



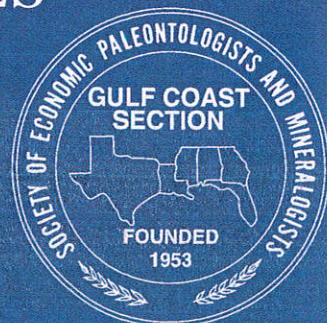
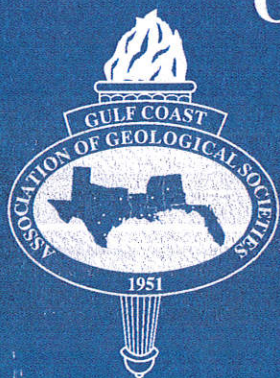
**GULF COAST ASSOCIATION  
OF GEOLOGICAL SOCIETIES**

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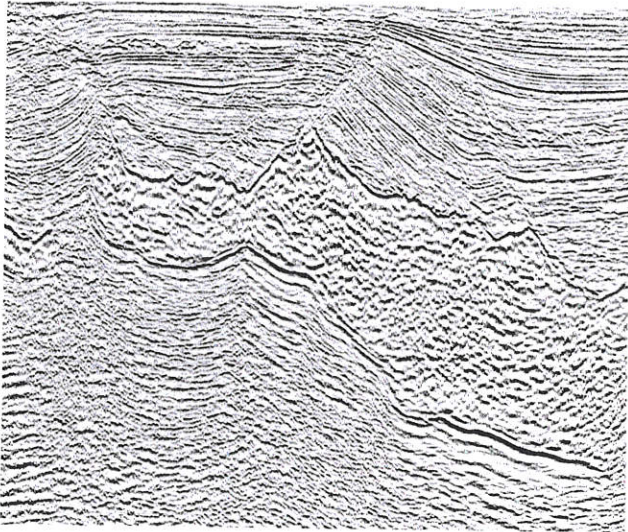
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**OCTOBER 2-4, 1996 • SAN ANTONIO, TEXAS**



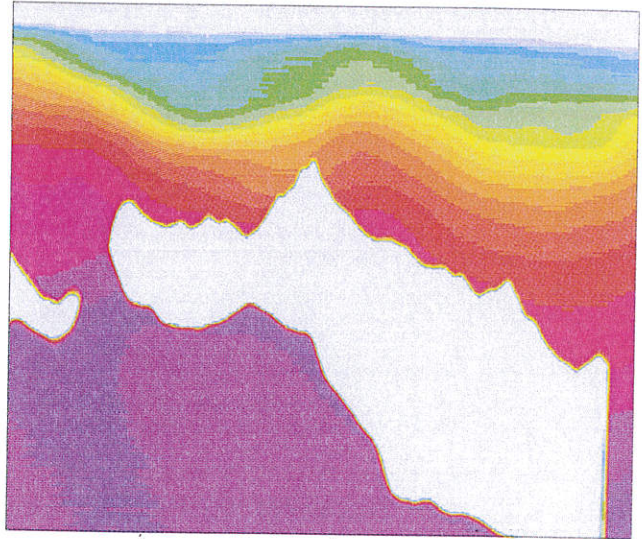
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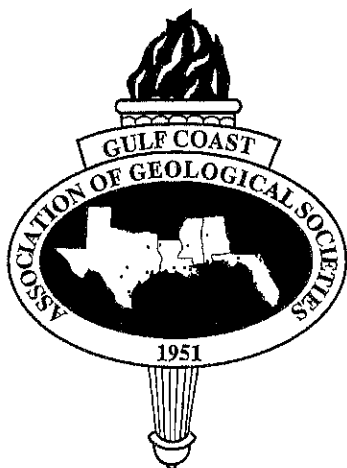
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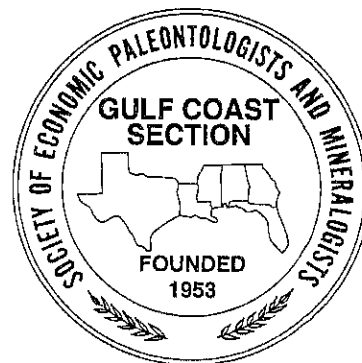
## **Gulf Coast Association of Geological Societies**

**A Section of the American Association of Petroleum Geologists  
With Contributions by the Gulf Coast Section SEPM**



**James O. Jones**  
Editor

**Volume XLVI  
1996**



**Robert L. Freed**  
Editor

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## Cover Photograph

**Front Cover:** View west across U.S. and Mexico coasts taken from the space shuttle Atlantis (OV-104) at an altitude of 240 nautical miles during the STS-27 mission in early December, 1988. The photograph epitomizes the theme of the meeting – “BASIN WITHOUT BORDERS.” Waco (near bottom), Killeen/Fort Hood, Austin, San Antonio and Amistad Reservoir at Del Rio lie along the sharp color change marking the Balcones Escarpment. Part of Houston is to the center of the lower edge of the photograph. The prominent wave-dominated Rio Grande River delta (center left) and Sierra Madre Oriental Mountains in eastern Mexico are clearly visible. Between Lavaca Bay and Baffin Bay the modern barrier island shoreline parallels the Ingleside Barrier, formed during the Sangamonian interglacial stage approximately 100,000 years ago.

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# Dedication

## *Transactions* Volume 46

### Don Freeman Tobin

It is with immense pleasure that the Executive Committee of the South Texas Geological Society dedicates the Transactions of the 1996 meeting of the Gulf Coast Association of Geological Societies in San Antonio to Don Freeman Tobin, a geologist of many talents and a warm and gifted friend among us. Don's contributions to the geological profession and to geology are myriad, substantial and continuous over a long, eclectic and stylish career and we are very pleased to salute him herewith.

Don was born in Casper, Wyoming, son of a pretty school teacher from Colorado and a successful sheep rancher who had emigrated from Ireland. Florence and Steve Tobin's ranching activities included summer operations in the Big Horn and Laramie Mountains and winter surface grazing leases north of Casper on and around the site of Teapot Dome, so famous and scandalous in the 1920's. Son Don, heard the engines of nearby pump jacks or drilling rigs throughout many nights spent sleeping in a sheep wagon. This intimate association with the outdoors and the earth itself, impelled Don to choose geology as his profession and life's work and he entered the University of Colorado where he received his degree in geology in 1937. After a semester of graduate work he returned to Wyoming and spent a year working on his father's ranch as a herder and camp mover.

In 1939, he mailed out a few resumes to major oil companies around the country, but received no job offers. Person to person interviews made the difference and after a visit to Bartlesville he accepted a job with Cities Service and was immediately dispatched to Kansas as "geologist" driver of a water truck on a seismograph crew. He was promoted to assistant surveyor and then to the position of assistant computer (a computer in the late thirties being a person, not a machine). From Kansas the crew went on to Michigan and then down into East Texas.

Don was next assigned to the San Antonio office of Cities Service as a junior geologist, his duties including those of an oil scout. It was during this period that he began to become familiar with the people, places, and geology of South Texas. He

attended "scout check" in Corpus Christi each week to report on wildcat wells drilling in the South Texas area. During that same period, he made it back into San Antonio several nights a week to attend St. Mary's University Law School. He received his J.D. degree and was admitted to the Texas Bar.

When the United States entered World War II in late 1941, Don entered an armed services training program in the engineering school at The University of Texas at Austin. His lead

professor was the late Myron Begeman, father of geologist Bob Begeman, who years later was a partner in the enterprise of Tobin and Begeman.

On February 1, 1942, in St. Mark's Church, San Antonio, Don and Peggy Portwood, daughter of school superintendent Thomas Portwood, were married. They both attended classes at U.T.-Austin until the end of the spring semester when Don was assigned to an Army Air Corps primary training school at Randolph Field as a ground school instructor in the enlisted reserve. He commuted to Randolph from the Buckaroo Ranch, near Bandera, an old-style dude ranch which Don and his mother had established during his oil scout years with Cities Service. But events like the birth of a first son, Don Jr., and transfer to Connally Field in Waco, necessitated the giving up of the ranch "for the duration".

After a few months in Waco, the Air Corps again moved Don, to a training facility at Cuero, where he continued to teach weather, navigation and aircraft identification to student pilots. In 1944, with personnel procurements winding down, the branch of service in which Don served was demobilized, and he received an honorable discharge from the U.S. Army Air Corps.

Free now to return to geology, Don applied for employment with Carter Oil Company, and was hired immediately. The Tobins were sent to the office of Carter in Jackson, Mississippi. They remained there for five months, Don spending most of his time sitting on wells in the growing Pickens Field north of Jackson. Then another transfer took the Tobins to the district office in Shreveport, where they lived for the next year. After several trips to the company headquarters in Tulsa they could see that major company employment meant frequent moves



and so they opted for a return home to Texas and San Antonio where Don went to work for Saltmount Oil Company, headed by an old friend and mentor, Harold Herndon.

The Tobins soon headed back to the hill country, acquiring the first of several tracts on the Medina River below Bandera which became their permanent home. Always interested in ranching, Don went into partnership with the venerable Semp Russ, forming the TR Cattle Company. Tobin and Russ leased thousands of acres in Bandera and Medina Counties, on the border at El Indio, and in Oklahoma to run Hereford cattle and goats. The big drought of the 1950's overtook their hopes for a successful venture, and the Tobins moved back into San Antonio where Don went out on his own as an independent. He was retained by John Manley of Dallas to oversee surface and core drilling exploration along the Front Range of Colorado, so the Tobins moved to Golden where they remained for some months before Mr. Manley chose to give up his project. The "Golden Arch", now buried under Denver suburbs, is still a prime prospect for a major discovery in Don's opinion.

Back in San Antonio again in 1953, Don was involved in consulting or wildcat prospecting, spending one long hot summer in eastern Kansas and a more pleasant one the next year in Durango, Colorado, where he located and checked out uranium leases for various clients during the boom in western Colorado and southwest Utah.

During the next fifteen or so years in San Antonio, both Don and Peggy became prominent in civic activities. Don joined the downtown San Antonio Rotary Club and also became active, because of his interest in ranching and horses, in the San Antonio Charro Association. He served as president of both organizations, the first "Anglo" to head a charro association on either side of the border. He was chairman of the Alamo District Science Fair, was president of San Antonio Children's Center, which he helped to build into a major psychiatric facility and was chairman of the Bexar County Legal Aid Society. All the while, he continued his interest in the professional organizations with which he was affiliated - South Texas Geological Society and American Association of Petroleum Geologists. He was active in exploration in South Texas, especially in Frio County where he brought in several new discoveries. The family went to the Bandera ranch almost every weekend!

In 1970, the Tobins made another major move, though Don continued to office in San Antonio as he had always done since coming to Texas in 1939. They sold their San Antonio home in Terrell Hills and moved back to live full time at the ranch in Bandera to which they had added a considerable amount of acreage since their initial acquisition. Don established two family companies, the Rio Bravo Royalty Company and the South Texas Gas Company, the latter devoted exclusively to the distribution of natural gas to irrigation farmers principally in Zavala, Uvalde and Frio Counties. Still keeping up his activity in Frio County during the Austin Chalk boom, he also established a title company in Laredo and a bank in San Antonio. Busy man: His office continued to be in the Milam Building in San Antonio.

In 1982, a call from a solicitor in Ireland offered the Tobins the opportunity to acquire the farm on Bantry Bay, County Cork, which had belonged to Don's ancestors for at least 250 years and from which his father, aunts and uncles, had migrated to Wyoming. The sale was consummated, and Don and family, now five sons and three daughters, added Ireland to their list of interests and concerns, making one, sometimes two, pilgrimages there each year thereafter. Don organized the Bantry Art Exhibition to assist the many painters working in West Cork in showing and selling their creations. In 1995, the exhibition celebrated its tenth anniversary and had become an independent enterprise put on by local citizens, though Don continues to sponsor the event with a contribution through the American Ireland Fund.

All during Don's career, he has been active in professional affairs and in the work of professional societies. His contributions of time and talent to the work of various professional society committees has been generous and substantial and his peers have awarded him Honorary Memberships in the South Texas Geological Society and the Gulf Coast Association of Geological Societies. Don has also received the GCAGS Special Award in 1989, the AAPG Distinguished Service Award in 1991, the Rotary International Paul Harris Fellowship and for 26 years he served as a Trustee of the Southwest Research Institute in San Antonio.

In 1987, Don served as General Chairman of the annual GCAGS meeting in San Antonio and his stellar performance must have caught the eye of the AAPG for they invited him to be General Chairman of the national meeting held in San Antonio in April 1989. He did such a fine job in that role that three years later, in the Spring of 1992, the AAPG surprised and astounded Don by sending word to him from Tulsa that he had been nominated to run for the office of president-elect of the AAPG. He indeed became president-elect. Taking office as AAPG President in an informal ceremony in Tulsa in the summer of 1993, Don embarked on the demanding tour of duty as president of the most influential and many-faceted geological organization in the world, representing the AAPG at conferences in Calgary, Caracas, Singapore, The Hague, and Vienna.

In April 1995, after more than half a century in the Milam Building, interrupted only by a war-time hiatus, Don moved his office to the ranch, where a downstairs bedroom, former sleeping porch, and a guest house — along with a file room in an addition to the barn now house his continuing activities with the AAPG and the oil industry. He shows no sign of retiring, but he does spare a little time for his sixteen grandchildren who come to the ranch to hike, play tennis and swim. His interest in his profession and its activities continue unabated and he looks forward to taking part as an elder statesman in the present San Antonio meeting of GCAGS and the upcoming national AAPG meeting also in San Antonio in 1999.

We are proud to honor Don Tobin by the dedication of this volume to him and to his achievements in the profession he has served so well.

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# Report of the President

## Gulf Coast Association of Geological Societies

E. Gerald Rolf

Welcome to San Antonio, home of the South Texas Geological Society. We are more than pleased to host the forty-sixth Annual Convention of the Gulf Coast Association of Geological Societies.

This year's **Transactions** are dedicated to Mr. Don F. Tobin who has served his profession and its organizations in a most outstanding manner. We salute Don for his ability and willingness to give so much of himself at the local, regional, and national level in supporting the science of geology.

