall attend to the preparation and mailing of notices, membership application blanks and other materials necessary to the business of the Section.

3.05—The Treasurer shall have custody of all funds of the Section. He shall keep account of the receipts and disbursements, and submit his account to the membership at the end of each year.

3.06—The Council shall consider all candidates for membership and pass on the qualifications of the applicants; shall have control and management of the affairs and funds of the Section; shall designate the time and place of the Annual Meeting.

3.07—The President and Vice-President shall not serve for more than one (1) year, except that if the Vice-President succeeds to the position of Acting President, he may be elected to a full term as President.

3.08—In the event that neither the President nor Vice-President is available to serve as presiding officer of the Section, the immediate Past President shall assume the President's duties.

3.09—The President-Elect shall serve for one (1) year as such, and in the following year he shall assume the office of President. He shall have no administrative authority except as a member of the Council. He shall acquaint himself with all the details of the office of President and generally prepare himself to serve as President. He shall be responsible for the preparation of the annual meeting for the ensuing year.

3.10—A vacancy occurring in the offices of Vice-President, Secretary or Treasurer shall be filled by Council appointment.

3.11—A vacancy occurring in the office of President-Elect shall be filled by mail ballot by the membership through a special election called by the Council.

ARTICLE 4.—MEETINGS OF MEMBERS

4.01—The Section shall hold at least one stated meeting each year, which shall be known as the Annual Meeting. This meeting will usually be held in conjunction with the Annual Meeting of the Gulf Coast Association of Geological Societies.

4.02—The program for the Annual Meeting shall be arranged by the Program Chairman in conjunction with the Chairman designated by the Gulf Coast Association of Geological Societies to arrange for its own program. In general, it will be desirable that the contributions from members of the Section be included in the main program rather than being allotted to a separate session.

4.03—At the time of the Annual Meeting, a Business Meeting shall be held for the transaction of Section business.

ARTICLE 5.—AMENDMENT OF BYLAWS

5.01—These Bylaws may be amended by a two-thirds vote of returned mail ballots received by the Secretary sixty (60) days after proposal of amendments with provision for vote is mailed to the members. Any proposed amendments must have the approval of a majority of the Council before being submitted to the members.

5.02—A petition containing the signatures of twenty (20) active members is considered sufficient to bring before the Council a proposed change in the Bylaws. A majority vote of the Council is also considered sufficient to initiate a proposed change.

ARTICLE 6.—DUES

6.01—The fiscal year of the Section shall commence on October 1 and expire on September 30 of the following year.

6.02—The annual dues of the members and associates of the Section shall be eight dollars (\$8.00)[†]. Penalty of fifty cents (.50) shall be assessed for late payments. The fifty cents (.50) late penalty shall be waived upon payment of dues for two more years.

6.03—A bill for dues shall be mailed to each member and associate before January 1 of each year. Members and Asso-

ciates who have not paid their annual dues by April 1 shall be dropped from the membership rolls.

6.04—Members and Associates dropped for non-payment of dues may apply to the Council for reinstatement and be reinstated by majority vote of the Council.

6.05—Members or Associates may, at their discretion, pay their annual dues in advance for periods of up to five (5) years.

ARTICLE 7.—FINANCIAL PROCEDURE

7.01—No officer or member shall enter into contract or disburse any of the Section's funds, without the co-signature of a member of the Council. Disbursal of a sum in excess of Five Hundred Dollars (\$500.00) must be approved by a majority of the Council.

ARTICLE 8.—ELECTIONS

8.01—The President shall appoint two (2) nominating committees, instructing each committee to submit nominations for President-Elect, Vice-President, Secretary, and Treasurer. These nominations shall be in the Secretary's hands before July 15. If desired, the same person may be nominated by the two committees for the offices of Secretary and Treasurer, but the nominations for President-Elect and Vice-President shall not include the names of the same person on the two slates. The nominations of the first committee to file its report will have precedence in case of overlapping nominations, and the other committee shall then be requested to change its nomination. A candidate for office must be an active member and reside in the Gulf Coast at the time of his nomination.

8.02—Ballots containing the nominations for officers, arranged alphabetically under each office, shall be prepared by the Secretary and mailed to each member of the Section on or before July 15. The ballots received by the Secretary before September 15 shall be counted by him. Receipt of a plurality of the votes cast for any office shall constitute election. In case of a tie vote, members of the Council shall cast one additional deciding vote.

8.03—Results of balloting shall be announced at the Annual Meeting, and the new officers shall enter upon duty at the adjournment of the Meeting.

ARTICLE 9.—PUBLICATIONS

9.01—The Section Editor, appointed by the President, shall actively solicit papers from the Section membership for presentation at the Annual Meeting. He shall cooperate with the editor of the Gulf Coast Association of Geological Societies'

[†]Amended by ballot concluded August 15, 1984.

TRANSACTIONS volume in preparing papers delivered at the meeting for publication in this volume. He shall cooperate with the editors of the Society of Paleontologists and Mineralogists' journals by helping to arrange for publication in these periodicals of suitable papers which come to his attention.

9.02—Members of the Section may purchase one copy of each Section publication at a discount rate of 20 percent off the advertised price.

ARTICLE 10.—BUSINESS REPRESENTATIVES

10.01—The President shall appoint one representative from each group of members in each local geological society affiliated with the Gulf Coast Association of Geological Societies and in other localities as needed. Each representative shall have an up-to-date list of the members residing in his vicinity. He will notify these members concerning any matter of Section policy which may be relayed to him by the President and shall have the authority to convene a meeting of those members to determine their views concerning Section affairs. He will report the results of such meetings to the President of the Section. He will cooperate with the Section Editor in the

soliciting of papers to be presented at the Annual Meeting and with the Chairman of the Membership Committee in recruiting new members for the Section.

ARTICLE 11.—AUDIT

11.01—The President shall appoint an Auditing Committee which shall review the accounts presented by the Treasurer. The approval of the Treasurer's books by the committee shall be required before his final report will be accepted. The Treasurer shall submit a provisional report at the Annual Meeting, and his final audit shall be accomplished not later than 30 days thereafter.

The Constitution of the GCS-SEPM was originally adopted in 1954 and was amended in 1960, 1962, 1966, 1969, 1971, 1972, 1975, and 1981. The Section was incorporated under the laws of the State of Texas in 1981, and these Bylaws were adopted at that time in place of the original Constitution and its amendments. They were amended in 1984. These Bylaws embody all of the provisions of the original Constitution and its amendments.