I wish all our membership had the opportunity I've had to participate in and witness the dedication, ability, and genuine enthusiasm of your Board of Directors and Committee Chairmen. In any one year there are some thirty five to forty of your fellow geologists who meet to carry on the business for the twelve member societies who comprise the GCAGS. The amount of time a Board member or Committee person spends in study, inquiry, and preparation is significant. I encourage you to become more aware of these opportunities to serve and support your profession. Be a participant, not a spectator.



Thanks to the hard work of all our Convention site societies, we are financially in good health. This year under Howard Kiatta's (Houston) able leadership of the Finance Committee, we have taken advantage of some of the newer financial instruments for a more flexible financial portfolio and added interest income.

Another new and exciting event made possible by Robert Boyer (Austin), Publication Chairman, Howard Kiatta (Houston) and others is the start of compilation of all GCAGS **Transactions** articles in a digital format for future computer access and use. A very meaningful step for all members. Soon you will be able to access a list of all articles dealing with a particular subject, formation, or trend. This year's **Transactions** will be digitized. All of this will be handled through Datapages, Inc. of Tulsa. There will necessarily be a cost involved.

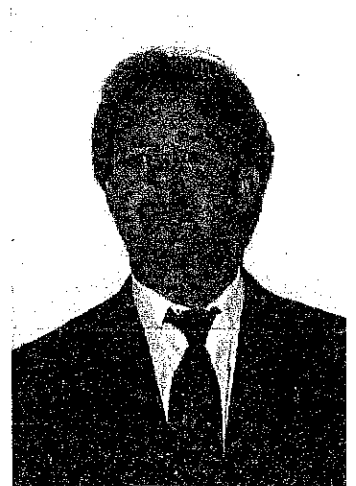
In the near future you will find the GCAGS on the Internet World Wide Web with a web site home page and several information pages listing our member societies, publication



Mark J. Gallagher  
Vice-President



William P. Wilbert  
Secretary



Bill Layton  
Treasurer

lists, an e-mail address, and many links to world wide web sites dealing with geology. Exciting!

Our Aid-to-Students Committee led by Ralph Richardson (Shreveport) has again received numerous applications from students within our Association's geographic area. Ten students from Florida to Texas were awarded financial aid in the form of \$1,000 grants. Our thanks to this Committee, it is not an easy task albeit a very satisfying one.

Bill Meaney (Shreveport) has done an excellent job for the past three years as Chairman of your Awards and Nominations Committee, a very demanding, time consuming effort. Your new Chairman is Dr. James Jones (San Antonio). A word to our membership. It is your function to recognize and submit worthy candidates through your local society.

Your Historian, David Pope (Baton Rouge) is continuing his efforts at updating our Association's history Ñ truly a people story.

The two Committees you hear the least about are the Convention Committee, chaired by Dan Smith (Houston) and Long-Range Planning, chaired by John Amoruso (Houston). These two chairmen and the excellent folks on their Committees do yeomen's service to keep the GCAGS up to

date in all our various functions. The amount of time and effort they put in deserves your applause.

I remind our members that the mechanics of organizing and maintaining continuity from year to year has been – is most efficiently being done by Mrs. Birdena Schroeder (Austin) as our Executive Secretary. I can truthfully say that Birdena is the cement that holds our GCAGS structure together. Her presence makes serving the GCAGS a satisfying experience.

To all those who have given so unselfishly of their time and talent to guarantee an excellent Convention for all attendees, my heartfelt thanks. When professional people set out to do something, it's a pleasure to watch. To our General Chairman, Tom Ewing, for insightful programming and his sacrifice of time and energy, our thanks.

And, now, you came to learn, refresh your thought process, and renew acquaintances. As your President I encourage you to participate wholeheartedly and not be only a spectator. Enjoy your time in San Antonio and a warm welcome from the folks of the South Texas Geological Society!

# Report of the President

## Gulf Coast Section SEPM

Rashel N. Rosen, President

I would like to take this opportunity to send my greetings to all of you and also to welcome you to San Antonio, Texas, a city rich in history and culture. It gives me a sense of being part of history by attending, celebrating, and welcoming you to the 46th Annual GCAGS and the 43rd Annual GCSSEPM Convention. I would like to take also this opportunity to express my sincere gratitude to the GCAGS officials, most notably the President, Gerald Rolf, and General Chairman, Tom Ewing, for their hard work and their spirit of cooperation with our society. I wish to acknowledge them as well as the hard working members of the GCSSEPM Convention Committee (Bonnie Weise, Walter Coppinger, Robert Freed, and Mike Nault) who have selflessly given their time and effort to organize this meeting and make the convention scientifically fruitful and rich as well as enjoyable, memorable, and interesting.

The theme for 1996 Convention meeting, "Basin Without Borders", makes San Antonio meeting a forum for the interchange of ideas between U.S. and Mexican geologists working in the Gulf of Mexico Basin.

The last decade, as you know, has been rough for those of us working in the oil industry. Nevertheless, the Gulf Coast Section of SEPM has been hard at work preparing for conventions, including this one, as well as the



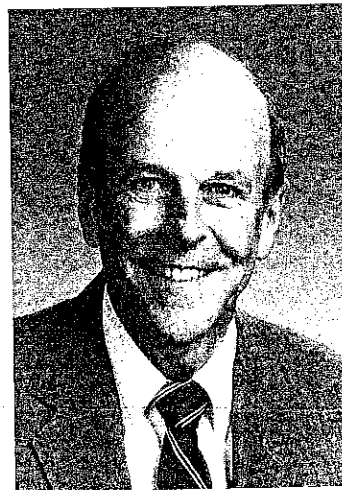
Rashel R. Rosen  
President

successful GCSSEPM Foundation Research Conferences, the last one of which dealt with the popular topic of "Salt, Sediments, and Hydrocarbons," and working hard and looking forward to another interesting and hot topic for the 1996 Research Conference entitled "Stratigraphic Analysis Utilizing Advanced Geophysical, Wireline, and Borehole Technology for Petroleum Exploration and Production" to be held in Houston, Texas in December 8 - 11, 1996, at the Adam's Mark Hotel. Dr. Pracht and Dr. Sheriff are the program co-chairmen and have put together an excellent Program Committee from industry as well as academia. In addition to presentation of papers on related topics and posters, VIP booths are also included so as to allow for demonstration of some of the techniques used for solving stratigraphic problems. Registration forms are available now. We expect an early sellout and full house. Please sign up early.

In 1996, the GCSSEPM will be celebrating its 43rd anniversary. The section was founded in 1953 for the purpose of "promoting the science of stratigraphy in the Gulf Coast States through research in paleontology and sedimentary petrology especially as it relates to petroleum geology." I am pleased to report that although members are primarily from the Gulf Coast States, the section has many members from



Paul Weimer  
President-Elect



Charles C. Smith  
Past-President



James Jones  
Vice-President



Rick Majors  
Secretary



Dick White  
Treasurer

other parts of the U.S., as well as foreign countries. This wide geographic distribution of membership illustrates the fine reputation that the section has gained over the years for scientific excellence and service to the geologic community.

The interesting and somewhat sad thing about the supportive members and the selfless hard working officers and organizers is that the majority of them come from a biostratigraphic background: A field targeted by the oil industry managers to be hit hard for downsizing; a group whose name does not even appear on the AAPG list of related geologic fields for membership (and thousands of us are AAPG members). Yet despite all this they still work hard to come up with interesting topics and conventions and research conferences. My hat is off to all of you. Things which can not get worse can only get better friend!!!

The 1997 AAPG-SEPM Convention will be held in Dallas, Texas. The Gulf Coast Section of SEPM will again sponsor a technical session.

On behalf of the GCSSEPM, there are many people I need to thank for their hard volunteer work. First of all, the section officers: vice president James Jones, secretary Rick Majors, treasurer Dick White, past President Charlie Smith, and

President-Elect Paul Weimer into whose capable hands I turn over the reigns on January 1st. They have all been pillars of support for me and they have all done a tremendous job. Such a powerful group. One could not have asked for a better one.

Next to be thanked are the GCSSEPM Foundation Trustees: Art Waterman, chairman, and Denise Butler and Sheila Barnette. The Foundation Executive Director, Dr. Bob Perkins, deserves special thanks, for without his guidance and leadership from the early conception of the Section and the Foundation, the GCSSEPM would not have the world wide reputation and recognition it now enjoys. I feel fortunate and proud to be part of such a group of professionals, for without their help, support, and team work the GCSSEPM Section and Foundation would not have functioned so effectively and would not have had such a profound impact on our geologic community. Thanks again, it has been a pleasure working with all of you. I have thoroughly enjoyed my association with you the last two years. I am hoping that with your continued support and participation the GULF COAST SECTION OF SEPM will be able to continue to be what it has been for the past few decades.

# Report of the General Chairman

## FORTY-SIXTH ANNUAL CONVENTION -- 1996

Thomas E. Ewing

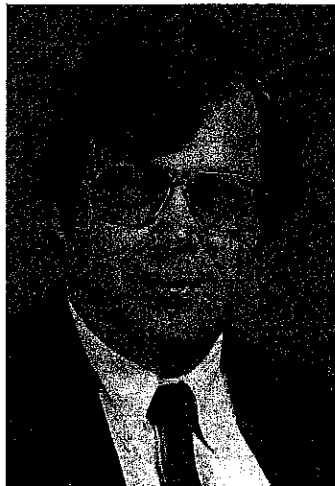
The South Texas Geological Society is pleased to host the 46th GCAGS Convention and the 43rd Annual Meeting of GCSSEPM in San Antonio. Bienvenidos a San Antonio!

Our full technical program is crowned by a Special Session on the regional geology and hydrocarbon framework of the Gulf of Mexico. This session, chaired by Dr. Joel Watkins of Texas A&M University, will provide a scientific synthesis of years of research conducted at several universities, in association with industry partners, on important questions of basin evolution, including salt mobilization, sediment loading and growth faulting. As part of the session, a special Supplement to the Transactions including a map of structural elements of the Northern Gulf of Mexico is included with your registration.

The exhibit floor this year will encompass a broad array of the latest geological and exploration software and hardware. Poster sessions and the Deal Alley are featured parts of the exhibition. Our meeting room and exhibit facilities in the Convention Center are convenient to each other, and in close proximity to our flagship hotels, the Marriott Rivercenter and the Hilton Palacio del Rio.

Of course, since this is San Antonio, we're putting on a special fiesta of social and spouse events, including the famous Night in Old San Antonio. A full slate of field trips and short courses will be held pre- and post-meeting.

A convention of this magnitude is only possible with the whole-hearted assistance of a substantial number of people in the geological profession. All of the workers on the list of committees have contributed their time and efforts; thank them when you see them! Special thanks go to Bonnie Weise, who served as GCSSEPM Co-Chairman and took care of innumerable matters great and small; Doug Draves, who was chief in charge of Arrangements; Lee Billingsley and Walt Coppinger, who coordinated the Technical Program; James



Jones and Bob Freed, who edited the Transactions; and the efforts of the Development Committee, led by Gene Ames III with Ray Jones (Exhibits) and Russell Dorsett (Advertising). We availed ourselves of the services of the Convention Department of AAPG, who proved essential at helping our small community stage this meeting, and saved us many difficulties in the competitive convention market; Michelle Mayfield, Randa Reeder and the Exhibits Manager Bruce Lemmon, thank you!

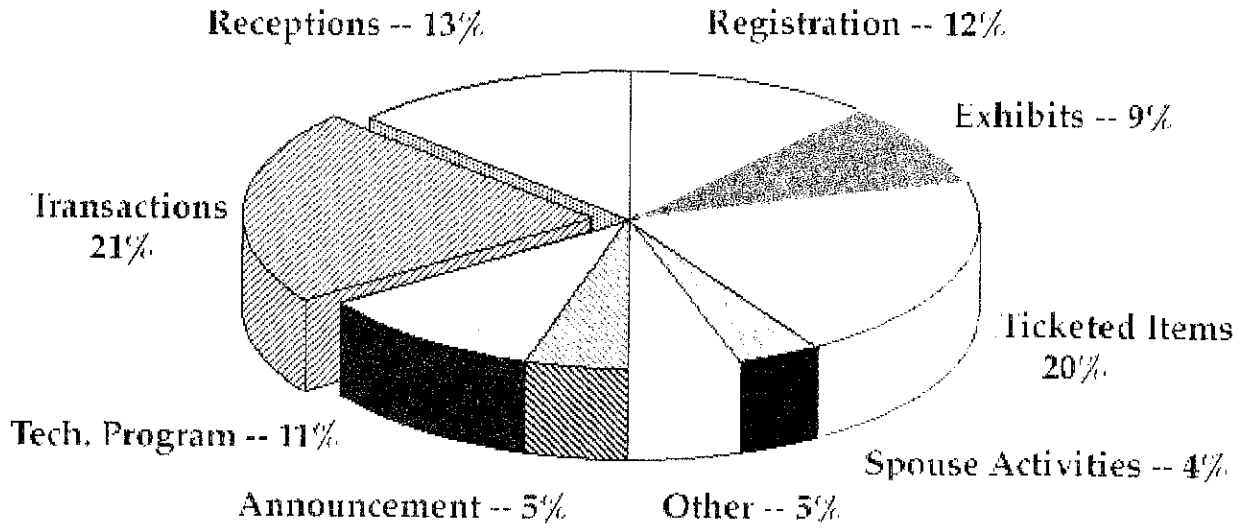
Many companies have generously contributed to the success of this Convention, by sponsoring one or more events or by making various cash and in-kind contributions. The latest list of sponsors

is included as a separate page in this Transactions. Please look the list over, take some time to thank them, and patronize them when you can.

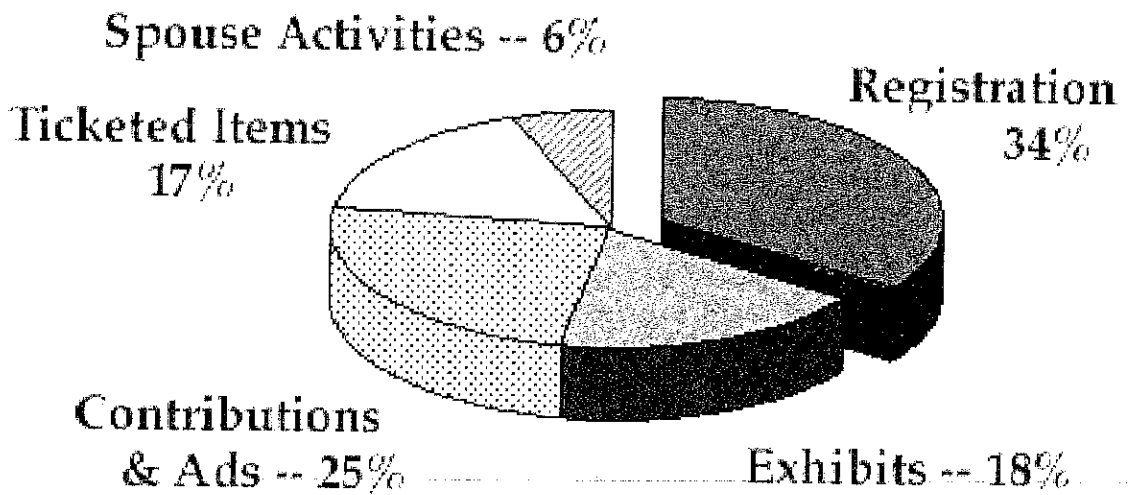
That brings to mind one closing thought. It is not, perhaps, obvious to the membership of our Gulf Coast geoscience community what it takes to put on a convention such as GCAGS. This convention is budgeted for over \$250,000 in expenses and revenues (excluding field trips and short courses). The registration fees cover only a third of the true costs of the convention; the rest is picked up from separately ticketed items (23%), the exhibition (18%) and from sponsors (25%). Our expenses are dominated by the Transactions (21%), the Receptions (including the Icebreaker, 13%), and the Ticketed Items (20%, budgeted to come out nearly even). The pie charts reproduced on the following page may serve to convey some sense of where the money comes from and goes to. At this convention, we strove to keep the per-registrant cost below \$100 for preregistration, and the values received high. I hope we've succeeded.

Please make yourself at home here in San Antonio, enjoy yourselves, meet friends, and learn at the sessions and the exhibits.

# Expenses -- \$228,800



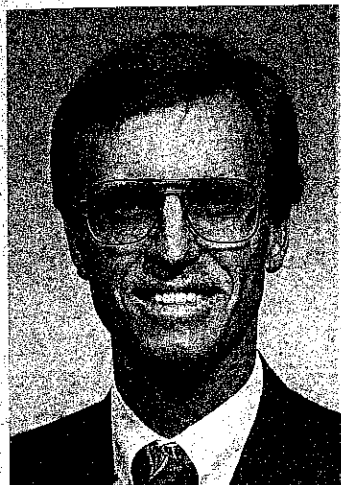
# Revenue -- \$226,525



# Report of the Technical Program Chairman

## Forty-Sixth Annual Convention – 1996

Lee T. Billingsley, GCAGS  
and  
Walt Coppinger, GCSSEPM



Lee T. Billingsley  
GCAGS

This year's technical program consists of the usual high-quality unsolicited and varied technical papers. But we are fortunate to have a collection of special papers on the offshore Gulf of Mexico that were assembled by Joel Watkins. The special papers are the result of the past 10 years of research by the Gulf of Mexico Structural and Stratigraphic Synthesis Project. Faculty

members of the Project are: Joel Watkins, Texas A&M Department of

Geology and Geophysics, William R. Bryant, Texas A&M Department of Oceanography, and Richard T. Buffler, The University of Texas Institute for Geophysics. These papers are the result of graduate student research utilizing donated data from seismic surveys and wells. The papers are concentrated in a special oral session that begins Thursday morning and continues into part of Thursday afternoon. Some papers will also appear within a poster session. Written versions of the special session and poster papers appear in a

separate GCAGS Special Publication. The Special Publication is included in your registration packet. Additionally, Dr. Watkins has compiled a map depicting the structural framework of the entire Gulf of Mexico. He has done a tremendous service to the scientific community by combing various individual research areas into a single continuous map. Gerald Rolf, this year's GCAGS President worked consistently to make the map a reality. The map appears in the back of the Special Publication.

Thanks go to all the authors who submitted papers to this year's convention. Without your good work and willingness to share, there would be no gathering of geologists in San Antonio in October. Also, we would like to acknowledge the guidance of our meeting chairman, Tom Ewing, who greatly aided the technical program by suggesting a possible special session by Dr. Watkins. In addition, Wayne Jones handled the duties of poster chairman.



Walt Coppinger  
GCSSEPM

# Report of the Editors

## Gulf Coast Association of Geological Societies Transactions, Volume 46, 1996

James O. Jones and Robert L. Freed



James O. Jones  
GCAGS

Like all Gulf Coast Association of Geological Societies Transactions of the past, this 1996 volume presents a very diverse program representative of the science as it is today. It covers nearly every sub-discipline of geoscience research, both applied and pure. Especially important subjects for the petroleum industry are represented by paleontology, biostratigraphy, sequence and seismic stratigraphy, sedi-

mentology and sedimentary petrology, structure and tectonics, organic geochemistry and the applied areas of oil and gas field research. In addition, the areas of more diverse interest are represented by various environmental geology and groundwater geology contributions.

All volumes of the Transactions of the Gulf Coast Association of Geological Societies published since the very first one in 1950 are recognized as major scientific contributions and this one continues that fine tradition. Format and reviews of the Transactions may be different from some other scientific publications, but format and reviews do not make a great scientific contribution: it is the ideas that are put forth that are the important part of any scientific publication. With the addition of research papers from the Gulf Coast Section SEPM, the Transactions are known as the most significant source of scientific information available on the Gulf of Mexico basin. Some of the early volumes are out of print, but they are still in demand. These Transactions have earned their rightful place beside all other scientific journals and bulletins in terms of their contribution to the overall body of geologic knowledge. We should always have space for individual style to be incorporated into each paper. Every year, professionals from around the world acquire these volumes and use the science presented by geologists studying the Gulf of Mexico basin.

This year all abstracts and papers were required to be submitted on a computer disk and all illustrations had to be camera ready to fit the required space. Future authors should be aware that this will be the requirement for all future submissions. Printers now require it. We thank all the authors who have contributed to these Transactions. They have put their discoveries and thoughts into each paper with the expectation of extending their fellow worker's understanding of the geology of the Gulf of Mexico

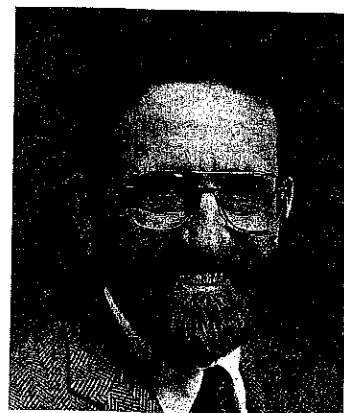
basin. You will find that they have been very successful. We are especially appreciative of the cooperation received from each author while making necessary changes during the review process. Over one hundred abstracts were submitted in response to the call for papers. Of these, 32 were selected as GCAGS oral papers, 25 as GCSSEPM oral papers, 7 as GCAGS/GCSSEPM oral papers, 19 as GCAGS

poster papers, 13 as GCSSEPM poster papers, and 4 as GCAGS/GCSSEPM poster papers. This year there are two bound contributions, the usual Transactions and a Special Publication. Therefore, the Transactions volume is slightly smaller. We have 12 oral papers and 7 poster papers presented in dedicated sessions on the offshore Gulf of Mexico basin. The oral papers, some poster papers and a special map are bound separately in the GCAGS Special Publication, **Structural Framework of Northern Gulf of Mexico**.

We extend our appreciation to Berdena Schroeder and Bonnie Weise for help in putting the frontal material together. A special thanks goes to David L. Amsbury and NASA-Johnson Space Center for the cover photograph and Linda Ewing for meeting logo design. We extend our thanks to the reviewers listed below who volunteered their expertise and time away from their search for hydrocarbons to provide reviews of manuscripts in this volume: Douglas A. Draves, Consultant; Thomas E. Ewing, Venus Exploration, Inc.; Raymond T. Jones, Independent Consultant; Bill J. Layton, Burk Royalty Company; Perry O. Roehl, Consultant; Gerald E. Rolf, Independent Consultant; and several anonymous readers.

One of the benefits of being an editor is that one gets to read all the papers and abstracts. As a result we have learned more about Gulf Coast geology in shorter time than usually possible. We hope that all attendees will read each contribution.

Manuscript layout for the Transactions was by Kim Wilks and printing was under the direction of Billy Seidel of Capital Printing, both of Austin, Texas. We wish to express our appreciation for their friendly advice and cooperation throughout production of this volume.



Robert L. Freed  
GCSSEPM



# 1996 Distinguished Service Award Gulf Coast Association of Geological Societies

## Carlo C. Christina

Carlo C. Christina was born in New Orleans, Louisiana and educated in the public schools of that city. Carlo received a Bachelor of Science Degree from Louisiana State University in 1951. His devotion to LSU is well known as he has served as President of the Geology Alumni Association, Jefferson Parish Alumni Association, Chairman of the Jefferson Parish Alumni Fund and the founding chairman of the Geology Endowment. He is a member of the LSU Foundation, the Development Council of the College of Basic Sciences and the National "L" Club. Carlo organized a senior level course for geology students to expose them to the operations of the oil and gas business. This course was very successful and aided many students in gaining insight into the complex oil and gas industry.



Carlo began his geological career in 1951 doing geophysical work prior to and immediately after serving two years as electronics officer in the U. S. Air Force.

His first employment as an exploration geologist was with Southern Natural Gas Company. During these years Carlo was involved in the exploration and development of several significant oil and gas fields in Louisiana and Mississippi.

After completing six years with Southern Natural Carlo joined John Bricker and his partner Lewis Lohman as their first geologist. This partnership was later incorporated into the Exchange Oil & Gas Company. Carlo was elected Vice President of Exploration and served on the Board of Directors until Exchange was acquired by Georgia Pacific Corporation. During Carlo's tenure at Exchange the company participated in over 500 exploration and development wells that found significant reserves in the Gulf Coast region.

In 1977 Carlo joined Martin Exploration and became an integral part of that company's exploration effort in the Tuscaloosa Trend in South Louisiana.

In 1980 Christina and Lawrence G. Ringham formed C & R Exploration, Inc. This company was successful in finding several Tuscaloosa, Miocene and Frio fields.

In 1988 Carlo organized and chaired the first GCAGS Committee that conceived the idea of contacting operators and service companies for financial support of GCAGS conventions. This concept was so successful that projected registration costs for the 1988 Convention were lowered, and all subsequent conventions have adopted Carlo's approach for raising funds.

Carlo's paper, "The Tuscaloosa Trend of South Central Louisiana" was awarded third place at the 1979 GCAGS Convention in San Antonio, Texas.

Carlo served NOGS as Vice President and President. Under his innovative leadership NOGS began honoring members for years of continuous membership and sponsored a luncheon recognizing Senior Management of the companies that employed most of the NOGS members. These luncheons improved NOGS communications with management and helped gain support for the endeavors of the Society. For his efforts Carlo was awarded Honorary Life Membership in 1991.

Carlo is a Certified Petroleum Geologist, a member of SIPES and has been an active member of AAPG since 1958. He has served as an AAPG Delegate and chaired numerous AAPG convention committees.

Although Carlo retired in 1994 he continues to be active in NOGS and will serve as a committee chairman for the 1997 GCAGS Convention.

Carlo and his lovely wife, the former Beverly Burris, are the proud parents of three sons. They have five grandchildren. Beverly is a former President of the New Orleans Geological Auxiliary and has helped with spouse activities on many AAPG and GCAGS Conventions. She is also very active in numerous civic, philanthropic and cultural organizations.

Carlo has had a lifetime of service to the geological community and is truly deserving of the Distinguished Service Award.

*Charles J. Corona*

# 1996 Distinguished Service Award Gulf Coast Section SEPM

## Denise M. Butler-Ford

Denise M. Butler-Ford has been chosen to be the recipient of the 1996 Distinguished Service Award by the GCSSEPM. Denise was born in Florence, Alabama and grew up in Tennessee and Kentucky. She graduated with a BS degree in Biology from Tulane University, New Orleans, Louisiana in 1975, later receiving her MS in Geology from that same institution. Denise married Tim Ford in 1990 and has two step sons.

Her career in the oil business began with Chevron's micropaleontology group in New Orleans, La. There she was trained in foram analysis of the late Tertiary and Pleistocene and worked for the Offshore Exploration and Production Groups in the Gulf of Mexico. Denise left Chevron in 1984 to join Sohio in Houston (later to become BP Exploration). She spent five years as a Senior Geologist in Offshore Operations specializing in foram biostratigraphy and computer applications. She also designed and served as database administrator for the Sohio/BP's paleontological database. While at BP, Denise also served as the Technical Service liaison to Exploration and was a member of the Stratigraphic Studies Group. In 1992, Denise left BP to join Pennzoil as Biostratigraphy Coordinator and to design and manage a computer database for storage and retrieval of paleontologic data. She is currently responsible for all aspects of



biostratigraphy for Offshore, Onshore and International business units. In addition, Denise is an active member of the Industry Biostratigraphy Coordinators Group (IBCG) and is currently participating in the Taxonomic Equivalency Project.

Denise has been a member of the Gulf Coast Section SEPM since 1980. She has served as Vice President (1986-87) and President (1990-1991) and is currently serving her second 3-year term as Trustee of the GCSSEPM Foundation. She was co-chairman and co-editor for the 1987 GCSSEPM Foundation Research Conference on *Innovative Biostratigraphic Approaches to Sequence Analysis*. Since that time she served on the conference

organizing committees of numerous GCSSEPM Foundation Research Conferences. In addition to the GCSSEPM she is also a member of the Paleontological Research Institute, National SEPM and the Houston Geological Society.

This award is being given to Denise M. Butler-Ford in appreciation and recognition of her many years of service and involvement with the Gulf Coast Section of SEPM and the GCSSEPM Foundation.

*Sheila C. Barnette*

**Past Recipients**  
**Distinguished Service Awards**  
**Gulf Coast Association of Geological Societies**

|                             |                           |
|-----------------------------|---------------------------|
| R. E. Boyer (1982)          | C. C. Baker (1991)        |
| P. B. Souders (1982)        | G. A. Jerry Cooley (1991) |
| B. C. Tucker (1982)         | S. Chuber (1991)          |
| none awarded (1983)         | C. R. Noll (1992)         |
| A. T. Green, Jr. (1984)     | J. H. Hefner (1992)       |
| Dewitt C. Van Siclen (1984) | J. G. Samuels (1992)      |
| C. E. Harrison (1985)       | T. E. Ewing (1993)        |
| none awarded (1986)         | W. R. Payne (1993)        |
| none awarded (1987)         | E. G. Wermund (1993)      |
| none awarded (1988)         | D. L. Smith (1993)        |
| H. G. Collier, Jr. (1989)   | D. E. Pope (1994)         |
| R. B. Seigert (1989)        | Duncan Goldthwaite (1995) |
| C. J. Corona (1990)         | Howard W. Kiatta (1995)   |
| R. W. Sabaté (1990)         | Carlo C. Christina (1996) |

**Past Recipients**  
**Distinguished Service Awards**  
**Gulf Coast Section SEPM**

|                            |                              |
|----------------------------|------------------------------|
| Michael J. Nault (1988)    | C. Clarence Albers (1993)    |
| Richard P. Zingula (1988)  | David T. Dockery III (1993)  |
| Thomas H. Fett (1989)      | Nolan G. Shaw (1994)         |
| Dennis Joseph Greig (1989) | Arthur S. Waterman (1995)    |
| Bob F. Perkins (1991)      | Denise M. Butler-Ford (1996) |
| Sheila C. Barnette (1992)  |                              |

# Honorary Membership

## Gulf Coast Association of Geological Societies

### George D. Severson

George D. Severson was born April 2, 1932, in Tulsa, Oklahoma. He grew up in Tulsa and enrolled at Tulsa University in 1950. He enlisted in the U.S. Air Force after his first semester and was a Staff Sergeant when he received an honorable discharge in 1955. George returned to Tulsa University, where he earned a Bachelor of Geology in Engineering degree in 1958. He completed one year of graduate school at Tulsa University before going to work as a subsurface geologist with Alex W. McCoy Associates in Tulsa. George worked the mid-continent, Rockies, western Canada, Mississippi, and Ohio until 1963, when he completed his Masters thesis and received his M.S. degree in geology from Tulsa University. George then went to work for Texaco from 1963-67, exploring the geographical areas around the district offices to which he was successively assigned in Ardmore, Oklahoma City, Lafayette, and New Orleans. In 1967 he moved to Exchange Oil and Gas in New Orleans, working south Louisiana onshore and offshore, Mississippi, Alabama, and Florida. In 1971 George joined The Louisiana Land and Exploration Company in New Orleans, working the Arkansas/Louisiana/Texas area. He was the Eastern Division Exploration Manager for LL&E from 1975-88, with responsibility for the eastern United States, north Texas, Oklahoma, Kansas, and the international areas of South America and the Far East. In 1988 he formed Severson Exploration Company, his current business activity.

George joined the AAPG in 1958 and the Division of Professional Affairs (CPG #1569) in 1973. His AAPG activities have included: member of the Convention Coordinating Committee (1975-76), Entertainment Chairman of the 1976 Convention in New Orleans, member of the



Committee on Conventions (1983-87), Chairman of the Convention Coordinating Committee (1983-85), General Chairman of the 1985 Convention in New Orleans, AAPG Delegate (1986-89), member of the Committee on Committees (1991-92), and candidate for Secretary (1991). He received a Distinguished Service Award from AAPG in 1993.

George served as Treasurer of the Ardmore Geological Society (1964-65); and he has continuously dedicated his time and energy to the New Orleans Geological Society during the past 28 years, serving as: Secretary (1970), Vice President (1971), President (1972), a Director during seven of the last 21 years, and three times as Chairman of the Nominating Committee. He was Chairman of the Employment Counseling Committee (1986-89) and counseled nearly 100 students, recent graduates, and experienced geologists about geology, job opportunities, and arranging job interviews. He is a past Trustee of the NOGS Memorial Foundation, and is an Honorary Life Member of NOGS. He is also a member of SIPES, AIPG (CPGS #2960), and Sigma Gamma Epsilon.

In his successful involvement with all of these professional activities, George has been most ably assisted and supported by his wife, Joanne. The Seversons live in New Orleans and have four grown children: Dianne, Judy, George F., and Jennifer. George's personal and professional ethics and integrity are unsurpassed, as is his love of the profession. His many friends and business associates join with me in congratulating him on this most deserved honor by the GCAGS.

*Donald I. Andrews*

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# Past Recipients Honorary Membership Gulf Coast Association of Geological Societies

|                            |                             |
|----------------------------|-----------------------------|
| D. R. Boyd (1982)          | J. J. Amoruso (1987)        |
| J. Braunstein (1982)       | W. L. Stapp (1988)          |
| M. T. Halbouty (1982)      | J. A. Gilreath (1989)       |
| F. W. Harrison, Jr. (1982) | R. E. Boyer (1990)          |
| H. N. Hickey (1982)        | J. A. Hartman (1990)        |
| L. H. Meltzer (1982)       | T. H. Philpott (1990)       |
| S. J. Lysinger (1983)      | none awarded (1991)         |
| J. O. Lewis (1983)         | none awarded (1992)         |
| E. C. Roy, Jr. (1983)      | G. A. Cooley (1993)         |
| F. L. Smith, Jr. (1983)    | M. G. Frey (1993)           |
| P. M. Strunk (1983)        | P. G. Gray (1993)           |
| R. J. LeBlanc, Sr. (1984)  | J. T. Palmer (1993)         |
| W. R. Paine (1984)         | T. D. Barber (1994)         |
| M. O. Turner (1984)        | D. F. Tobin (1994)          |
| W. L. Fisher (1986)        | Edward B. Picou, Jr. (1995) |
| C. L. Sartor (1986)        | George D. Severson (1996)   |

# Honorary Membership

## Gulf Coast Section SEPM

### Harry H. Roberts

**Dr. Harry H. Roberts'** official resumé includes only one entry in the professional experience section: Coastal Studies Institute, Louisiana State University. For almost thirty years he has devoted his time and energy to conducting research and teaching students at LSU, though in fact his projects frequently have taken him far from Louisiana. He has studied reefs in the Caribbean, algal bioherms and deltas in Indonesia, depositional settings in the Red Sea, terrigenous-carbonate facies and wave-current interactions in Nicaragua, shelf margin morphology in the West Indies, marine geology of the Nile, lagoons on Grand Cayman, and of course many aspects of the geology of the Gulf of Mexico and Mississippi and Atchafalaya deltas. In the process he has become an internationally recognized expert on marine geology, deltaic/carbonate sedimentology, and reef processes.

Harry entered LSU as a graduate student after receiving a B.S. degree from Marshall University, Huntington, West Virginia, in 1963. Fellowships from the Pan American Petroleum Foundation and the National Science Foundation supported his graduate work. Concentrating on Recent carbonate sedimentation, he earned his M.S. degree in 1966 and his Ph.D. in 1969. The geographic area for this study was North Sound, Grand Cayman Island. His interest in the Caribbean and Bahamas islands continues to the present.

Having demonstrated his adeptness at conducting field research, publishing his findings, and teaching, and an ability to participate in team efforts, he was invited by Coastal Studies Institute to join its staff as an instructor. The work of the Institute, at that time contracted for the most part by the Office of Naval Research, was conducted in many parts of the world, and Harry expanded his geographic framework to include projects in ever far-ranging locations. He readily accepted the challenge of foreign field projects, working out the complicated logistics of shipping massive amounts of equipment and obtaining cooperation from foreign agencies and native field assistants.

In Louisiana, the emerging Atchafalaya delta provided an unparalleled opportunity for study of a new delta lobe in its



formative stages. Monitoring the delta's development has given new clues to processes active in delta formation. A soon-to-be published book presents much of the material he and others have assembled on this new delta.

Interspersed with foreign work, in addition to his Atchafalaya and ongoing Mississippi delta studies, has been research in the Gulf of Mexico. Recent continuing investigations of deepwater geologic settings in the Gulf using research submersibles have inspired new appreciation of the surface geology of the continental slope and the importance of unusual gas hydrates in this setting. In support of this work, Coastal Studies Institute technicians fabricated equipment

for in situ measurements of gas emission and temperature changes in the sediments as well as the water column. In addition, an MMS contract recently resulted in completion of a synthesis of high-resolution acoustic data from Louisiana's continental slope. The surficial geology of the slope was evaluated using high-resolution acoustic data, which were verified by direct observations and samples collected by a research submersible.

With the publication of Harry's research results and presentation of papers at regional and national conferences came invitations to lead field seminars and continuing education courses and a corresponding growth in his reputation as a leading scientist. His outstanding ability to communicate through lectures and writing has earned him awards, beginning with a GCAGS Best Paper Award in 1980, and invitations to serve on editorial boards. He received another Best Paper Award from SEPM in 1984, a Best Published Paper Award from the Gulf Coast Section of SEPM in 1985 and 1994, and third place in the GCAGS Best Paper competition in 1986 and in the Best Poster category in 1988. He was named to the Board of Advisory Editors of *Coral Reefs* and *Sedimentary Geology* and currently serves as associate editor of the latter journal. In 1992 he won the prestigious I. A. Levenson Award. He regularly reviews manuscripts for international journals and served as an AAPG Distinguished Lecturer in 1994. He received the GCSSEPM Outstanding Educator Award in 1995.

Advancing through the ranks at LSU, in 1970 Harry was promoted to assistant professor. In 1973 he became an associate professor, and since 1978 he has been a full professor. In 1985 he was named assistant director of CSI, and from 1989 to 1995 he served as director. He resigned as director in order to give more attention to research and teaching. He continues to win contract awards for LSU from such agencies as the Department of Energy, NASA, MMS, NOAA-NURP, NSF, and private industry. His most recent field work was set in the Mahakam Delta, Indonesia; he has just completed a four-volume report that provides the first clear understanding of the sedimentary architecture of a tropical delta.

He has served the University in a number of ways, and his service was recognized by LSU in 1993 when he was awarded the H. M. "Hub" Cotton Award for Faculty Excellence. His contributions include serving as a member of the Faculty Senate in 1974-75 and on the Search Committees for Vice Chancellor for Research, Dean of Basic Sciences, and Director of the Center for Coastal, Energy and Environmental Resources (CCEER). He was a member of the committee named to write a proposal to establish the Basin Research Institute. He has worked on advisory committees of the Center for Energy Studies, the School of Geoscience, and CCEER. He was coordinator of CSI's Industrial Associates Program and served on the Strategic Wetlands Plan Task Force and the Basic Sciences Chairs and Directors Council.

On the state level, Harry is an alternate to the LUMCON Council and Executive Committee and was a candidate for the Outstanding Scientist Advisory Council.

He is a member of the International Association of Biological Oceanographers. From 1988 to 1990 he was a member of the National Steering Committee for the Earth Sciences Geostationary Platform, a NASA program, and he served on the Steering Committee for the Global Sedimentary Geology Program Workshop on Neogene Global Change.

Harry has embraced deepsea submersibles as a tool for studying underwater seafloor geology and geologic processes. He has dived in Alvin, Pisces II, and the Johnson Sea-Link manned research submersibles. NOAA vessels and research submersibles have supported his work on authigenic carbonate buildups on the Louisiana continental slope, and NASA high-altitude aircraft have acquired multispectral imagery over the Louisiana coast in support of his work.

He participated in a cooperative program with the Earth Resources Laboratory at the National Space Technology Laboratory using a unique multispectral scanner system and in a Center for Satellite Meteorological Studies project at the University of Wisconsin to evaluate changes in Louisiana's coastal plain and nearshore waters.

Honorary membership in the Gulf Coast Section of the Society of Economic Paleontologists and Mineralogists is apt recognition for Harry Roberts, who has devoted his adult life to the science of marine geology, sedimentology, and reef processes. He is an outstanding educator, researcher, and communicator. More than that, he is a person who commands the loyalty, respect, trust, and admiration of his colleagues and students, who applaud his selection for this honor.

*James M. Coleman*

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## Past Recipient Distinguished Honorary Membership Gulf Coast Section SEPM

Charles G. Ventress (1989)

## Past Recipients Honorary Membership Gulf Coast Section SEPM

|                                |                               |
|--------------------------------|-------------------------------|
| Ester Applin (1964)            | Frank E. Lozo, Jr. (1981)     |
| Alva C. Ellisor (1964)         | Gene B. Martin (1984)         |
| Marcus A. Hanna (1964)         | Bob F. Perkins (1984)         |
| Henry V. Howe (1964)           | Edward B. Picou, Jr. (1984)   |
| Hedwig T. Kniker (1964)        | Claude M. Quigley, Jr. (1986) |
| Winnie McGamery (1964)         | William P. S. Ventress (1986) |
| John R. Sandidge (1964)        | Don G. Bebout (1987)          |
| J. B. Garrett, Jr. (1965)      | David E. Pope (1987)          |
| E. H. Rainwater (1966)         | Emmett Ray Adams (1989)       |
| Henry Bronislaw Stenzel (1971) | Jack O. Colle (1989)          |
| Jules Braunstein (1973)        | John B. Dunlap (1989)         |
| Grover E. Murray (1973)        | C. Clarence Albers (1990)     |
| Harold V. Anderson (1975)      | Ben J. Petrussek (1990)       |
| Lyman D. Toulmin (1975)        | Ernest A. Mancini (1991)      |
| Doris M. Curtis (1977)         | James M. Coleman (1992)       |
| Stuart A. Levinson (1978)      | Edward McFarlan, Jr. (1994)   |
| Fred L. Smith, Jr. (1978)      | Arnold H. Bouma (1995)        |
| Charles W. Stuckey (1978)      | Harry H. Roberts (1996)       |
| William R. Paine (1980)        |                               |



# Special Commendation Award

## Gulf Coast Association of Geological Societies

### Birdena Schroeder

GCAGS is fortunate to have Mrs. Clarence C. (Birdena) Schroeder as its Executive Secretary. Birdena does her work at no cost. The arrangement was that Birdena would bill the Association for her time. However, except for reimbursement of expenses for semi-annual Board meetings, Birdena has not submitted any payment requests. The GCAGS "office" is in her home, with the only GCAGS equipment being a FAX machine. How many families would put up with that on a long-term basis?

Born in El Reno, Oklahoma, Birdena came by her red hair and strong will honestly; her parents immigrated from Ireland. She visited Austin upon finishing El Reno high school (a year early) in June of 1954, to see her brother living here. After two years as an Insurance Company secretary, she returned to Oklahoma and became a stenographer with Magnolia Petroleum Company in their Oklahoma City office. In February, 1959, she married Clarence Schroeder, who resided in Austin. Birdena then accepted a position as senior secretary in the Development Office of The University of Texas. One year later Sam Ellison hired her as administrative secretary for the Department of Geology. She worked in the Department for 22 years, retiring as executive assistant in 1982.

While Birdena was executive assistant, the arrangement was made to consolidate the GCAGS publications inventory at The University of Texas from warehouses, offices, and sundry garages in Houston, Corpus Christi, and elsewhere. The initial plan was for UT geology majors to be paid for packing and shipping the publications. However, that arrangement violated University guidelines on use of facilities, even though all materials were purchased by GCAGS. Birdena and I then moved the inventory off campus and arranged for warehousing and distributing the publications.

Keeping busy has come naturally for Birdena. While working and raising her son, Scott, Birdena became immersed



in voluntary activities. St. Paul Lutheran Church of Austin is one beneficiary. In addition to teaching Sunday School for several years, she has been a longtime member of the Lutheran Women's Missionary League, serving in several official positions and on numerous committees. She has also been on the Youth Club Board and the Altar Guild (currently directress), and was recently elected to the Stewardship Board.

For some 30 years Birdena has been involved with The Easter Triumph, which produces a passion play each Easter for the City of Austin. The play is a popular event attended by many thousands on Saturday evening and again at sunrise on Easter morning. Birdena was Triumph secretary for years, and more recently, pageant committee chairperson. Election time has also not missed out. For as long as I can recall, Birdena has been election judge for Precinct 406 of the Democratic Party, managing every election (be it for one County position, one of an endless array of City runoffs, or a Presidential election) for her precinct.

Another major endeavor has been Birdena's work with the Texas Extension Homemaker's Association (TEHA). She has been Travis County Extension Homemaker's Council vice chairman and chairman, the TEHA chairman for Travis County, the TEHA cookbook chairman, and for several years the Travis County delegate to the Statewide Convention.

These examples highlight a life full of benefit to others. GCAGS is indeed blessed to have Birdena Schroeder as its Executive Secretary. It is therefore a true pleasure to recognize Birdena as recipient of the GCAGS Special Commendation Award, established by the Board of Directors. No one could possibly be more deserving of this expression of appreciation.

**Robert E. Boyer**

on behalf of the GCAGS and its Board of Directors

# Outstanding Educator Award

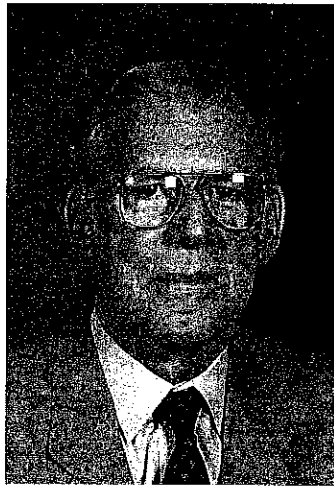
## Gulf Coast Association of Geological Societies

### William R. Bryant

**William R. Bryant** was a cryptanalyst for the Air Force for four years before he started geology at the University of Chicago. In 1963 he came to Texas A & M University and a year later he became Assistant Professor in the Department of Oceanography. He was promoted to Associate Professor in 1968 and to full professor in 1971.

Dr. Bryant loves the oceans and has sailed on many of them during his career. He has participated in more than 32 major oceanographic cruises, two Deep Sea Drilling Projects and two Ocean Drilling Program legs. During 1993-1995 he sailed six of the Russian polar seas.

On many of those cruises he took students along allowing them to gain tremendous practical experience and to collect data to be used for an M.S. or Ph.D. thesis. During those years he chaired more than 40 M.S. Graduate Committees and over 44 Ph.D. Committees. Bill has taught and developed 12 courses ranging from Introduction to Oceanography for undergraduates, geological oceanography for graduates (majors and non-majors), sediment transport,



techniques in geological oceanography, small ocean basins, geotechnical properties, to high-resolution marine geophysics for geology majors and also for marine archeology majors.

Bills professional interests are geology and geophysics of the Gulf of Mexico and the Caribbean, geotechnical aspects of marine sediments, marine sedimentation, acoustical properties, microfabrics of clay, and seafloor morphology and characteristics. Those interests got him involved in many Texas A & M and national committees.

His diversity in research, interest in teaching and respect for students made him the recipient of the "Faculty Distinguished Achievement Award in Research" in 1982.

That is partly based on his extensive publication list with over 157 papers, 64 abstracts mostly belonging to presentations at professional meetings, and 51 reports. It is his devotion to geological research and teaching that energizes himself and his students, making it well deserved to become the recipient of the Outstanding Educator Award.

# 1995 A.I. Levorson Memorial Award

Awarded to: Mary J. Broussard

## For: Modern Analytical Techniques for Fault Surface Seal Analysis: A Gulf Coast Case History

**Mary Jennemann Broussard** received a B.S. degree in geology and geophysics from the University of Tulsa in 1984. Upon graduation she joined Ward Exploration in Tyler, Texas as a processor of 2-D seismic data. She has also worked for SRS-Geosource in marketing, and, since 1987, with Marathon Oil Company in Lafayette, Louisiana. To further her career, she chose to pursue an M.S. degree in geology from the University of Southwestern Louisiana while working full-time. She received her M.S. degree in 1995 with her thesis work serving as the subject of this paper.



Broussard presently works as a petroleum geologist in an Offshore Gulf of Mexico Development Team. Her primary interests include fault seal analysis, 3-D reservoir characterization modeling, and experimentation with new 3-D seismic techniques which facilitate here day to day field interpretations. She is a member of the American Association of Petroleum Geologists, Society of Exploration Geophysicists, Southwest Louisiana Geophysical Society, Lafayette Geological Society, and the Houston Geological Society.

# 1995 Best Paper Awards

## Gulf Coast Association of Geological Societies

First place awarded to:

Robbie R. Zenero, David L. Seng, Mark R. Byrnes, and  
Randolph A. McBride

### For: Geophysical Techniques for Evaluating the Internal Structure of Cheniers, Southwestern Louisiana

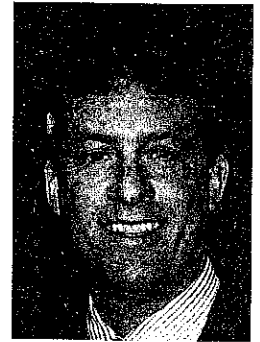
**Robbie R. Zenero** is a graduate student in the Department of Geology and Geophysics at Louisiana State University, anticipating August 1996 graduation with a M.S. in geology. She received a B.S. in geology from Western Michigan University in 1994. While at LSU, Robbie has worked as a graduate research assistant with Dr. Mark Byrnes, focussing her efforts on the southwest Louisiana Chenier Plain. Her primary contribution to the southwest Louisiana project was to collect, process, and interpret ground penetrating radar data. Her research interests further include palynological studies of Quaternary deposits. She has accepted a position with Exxon, Exploration Division, and will move to Houston in August 1996.



**David L. Seng** is a field technician for Heritage Services in Baton Rouge, Louisiana. He received a B.S. in geology from Eastern Michigan University and a M.S. in geology from Western Michigan University. While at Western Michigan University he worked as a field technician for several research projects on Lakes Michigan, Erie, and Huron. He actively participated in the development and modification of a submersible ground penetrating radar antenna for mapping sand sheet thickness along Michigan coastlines. His research interests include environmental applications of geophysical methods. He is particularly interested in applications of ground penetrating radar



**Mark R. Byrnes** is an Associate Professor - Research with the Coastal Studies Institute, Louisiana State University. He received a Ph.D. in Oceanography from Old Dominion University in 1988. His principal research interests focus on sediment dynamics in coastal and nearshore environments and the scaled response of coastal depositional systems, including an understanding of the linkage between short-term beach and nearshore process-form relationships, historical environmental change trends, and the recent geologic evolution of coastal systems. Before joining the faculty at LSU in 1990, Mark spent 3.5 years as a research physical scientist at the U.S. Army Coastal Engineering Research Center (CERC) investigating barrier island sedimentation processes and developing models for simulating shoreline response to waves and water level. Since 1990, he has been investigating meso- and macro-scale sediment transport patterns at entrances and on the shoreface for assessing coastal/shelf sediment exchange relationships. In addition, over the past three years, he has been studying the sedimentary framework and geomorphic evolution of Chenier Plain deposits in southwestern Louisiana and their relationship to sea level change (global climate change), variations in sediment supply, and coastal processes. Recent activities include studies to evaluate beach and nearshore dynamics related to coastal engineering activities (e.g., the effectiveness of 85 segmented breakwaters for mitigating chronic erosion problems in southwestern Louisiana), as well as a project aimed at assessing the feasibility of shoreline restoration for mitigating wetland loss on the Mississippi River Delta Plain and an associated environmental impact statement. Mark is an active publisher of research articles on coastal sediment dynamics, process/response variables affecting geomorphic change in coastal environments, and the sedimentary framework and evolution of coastal deposits along the northern Gulf of Mexico and U.S. Atlantic seaboard.



**Randy McBride** is a Senior Research Associate with the Coastal Studies Institute (CSI), Louisiana State University (LSU). He received a B.A. degree from Wittenberg University (Springfield, Ohio), an M.S. degree from LSU, and is currently completing his Ph.D. at LSU in the Department of Oceanography and Coastal Sciences (DOCS) with a minor in geology. His primary research interests are marine geology, sedimentology, and process geomorphology with a special emphasis on the geomorphic response of coastal/shelf depositional systems. McBride is a member of GSA, SEPM, CERF, and BRGS.



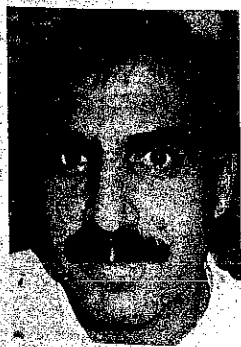
Before joining CSI in 1993, McBride worked seven years for the Louisiana Geological Survey-Coastal Geology Section. He has worked in many areas of coastal research including geologic framework studies in estuarine, deltaic, and marine environments; GIS/GPS mapping applications for quantifying coastal change; and documenting regional response patterns along barrier shorelines and on continental shelves. Since 1986, he has worked with the U.S. Geological

Survey (USGS) National Marine and Coastal Geology Program investigating the geologic framework and geomorphic evolution of deltaic and chenier plain deposits along coastal Louisiana. Randy worked on the USGS Louisiana Barrier Island Erosion Study and was the primary author on the shoreline change chapter of the USGS Barrier Island Erosion Atlas. Recently, he was a barrier island technical advisor to the LA Department of Natural Resources and is currently working on the Louisiana Barrier Shoreline Feasibility Study and an associated Environmental Impact Statement (EIS) aimed at mitigating severe wetland loss in Louisiana through barrier island restoration. These projects are funded by the Coastal Wetland Planning, Protection, and Restoration Act (CWPPRA). In addition, he is investigating Late Quaternary deposits and hard mineral resources in the northeastern Gulf of Mexico with funding from the Minerals Management Service. McBride also worked two field seasons in Alaska in 1989 and 1990 as a coastal geomorphologist for Woodward-Clyde Consultants who was charged with the Exxon Valdez oil spill response and scientific assessment. Randy has authored numerous research articles, atlases, and professional maps about the northern Gulf of Mexico and the U.S. Atlantic seaboard.

Second place awarded to:

Ezat Heydari, William J. Wade, and Laurie C. Anderson

**For: Depositional Environments and Accumulation of Organic Matter in the Smackover Formation, North Central Gulf of Mexico**



**Ezat Heydari's** degrees in geology include a B.S. from the University of Tehran (1976), Iran, a M.S. from Penn State University (1981), and a Ph.D. from Louisiana State University (1990). He is presently an assistant professor with the Basin Research Institute at Louisiana State University. His research interests revolve around diagenesis, depositional environments, and

geochemistry of carbonate rocks to solve issues related to fluid-rock interactions and to earth history.



**Dr. William J. Wade** contributed to the research for this paper while serving as a post-doctoral research fellow with the Department of Geology and Geophysics of Louisiana State University. He is currently the President of LSS International, a core analysis and geological services corporation headquartered in The Woodlands, Texas. After earning BA and MS degrees in Geology from

Vanderbilt University, Nashville, Tennessee, he worked in the late 70's and early 80's for 3 years as a field mapper and coal geologist with the Tennessee Division of Geology, followed

by 5 years as a petroleum explorationist with Champlin Petroleum, Houston, Texas. He returned to academia and was awarded his Ph.D. from Louisiana State University in 1993 for research on the sedimentology, stratigraphy, and geochemistry of Smackover carbonates, conducted under the guidance of Prof. Clyde H. Moore, Jr.

Wade has pursued research on such diverse geological topics as: sequence stratigraphy of the Smackover Formation in southwest Alabama; prediction of hydrogen sulfide occurrence and abundance in carbonate reservoirs; aspects of liquid hydrocarbon alteration in carbonate reservoirs undergoing thermochemical sulfate reduction; sequence stratigraphic correlations of Wyoming Jurassic strata based on outcrops, core, and logs; and petroleum exploration in most of the major onshore trends of the U.S. Gulf Coast. Wade was previously a recipient of GCAGS' Best Paper Award, Third Place, in 1989, as senior author of the paper: "Controls on H<sub>2</sub>S Concentration and Hydrocarbon Destruction in the Smackover Formation, Southwest Alabama".

**Laurie C. Anderson** is an assistant professor in the Department of Geology and Geophysics at Louisiana State University. She received a B.A. in geology, biology, and



music from the University of Minnesota-Morris in 1985, M.S. in geology from Bowling Green State University, Ohio in 1987, and Ph.D. in Geology from the University of Wisconsin-Madison in 1991. The focus of her research is molluscan paleobiology, paleoecology, taphonomy, and phylogeny. Her current work includes taphonomic and paleoenvironmental studies in the northern Gulf of Mexico and Louisiana Chenier Plain to interpret sediment provenance,

reconstruct depositional history, and document spatial and temporal resolution in the fossil record. Other research includes a field and laboratory study of the evolutionary history of Neogene Corbulidae (Bivalvia: Myacea) in tropical America, especially as it relates to closure of the Isthmus of Panama and to climate change associated with continental glaciation.

## Third place awarded to: Arnold H. Bouma, Henry DeV. Wickens, and James M. Coleman

### For: Architectural Characteristics of Fine-Grained Submarine Fans: A Model Applicable to the Gulf of Mexico

**Dr. Arnold H. Bouma** is the McCord Professor in Petroleum-Related Geology in the Department of Geology & Geophysics of Louisiana State University.

**Dr. James M. Coleman** is a Boyd Professor in the Department of Oceanography and Coastal Sciences and former Director of the Coastal Studies Institute. Presently he is the Executive Vice-Chancellor of Louisiana State University.

**Dr. Henry DeVille Wickens** worked for the Geological Survey of South Africa, Soekor (the national oil company of South Africa) and is now a consultant.

## Past Recipients Best Paper Awards and A. I. Levorsen Memorial Awards

### Gulf Coast Association of Geological Societies

|      | First Award                    | Second Award  | Third Award   | A. I. Levorsen Award*         |
|------|--------------------------------|---|---|-------------------------------|
| 1959 | J. E. Walters                  | R. L. Oakes   | H. A. Bernard<br>C. F. Major, Jr.<br>B. S. Parrott                  |                               |
| 1960 | D. J. Hughes <sup>†</sup>      | D. I. Andrews <sup>†</sup>  | E. H. Rainwater <sup>†</sup>  |                               |
| 1961 | R. D. Ocamb                    | D. I. Andrews<br>J. C. Stipe  | R. P. Fietz<br>K. R. Scott<br>W. E. Hayes                           |                               |
| 1962 | D. R. Tucker                   | R. J. Granberry<br>R. C. Wilshusen  | G. C. Glaser (tie) <sup>‡</sup><br>W. R. Walton (tie) <sup>‡</sup>  |                               |
| 1963 | E. H. Rainwater                | V. Peppard  | S. L. Blanton, Jr.  |                               |
| 1964 | E. H. Rainwater                | D. R. Boyd<br>B. F. Dyer  | J. L. Arps  |                               |
| 1965 | C. R. Kolb<br>J. R. van Lopik  | G. R. Kellough  | Not awarded   |                               |
| 1966 | B. J. Sloan, Jr.               | W. R. Paine   | R. E. Gernant<br>R. V. Kesling                                      | B. J. Sloan, Jr.              |
| 1967 | H. Yarborough, Jr.             | W. A. Price   | J. Ewing (tie)<br>J. C. Meyers (tie)                                | H. Yarborough, Jr.            |
| 1968 | J. D. Myers                    | E. H. Rainwater   | D. J. Hughes  | J. D. Myers                   |
| 1969 | P. O. Roehl                    | J. K. Rogers  | D. F. McNamee (tie)<br>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)<br>G. M. Griffin<br>B. J. Sloan (tie)<br>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<br>J. W. Addington | R. D. Ottman<br>P. L. Keyes<br>M. A. Ziegler                                  | R. R. Berg<br>F. L. Findley   | J. M. Coleman<br>L. D. Wright |
| 1974 | D. H. Kupfer                   | J. M. Coleman<br>L. D. Wright<br>J. N. Schyda<br>T. Whelan                    | C. A. Parker  | D. H. Kupfer                  |
| 1975 | W. L. Seal<br>J. A. Gilreath   | J. D. Myers   | B. P. Baganz<br>J. C. Horne<br>J. C. Ferm                           | J. D. Myers                   |
| 1976 | J. D. Robinson<br>A. R. Troell | J. W. Becher<br>C. H. Moore<br>A. R. Troell                                   | N. Neel   | J. D. Robinson                |
| 1977 | D. K. Davies<br>W. R. Almon    | J. O. Lewis   | J. O. Snowden<br>W. B. Simmons<br>E. B. Troughber<br>R. W. Stephens | D. K. Davies<br>W. R. Almon   |

|      |  |  |   |  |
|------|--|--|---|--|
| 1978 | C. T. Siemers  | J. W. Lund<br>J. S. King<br>R. E. Berlitz<br>J. A. Gilreath  | E. F. McBride   | C. T. Siemers  |
| 1979 | C. D. Winker   | R. R. Berg   | C. C. Christina<br>K. G. Martin                           | R. R. Berg   |
| 1980 | E. A. Mancini<br>D. J. Benson  | F. W. Harrison, Jr.  | G. N. Gatenby   | E. A. Mancini<br>D. J. Benson                          |
| 1981 | E. C. Roy, Jr.<br>M. Eidelbach<br>N. Trumbly                               | J. L. Coleman, Jr.<br>C. J. Coleman  | G. J. Grabowski, Jr.                                      | E. C. Roy, Jr.<br>M. Eidelbach<br>N. Trumbly           |
| 1982 | T. E. Ewing<br>S. C. Caran   | D. J. Benson<br>E. A. Mancini  | R. R. Berg<br>M. F. Habeck                                | T. E. Ewing<br>S. C. Caran                             |
| 1983 | J. W. Cagle<br>M. A. Khan  | W. M. Ahr<br>H. B. Hull, Jr.   | T. E. Ewing (tie)<br>C. H. Moore (tie)                    | J. W. Cagle<br>M. A. Khan                              |
| 1984 | G. Kinsland  | S. K. Stewart  | C. L. Sartor<br>S. R. Howard                              | G. Kinsland  |
| 1985 | C. C. Walters<br>M. R. Cassa   | E. A. Mancini<br>R. M. Mink<br>B. L. Bearden   | A. L. Workman<br>J. S. Hanor                              | W. E. Galloway   |
| 1986 | S. P. Dutton   | A. H. Saller<br>B. R. Moore  | J. M. Coleman<br>D. P. Prior<br>H. H. Roberts             | S. P. Dutton   |
| 1987 | S. P. Dutton<br>R. Finley<br>K. Herrington                                 | R. Evans   | C. Black<br>R. Berg                                       | S. P. Dutton<br>R. Finley<br>K. Herrington             |
| 1988 | M. P. Prescott   | J. J. O'Brien<br>I. Lerche   | D. F. Williams<br>I. Lerche                               | J. J. O'Brien<br>I. Lerche                             |
| 1989 | Peter Hutchinson   | N. M. Kuich  | William Wade<br>Jeffery Hanor<br>Roger Sassen             | Peter Hutchinson                                       |
| 1990 | Michael P. Prescott  | Philip L. Cook, Jr.<br>John D. Bush<br>John C. Marble<br>Robert D. Schneeflock   | Daniel Tearpock<br>Harvey Pousson                         | Michael P. Prescott                                    |
| 1991 | Andrew J. Davidoff   | H. S. Sumner   | Tom Ewing<br>Grant Fergeson                               | Andrew J. Davidoff                                     |
| 1992 | K. T. Barrow<br>George B. Asquith<br>Gary L. Causey                        | Raymond A. Levey<br>Mark A. Sippel<br>Robert J. Finley<br>Richard R. Langford  | J. Ulises Ricoy<br>Joseph S. Yeh<br>R. P. Major           | Harry H. Roberts<br>Douglas J. Cook<br>Mark K. Sheedlo |
| 1993 | Wayne Carew<br>Paul F. Ostendorf<br>Glenn L. Krum                          | William A. Ambrose<br>Raymond A. Levey<br>Jose M. Vidal<br>Mark A. Sippel<br>James R. Ballard<br>David M. Coover, Jr.<br>Walter E. Bloxsom | William D. DeMis<br>Jeffrey V. Milliken                   | Wayne Carew<br>Paul F. Ostendorf<br>Glenn L. Krum      |
| 1994 | John A. Rhodes   | Barry E. Bradshaw<br>Joel S. Watkins   | Roger J. Barnaby<br>R. Ramamoorthy<br>Mark H. Holtz       | John A. Rhodes   |
| 1995 | Robbie R. Zenero<br>David L. Seng<br>Mark R. Byrnes<br>Randolph A. McBride | Ezat Heydari<br>William J. Wade<br>Laurie C. Anderson  | Arnold H. Bouma<br>Henry deV. Wickens<br>James M. Coleman | Mary J. Broussard<br>Brian E. Lock                     |

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

† 1985 through 1990 *Transactions* erroneously shown as not awarded.

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



# 1995 Best Poster Award

## Gulf Coast Association of Geological Societies

First place awarded to:

Mervin Kontrovitz and Jerry Marie Slack

**For: Upper Albian Salmon Peak Formation,  
Maverick Basin, Texas**



**Mervin Kontrovitz**, a Fellow of the Geological Society of America, is the Head of the Department of Geosciences at Northeast Louisiana University in Monroe. He earned a B.S. from the University of Toledo, a M.S. from the University of Florida, and a Ph.D. from Tulane University. He served as Professor and Chairman of the Department of Geosciences, Rider College, Lawrenceville, New

Jersey, from 1970 to 1980. He was Editor of CYPRIS the International Ostracoda Newsletter from 1985 to 1991 and Editor of the North American Micropaleontology Section Newsletter (SEPM) from 1992 to 1994. Kontrovitz has refereed for numerous professional journals and for granting agencies. He has been chairman of the Earth Science sections of the New Jersey and Louisiana academies of science.

His research interests lie in the areas of paleoecology and paleoenvironmental reconstruction, functional morphology in fossils, the use of ostracodes at archaeological sites, and taphonomy, including diagenesis, metamorphism, transport. His publications deal with ostracodes and foraminifers



**Jerry Marie Slack** is an instructor of Anthropology, Art and Art History at the Bossier Parish Community College (BPCC) in Bossier City, Louisiana. She earned a B.A. and an M.A. from Louisiana Tech University and completed an archaeology field school at the University of Texas, Austin. She served as an archaeologist with the Smithsonian Institute's excavations at the

Stewart's Cattle Guard Folsom kill and camp site. Slack has been a Lecturer and Tour Director for BPCC in China, the United Kingdom, and continental Europe.

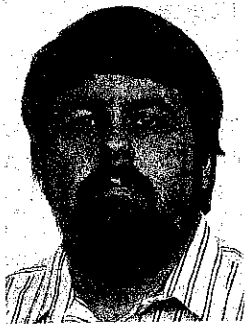
Her research interests lie in the areas of archaeology of Paleoindian sites, micropaleontology, including ostracodes, paleoecology, and the taphonomy of human other vertebrate remains. Her publications deal with paleoenvironmental reconstruction and sampling methodology, especially as related to ostracodes and foraminifers.

# 1995 Best Published Paper Awards

## Gulf Coast Section SEPM

First place awarded to: Sylvester Q. Breard and Gary L. Stringer

**For: Paleoenvironment of a Diverse Marine Vertebrate Fauna from the Yazoo Clay (Late Eocene) at Copenhagen, Caldwell Parish, Louisiana**



Sylvester Q. "Skip" Breard is a consulting biostratigrapher with Applied Biostratigraphix in Houston, Texas. A native of Monroe, Louisiana, he received his B.S. in Geology (1975) and M.S. in Geology (1978) from Northeast Louisiana University in Monroe. He began his career in New Orleans, Louisiana with Amoco Production Company as a paleontologist (1979-1982), senior paleontologist (1982-1985) and

staff paleontologist (1985-1889). He joined British Petroleum as a senior biostratigrapher in Houston, Texas (1989-1992). He next worked with Paleo Control, Inc. in Houston as a consulting biostratigrapher (1992-1993). Since 1993, he has been associated with Applied Biostratigraphix in Houston as a paleontologic consultant in Cenozoic and Mesozoic foraminifera.

Breard is an active member of several professional societies, including SEPM, Gulf Coast Section SEPM, Houston Geological Society, Cushman Foundation, Paleontological Research Institute and the Tertiary Research Group. He is also active in both the Houston and Florida paleontological societies. Breard served the Gulf Coast Section SEPM as Treasurer from 1986 to 1987, and was the Judging and Awards Chairman for GCSSEPM at the 1991 GCAGS convention in Houston. He maintains an active research interest in Tertiary paleontology of the Gulf Coast. Breard has published a number of papers and abstracts on topics including paleoecology, paleoclimate, biostratigraphy and vertebrate paleontology. He was recipient of the GCSSEPM 1993 Best Published Paper Award, 2nd Place, for an ecologic-biostratigraphic study of Miocene through Pleistocene foraminifera of the Gulf Coast Basin.



Gary L. Stringer is presently an assistant professor in the Department of Geosciences at Northeast Louisiana University in Monroe. He has worked in the specialized field of paleoichthyology and the study of fossil fish otoliths for 20 years, starting in 1975 with his graduate work at Northeast Louisiana University on otoliths and related vertebrates from the Upper Eocene Yazoo Clay in Louisiana. He continued his

research on otoliths while working as a micropaleontologist for Exxon in Houston, Texas. His Ph.D. work at the University of Southern Mississippi resulted in a dissertation involving fossil teleostean otoliths from the Bowden Formation in Jamaica. Publications have included studies of otoliths from the Mississippi River mudlumps, Miocene-Pliocene otoliths from the Dominican Republic, Upper Eocene otoliths from the Moodys Branch and Yazoo Clay from central Louisiana, and Upper Cretaceous otoliths from northeastern Mississippi. One of his most recent works, done in collaboration with Dr. Dirk Nolf of the Royal Belgian Institute of Natural Sciences in Brussels, Belgium, comprises a chapter in Mesozoic Fishes--Systematics and Paleocology. The chapter is a synthesis of Cretaceous fish otoliths in North America. In addition to his research with fossil otoliths, he has been involved with the study of earth science curriculum at the precollege and college levels for many years. He is currently the Principal Investigator of a program entitled "Oil Spill Awareness through Geoscience Education (OSAGE): Concepts, Activities, and Resources for Louisiana Classrooms" funded by the Louisiana Applied Oil Spill Research and Development Program.

Second place awarded to:

Randy McBride and Mark R. Byrnes

**For: A Megascale Systems Approach for Shoreline Change Analysis and Coastal Management Along the Northern Gulf of Mexico**



Randy McBride is a Senior Research Associate with the Coastal Studies Institute (CSI), Louisiana State University (LSU). He received a B.A. degree from Wittenberg University (Springfield, Ohio), an M.S. degree from LSU, and is currently completing his Ph.D. at LSU in the Department of Oceanography and Coastal Sciences (DOCS) with a minor in geology. His primary

research interests are marine geology, sedimentology, and process geomorphology with a special emphasis on the geomorphic response of coastal/shelf depositional systems. McBride is a member of GSA, SEPM, CERF, and BRGS.

Before joining CSI in 1993, McBride worked seven years for the Louisiana Geological Survey-Coastal Geology Section. He has worked in many areas of coastal research including geologic framework studies in estuarine, deltaic, and marine environments; GIS/GPS mapping applications for quantifying coastal change; and documenting regional response patterns along barrier shorelines and on continental shelves. Since 1986, he has worked with the U.S. Geological Survey (USGS) National Marine and Coastal Geology Program investigating the geologic framework and geomorphic evolution of deltaic and chenier plain deposits along coastal Louisiana. Randy worked on the USGS Louisiana Barrier Island Erosion Study and was the primary author on the shoreline change chapter of the USGS Barrier Island Erosion Atlas. Recently, he was a barrier island technical advisor to the LA Department of Natural Resources and is currently working on the Louisiana Barrier Shoreline Feasibility Study and an associated Environmental Impact Statement (EIS) aimed at mitigating severe wetland loss in Louisiana through barrier island restoration. These projects are funded by the Coastal Wetland Planning, Protection, and Restoration Act (CWPPRA). In addition, he is investigating Late Quaternary deposits and hard mineral resources in the northeastern Gulf of Mexico with funding from the Minerals Management Service. McBride also worked two field seasons in Alaska in 1989 and 1990 as a coastal geomorphologist for Woodward-Clyde Consultants who was charged with the Exxon Valdez oil spill response and scientific assessment. Randy has authored numerous research articles, atlases, and professional maps about the northern Gulf of Mexico and the U.S. Atlantic seaboard.



Mark R. Byrnes is an Associate Professor - Research with the Coastal Studies Institute, Louisiana State University. He received a Ph.D. in Oceanography from Old Dominion University in 1988. His principal research interests focus on sediment dynamics in coastal and nearshore environments and the scaled response of coastal depositional systems, including an

understanding of the linkage between short-term beach and nearshore process-form relationships, historical environmental change trends, and the recent geologic evolution of coastal systems. Before joining the faculty at LSU in 1990, Mark spent 3.5 years as a research physical scientist at the U.S. Army Coastal Engineering Research Center (CERC) investigating barrier island sedimentation processes and developing models for simulating shoreline response to waves and water level. Since 1990, he has been investigating meso- and macro-scale sediment transport patterns at entrances and on the shoreface for assessing coastal/shelf sediment exchange relationships. In addition, over the past three years, he has been studying the sedimentary framework and geomorphic evolution of Chenier Plain deposits in southwestern Louisiana and their relationship to sea level change (global climate change), variations in sediment supply, and coastal processes. Recent activities include studies to evaluate beach and nearshore dynamics related to coastal engineering activities (e.g., the effectiveness of 85 segmented breakwaters for mitigating chronic erosion problems in southwestern Louisiana), as well as a project aimed at assessing the feasibility of shoreline restoration for mitigating wetland loss on the Mississippi River Delta Plain and an associated environmental impact statement. Mark is an active publisher of research articles on coastal sediment dynamics, process/response variables affecting geomorphic change in coastal environments, and the sedimentary framework and evolution of coastal deposits along the northern Gulf of Mexico and U.S. Atlantic seaboard.

## Third place awarded to: Charles C. Smith

### For: Regional Lithostratigraphy and Calcareous Nannofossil Biostratigraphy of the Arcola Limestone Member, Mooreville Chalk, of Eastern Mississippi and Alabama

Dr. Charles C. Smith received his B.S. in Geology from the University of Texas at Austin in 1963, M.S. in Geology from the University of Houston in 1967, and Ph.D. in Geology from the University of Texas at Dallas in 1973. Charles began his professional career with Tenneco Oil Company, first as a laboratory technician in Houston from 1962 to 1965, and then as a Cenozoic foraminiferal micropaleontologist in Lafayette, Louisiana from 1965 to 1969. On completion of his doctoral studies on Coniacian and early Santonian calcareous nannofossils from the Eagle Ford and Austin Groups of Texas, he joined Phillips Petroleum Company as a research paleontologist from 1973 to 1974, then moved to Washington D.C. as a micropaleontologist with the Paleontology and Stratigraphy Branch of the U.S. Geological Survey. From 1974 to 1982, Charles conducted extensive stratigraphic studies in the emerged Gulf and Atlantic Coastal Plain area, serving as both a team member and supervisor of several biostratigraphic projects from Mexico to Delaware. He returned to Tenneco Oil Company in Houston as a Senior Micropaleontological Specialist from 1982 to 1986. Following the demise of Tenneco, he joined the Paleontology



and Stratigraphy Division of the Geological Survey of Alabama in Tuscaloosa, and from 1987 to 1990 published 14 papers on the paleontology and biostratigraphy of Mesozoic and Cenozoic sediments of Alabama. Charles served as a Paleontological Advisor with Unocal Corporation in Houston from 1990 to 1992, returning to the Geological Survey of Alabama in 1992 as a geologist with the Hydrogeology Division. His current interests include the assessment of surface and shallow subsurface stratigraphy for wellhead protection programs, regional subsurface stratigraphy and hydrogeology of the Coastal Plain of Alabama, and Mesozoic calcareous nannofossil paleontology and biostratigraphy.

During his 30-year career (between moving from city to city), Charles has published well over 100 papers on the surface and subsurface paleontology and biostratigraphy of the Gulf and Atlantic Coastal Plain area, and has taught both undergraduate and graduate geology courses at George Washington University and the University of Alabama. He has served on several SEPM research and organizational committees, was President of the North American Micropaleontological Section of SEPM from 1984 to 1986, and has served the Gulf Coast Section SEPM as Vice President (1988-89; 1990-91) and President (1995). Charles continues to be active in many professional organizations and societies, including his current involvement as President of the Alabama Geological Society.

# Past Recipients Best Paper Awards Gulf Coast Section SEPM

|       | First Place                                     | Second Place                                    | Third Place   |
|-------|---|---|---|
| 1995  | S.Q. Breard<br>G. L. Stringer                   | R.A. McBride<br>M. R. Byrnes                    | C. C. Smith   |
| 1994  | M. D. Blum<br>D. M. Price                       | R. A. Eustice<br>L. S. Land                     | H. H. Roberts<br>A. Bailey<br>G. J. Kuecher   |
| 1993  | R. L. Adams                                     | S. Q. Breard<br>A. D. Callender<br>M. J. Nault  | E. C. McDade<br>R. Sassen<br>L. M. Wenger<br>G. A. Cole   |
| 1992* | E. G. Otvos<br>W. E. Howat                      | D. W. Harrelson<br>J. A. Saunders               | W. T. Tanner  |
| 1980  | A. W. Cleaves                                   | I. L. Van Heerden<br>H. H. Roberts              | T. A. Hansen  |
| 1979  | L. C. Price<br>J. L. Clayton<br>L. L. Rummen    | C. W. Poag<br>R. C. Tresslar                    | R. E. Casey<br>L. W. Gust<br>R. A. Reynolds<br>D. H. Williams<br>A. Levesley<br>T. Duis<br>J. M. Spaw |
| 1978  | A. Thomson                                      | C. W. Poag                                      | J. A. Schiebout   |
| 1977  | C. D. Winker<br>J. D. Howard                    | W. C. Isphording<br>V. R. Baker                 | R. M. Looney  |
| 1976  | C. J. Stuart<br>C. A. Caughney                  | R. R. Berg<br>R. R. Powell                      | C. W. Poag<br>P. C. Valentine   |
| 1975  | J. L. Wilson<br>M. E. York                      | K. F. Wantland                                  | W. C. Isphording  |
| 1974  | G. M. Friedman                                  | W. F. Tanner<br>C. R. Berquist                  | R. J. Moiola<br>D. Weiser<br>A. B. Spencer  |
| 1973  | W. F. Tanner                                    | R. J. Moiola<br>A. B. Spencer                   | P. A. Thayer (tie)<br>W. J. Cleary<br>E. O'Donnell (tie)<br>A. P. Wright                              |
| 1972  | W. F. Tanner                                    | A. E. Weidie<br>J. L. Wolleben<br>E. F. McBride | P. A. Thayer<br>D. A. Textoris  |
| 1971  | R. W. Maxwell, Jr.                              | C. W. Poag                                      | E. A. Shinn   |
| 1970  | W. W. Hay<br>S. W. Wise, Jr.<br>R. D. Stieglitz | J. B. Dunlap, Jr.                               | W. L. Fisher<br>C. V. Proctor, Jr.<br>W. E. Galloway<br>J. S. Nagle                                   |

\* Since 1992 and before 1981, awards were given for first, second, and third place.

## Past Recipients Best Paper Awards Gulf Coast Section SEPM

|       | Best Published Paper                                 | Excellence of Presentation                 |
|-------|--|--|
| 1991  | Brian E. Lock<br>Catherine E. Bishop                 | Andrew J. Pulham                           |
| 1990  | George C. Flowers<br>Wayne C. Isphording             | Jory A. Pacht                              |
| 1989  | Ron Boyd<br>John Suter<br>Shea Penland               | Harry H. Roberts                           |
| 1988  | Ron Boyd<br>Shea Penland                             | Edward McFarlan, Jr.                       |
| 1987  | Wayne Isphording<br>Dewayne Imsand<br>George Flowers | Rowdy Lemoine (tie)<br>Earle McBride (tie) |
| 1986  | Douglas F. Williams<br>Dwight M. Trainor             | Robert R. Berg                             |
| 1985  | Paul A. Thayer<br>Harry H. Roberts                   | Gordon W. Fielder                          |
| 1984  | M.J. Ulrich<br>J.R. Kyle<br>P.E. Price               | M. Kontrovitz                              |
| 1983  | E.C. Kusters<br>A. Bailey                            | D.B. Prior                                 |
| 1982  | J. Mazzullo  | C.D. Winker                                |
| 1981† | T.A. Daws<br>A.V. Applegate<br>J.C. Palacas          | C.D. Winker                                |

† Also Best Poster award to E.A. Mancini

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Sage Energy

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## Gulf Coast Association of Geological Societies

### 1995–1996

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## Gulf Coast Association of Geological Societies

### July 1996

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President ..... Mary Ambrose  
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 Vice President ..... Sandi Barber  
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 President Elect ..... Douglas N. Toepperwein  
 Vice President ..... Debbie Dorsett  
 Secretary ..... Rene G. Hefner  
 Treasurer ..... John R. Waugh

**Southeastern Geological Society, P.O. Box 1634, Tallahassee, Florida 32302**

President ..... Ann Tihansky  
 Vice President ..... Wink Winkler  
 Secretary/Treasurer ..... Gary Maddox

# 1996 Executive Council

## Gulf Coast Section SEPM

### Officers

#### President

Rashel N. Rosen  
Excalibur Interpretation Co.  
333 Clay, Suite 3900  
Houston, TX 77002  
(713) 754-6789; Fax (713) 739-7130

#### Secretary

R.P. Major  
The Univ. of Texas At Austin  
Bur. of Economic Geology  
Austin, TX 78713  
(512) 471-4331; Fax (512) 471-0140

#### President-Elect

Paul Weimer  
Department of Geological Sciences  
Energy and Minerals Applied Res. Ctr.  
Campus Box 250  
University of Colorado  
Boulder, CO 80309  
(303) 492-3809; Fax (303) 492-2606

#### Treasurer

Richard J. "Dick" White  
Amoco Production Co.  
P.O. Box 3092  
Houston, TX 77253  
(713) 366-4152; Fax (713) 366-7416

#### Vice President

James O. Jones  
Department of Geology  
The Univ. of Texas at San Antonio  
San Antonio, TX 78249  
(210) 691-4455; Fax (210) 691-4469

#### Past President

Charles C. Smith  
Geol. Survey of Alabama  
P.O. Box O  
Tuscaloosa, AL 35486  
(205) 349-2852; Fax (205) 349-2861

### Foundation

#### Trustees

Arthur S. Waterman, Chairman  
Paleo-Data, Inc.  
6619 Fleur de Lis Drive  
New Orleans, LA 70124  
(504) 488-3711

Denise M. Butler-Ford  
Pennzoil Exploration & Prod. Co.  
700 Milam  
P.O. Box 2967  
Houston, TX 77252  
(713) 546-6357

Sheila C. Barnette  
BP Exploration Inc.  
P.O. Box 4587  
Houston, TX 77210  
(713) 560-3820

#### Executive Director

Bob F. Perkins  
165 Pinehurst Road  
West Hartland, CT 06091  
(203) 738-9302; Fax (800) 436-1424

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# Standing Committees

## Gulf Coast Association of Geological Societies

### July 1996

**AAPG Advisory**

Peter G. Gray

**Awards and Nominations**

Bill Meaney, Chairman

William L. Fisher

Robert L. Williamson

John C. Marble

Howard W. Kiatta

**Convention**

Daniel Smith, Chairman

Larry D. Bartell

Cragin Knox

Stanley King

O. Roger Berg

B. Ross White

Pete Rose

Carolyn Condon

**Finance**

Howard W. Kiatta, Chairman

Don R. Boyd

Gerald A. Cooley

Steve Hill

Marvin L. Smith

**Financial Aid to Students**

Ralph Richardson, Chairman

Brian E. Lock

Lee McRae

**Historian**

David E. Pope

**Long-Range Planning**

John J. Amoruso, Chairman

William L. Fisher

Robert L. Williamson

John C. Marble

Howard W. Kiatta

**Publications**

Robert E. Boyer, Chairman

David B. Bieler

Edward C. Roy, Jr.

William C. Ward

E. G. (Jerry) Wermund

# 1996 Financial Aid to Students

## Gulf Coast Association of Geological Societies

During 1996 the GCAGS received eighteen applications for financial assistance from students enrolled in graduate and undergraduate geology programs in ten Gulf Coast colleges and universities. Grants totaling \$10,000 were awarded to ten successful applicants.

The Financial Aid Committee, Ralph G. Richardson (chairman), Brian E. Lock and Lee McRae made awards to the following students:

|                     |                                    |
|---------------------|------------------------------------|
| Pamela F. Borne     | Louisiana State University         |
| Thomas P. Buerkert  | Louisiana State University         |
| Zigiang Chen        | Florida State University           |
| Robert Scott Jaynes | University of Houston              |
| Megan H. Jones      | Louisiana State University         |
| Robert L. Locklair  | Auburn University                  |
| Matthew J. Melnyk   | University of Southern Mississippi |
| Erik D. Scott       | Louisiana State University         |
| Barry H. Tew        | University of Alabama              |
| Fangjian Xue        | Texas A&M University               |

# Past Officers and Convention Chairmen

## Gulf Coast Association of Geological Societies

|      | Host City      | President           | Vice-President      | Secretary          | Treasurer             | Convention Chairman  |
|------|----------------|---------------------|---------------------|--------------------|-----------------------|----------------------|
| 1951 | New Orleans    | L. Bowling          | T. H. Philpott      |                    | E. M. Baysinger       |                      |
| 1952 | Corpus Christi | W. M. Chaddick, Jr. | W. A. Gorman        |                    | T. D. Barber          |                      |
| 1953 | Shreveport     | R. T. Wade          | D. D. Utterback     | J. S. Spencer      | K. Carter             | W. J. Nugent         |
| 1954 | Houston        | W. R. Canada        | W. H. Knight        | W. A. Peterson     | E. W. Kimball         |                      |
| 1955 | Biloxi         | A. E. Blanton       | L. D. Traupe        | F. H. Webster      | C. C. Barber          | R. D. Sprague        |
| 1956 | San Antonio    | R. L. Layden        | M. W. Beckman       | C. W. Holcomb      | A. F. Scott           | G. J. Joyce          |
| 1957 | New Orleans    | H. N. Hickey        | P. Montgomery       | R. A. Davis        | K. C. Anderson        | T. H. Philpott       |
| 1958 | Corpus Christi | E. A. Lohse         | R. W. Grayson       | E. T. Musselman    | W. H. Wallace, Jr.    | R. C. Wilshusen      |
| 1959 | Houston        | G. C. Hardin, Jr.   | L. Harvey           | J. F. Moss         | J. A. Wheeler         | O. G. Bell           |
| 1960 | Biloxi         | M. F. Kirby         | D. N. Osburn        | W. W. Woolfolk     | E. G. Jeffreys        | A. E. Blanton        |
| 1961 | San Antonio    | D. Dassow           | E. P. Roth          | A. W. Wood         | E. L. Ames            | L. L. Palmer         |
| 1962 | New Orleans    | T. H. Philpott      | J. C. Byrd          | H. O. Woodbury     | K. Soule              | L. H. Meltzer        |
| 1963 | Shreveport     | J. C. Byrd          | E. Knott            | W. E. Bancroft     | R. E. Rogers          | H. J. Tyler          |
| 1964 | Corpus Christi | K. Knott            | R. E. Fairchild     | R. W. Luker        | D. A. Pedrotti        | B. F. Dyer           |
| 1965 | Houston        | R. E. Fairchild     | A. M. Borland       | K. C. Harkins, Jr. | J. L. George, Jr.     | E. A. Lohse          |
| 1966 | Lafayette      | A. M. Borland       | J. H. Hensley       | W. A. Robbins, Jr. | J. S. Schoelen        | R. R. Copeland       |
| 1967 | San Antonio    | W. L. Stapp         | M. D. Horton        | M. L. Frazier, Sr. | L. C. Bryant          | M. O. Turner         |
| 1968 | Jackson        | M. D. Horton        | R. O. Vernon        | L. G. Hughes       | E. D. Minihan         | L. E. Warren         |
| 1969 | Miami          | R. O. Vernon        | H. J. Tyler         | J. W. Yon, Jr.     | C. W. Hendry, Jr.     | H. S. Puri           |
| 1970 | Shreveport     | H. J. Tyler         | L. H. Meltzer       | C. E. Brown        | B. C. Tucker          | J. O. Goffe          |
| 1971 | New Orleans    | L. H. Meltzer       | D. R. Boyd          | M. L. Dwight       | P. G. Gray            | R. G. Williamson     |
| 1972 | Corpus Christi | D. R. Boyd          | F. M. Schall, Jr.   | M. H. Oakes        | J. E. Melton          | J. M. Sides          |
| 1973 | Houston        | F. M. Schall, Jr.   | S. J. Lysinger      | M. E. Hole, Jr.    | P. W. Canthon, Jr.    | C. E. Harrison       |
| 1974 | Lafayette      | S. J. Lysinger      | W. H. Moore         | T. J. Eby, Jr.     | J. L. Bellamy         | F. W. Harrison, Jr.  |
| 1975 | Jackson        | W. H. Moore         | C. L. Sartor        | W. E. Taylor       | H. L. Ladner          | C. H. Williams, Jr.  |
| 1976 | Shreveport     | C. L. Sartor        | R. E. Boyer         | J. T. Palmer       | C. E. Brown           | L. E. Jordan         |
| 1977 | Austin         | R. E. Boyer         | P. G. Gray          | A. E. Bell         | F. L. Osborne, Jr.    | E. G. Wermund, Jr.   |
| 1978 | New Orleans    | R. W. Stephens      | E. C. Roy, Jr.      | R. M. Swords       | C. J. Corona          | J. Braunstein        |
| 1979 | San Antonio    | E. C. Roy, Jr.      | F. W. Harrison, Jr. | S. L. Perkes       | L. C. Bryant          | G. His               |
| 1980 | Lafayette      | F. W. Harrison, Jr. | P. M. Strunk        | J. W. Shirley      | R. A. Anderson        | M. A. Munchrath      |
| 1981 | Corpus Christi | P. M. Strunk        | J. J. Amoruso       | T. J. Wintermute   | W. R. Payne           | Wilson Humphrey      |
| 1982 | Houston        | J. J. Amoruso       | S. C. Childress     | C. G. Beckwith     | C. A. Baird           | J. O. Lewis          |
| 1983 | Jackson        | S. C. Childress     | J. P. Palmer        | S. A. Horton       | P. D. Cate            | J. C. Marble         |
| 1984 | Shreveport     | J. T. Palmer        | E. G. Wermund       | C. S. Cook         | E. W. Saye            | J. M. Forgotson, Jr. |
| 1985 | Austin         | E. G. Wermund       | D. E. Pope          | R. Everett         | D. C. Ratcliff        | L. E. Garner         |
| 1986 | Baton Rouge    | D. E. Pope          | R. H. Sams          | B. D. David        | F. E. Lindfors-Kearns | H. L. Roland         |
| 1987 | San Antonio    | R. H. Sams          | J. A. Hartman       | M. T. Tobin        | T. Cooper             | D. F. Tobin          |
| 1988 | New Orleans    | J. A. Hartman       | W. R. Payne         | R. W. Sabaté       | J. E. Bailey          | C. C. Baker          |
| 1989 | Corpus Christi | W. R. Payne         | P. G. Gray          | B. E. Gaither      | T. B. Henderson       | G. M. Heinzlmann     |
| 1990 | Lafayette      | P. G. Gray          | C. E. Harrison      | H. Fielding        | B. Smart              | B. E. Lock           |
| 1991 | Houston        | C. E. Harrison      | J. C. Marble        | H. W. Kiatta       | L. D. Bartell         | D. L. Smith          |
| 1992 | Jackson        | J. C. Marble        | R. L. Williamson    | W. Lester Aultman  | Stanley King          | C. Noll              |
| 1993 | Shreveport     | R. L. Williamson    | W. L. Fisher        | Mark Schroeder     | B. R. White           | S. C. Knox           |
| 1994 | Austin         | W. L. Fisher        | W. E. Marsalis      | S. P. Dutton       | C. Condon             | O. R. Berg           |
| 1995 | Baton Rouge    | W. E. Marsalis      | E. Gerald Rolf      | S. N. Breakfield   | R. W. Jackson         | J. P. Wanger         |
| 1996 | San Antonio    | E. Gerald Rolf      | Mark J. Gallagher   | William P. Wilbert | Bill Layton           | P. R. Rose           |
|      |                |                     |                     |                    |                       | D. E. Pope           |
|      |                |                     |                     |                    |                       | Thomas E. Ewing      |

# Past Officers

## Gulf Coast Section SEPM

|           | President               | Vice-President         | Secretary               | Treasurer                |
|-----------|-------------------------|------------------------|-------------------------|--------------------------|
| 1953-1954 | Stuart A. Levinson      | Grover E. Murray       | William H. Akers        | Frank V. Stevenson       |
| 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. Dillingman, Jr.      | Eleanor T. Caldwell      |
| 1957-1958 | J. O. Colle             | Fred L. Smith, Jr.     | Harold V. Anderson      | 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. Anderson     | E. Ann Butler           | Edward Marks             |
| 1961-1962 | Harold V. Anderson      | 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. Elliot, 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. Strough          |
| 1973-1974 | Edward B. Picou, Jr.    | Walter H. Trenchard    | Lawrence C. Menconi     | J. Lloyd 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. Leutze       | 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 | Charles L. McNulty      | Denise M. Butler       | Kurt G. Geitzenauer     | Sylvester Q. Breard, Jr. |
| 1987-1988 | Arthur S. Waterman      | Brian J. O'Neill       | Ramil C. Wright         | Charles G. Rosato        |
| 1988-1989 | Samuel P. Miano         | Charles C. Smith       | Richard H. Fillon       | Bethanne Breisacher      |
| 1989-1990 | Sheila C. Barnette      | Michael J. Nault       | Nancy Engelhardt-Moore  | Michael W. Center        |
| 1990-1991 | Denise M. Butler        | Charles C. Smith       | Nancy Engelhardt-Moore  | Kurt Geitzenauer         |
| 1992      | Michael J. Nault        | Brian E. Lock          | Mary (Missy) Jackson    | Elaine H. Collison       |
| 1993      | John M. Armentrout      | David W. Ford          | Mary (Missy) Jackson    | Elaine H. Collison       |
| 1994      | Nancy Engelhardt-Moore  | Mary (Missy) Jackson   | Michael J. Styzen       | Elaine H. Collison       |
| 1995      | Charles C. Smith        | William C. Ward        | Michael J. Styzen       | Richard J. White         |
| 1996      | Rashel N. Rosen         | James O. Jones         | R.P. Majors             | Richard J. White         |

# Bylaws

## Gulf Coast Association of Geological Societies, Inc.

### Part A: Organization

#### ARTICLE I—Name

This is a non-profit organization and shall be known as the "Gulf Coast Association of Geological Societies, Inc." 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

This 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 a Board of Directors 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 Board of Directors at the annual meeting. At the request of the Vice-President's society, however, the Secretary and Treasurer may be elected at a prior Board meeting but they will not take office until after the annual meeting. The Secretary and Treasurer shall be non-voting members of the Board of Directors. 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 Board of Directors 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 Board of Directors of GCAGS and shall be an ex-officio, non-voting member of the GCAGS Board of Directors.

Each member society shall designate a representative to the Board of Directors and in the event the chosen representative cannot attend any given Board of Directors 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 Board of Directors 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 Board of Directors 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, except as noted in Paragraph I with regard to the Secretary and Treasurer. Any vacancies shall be filled by the Board of Directors as provided above in Paragraph 1.

##### Section 2.

The business of This Association shall be conducted by the Board of Directors. 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 these Bylaws.

A quorum shall consist of more than one-half of the voting members of the Board of Directors.

The Executive Committee composed of the President, Vice-President, Secretary, Treasurer, Past President, and Finance Committee Chairman shall have the authority to transact business of an emergency nature between meetings. Any business so transacted shall be subject to ratification by the Board of Directors at its next regularly scheduled meeting. A quorum of the Executive Committee shall be three members.

#### ARTICLE IV—Meetings

There shall be an annual meeting of This Association, the time and place of which shall be determined by the Board of Directors. Additional meetings may be called at the discretion of the Board of Directors.

#### 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 Board of Directors. The Board of Directors 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 federally insured bank or savings and loan association or in any fully insured account of a major securities firm 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 Part A and to the Articles of Incorporation may be proposed by the Board of Directors, 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 such an amendment.



### ARTICLE VIII—Later Affiliation

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

### ARTICLE IX—Resignation

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

### ARTICLE X—Dissolution

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 as mandated by the Articles of Incorporation.

## Part B: Committees, Finances

### ARTICLE I—Permanent Committees

The President, with the approval of the Board of Directors, shall appoint the Annual Meeting Chairman, and the Publications Committee Chairman, appointments being for one year.

#### Section 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.

#### Section 2. Publications

This committee shall be responsible for publishing all publications of This Association except the *Transactions* which fall under the purview of the Annual Meeting Chairman. Sales and storage of all GCAGS publications, including the *Transactions*, are the responsibility of this committee. The chairman shall provide annually to the Finance Committee an inventory of the GCAGS publications.

#### Section 3.

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

### ARTICLE 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 Board of Directors, if so required by the depository. The Treasurer shall submit a financial report on the Annual Meeting at each meeting of the Board of Directors 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 Board of Directors.

### ARTICLE III—Finance Committee

The Finance Committee shall be responsible for investing and managing the funds of This 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 Board of Directors. The Committee shall have authority to invest the funds as outlined in Article VI of Part A hereof. They shall prepare a financial report on the Association's funds and submit it at each meeting of the Board of Directors. They shall also keep an inventory 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 Board of Directors. 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 five members serving staggered three-year terms, such that each year one to three members will complete their terms and one to three new members will be appointed. The President of the Association, with the approval of the Board of Directors, shall appoint the members of the Finance Committee and select its chairman. Members of the Finance Committee shall be bonded as directed by the Board of Directors. All checks of greater than \$1,000 shall be signed by two of the Finance Committee members.

### ARTICLE IV—Amendments

This Part B may be amended by an affirmative vote of three-fourths of the Board of Directors.

### ARTICLE V—Dues

There shall be no dues.

# Bylaws

## Gulf Coast Section 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 applications 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, Presi-

dent-Elect, Vice President, 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 the 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 not have 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.

3.12 - The Secretary and Treasurer shall serve for a term of two (2) years. These offices shall be renewable through election.

### 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 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 Council is also considered sufficient to initiate a proposed change.

#### **ARTICLE 6—Dues**

6.01 - This 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 (\$0.50) shall be assessed for late payments. The fifty cents (\$0.50) 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 associates 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 and 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 name 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 nominations. A candidate of 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 each October and the new officers shall enter upon duty on January 1 of the next calendar year.

#### **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' Transactions volume in preparing papers delivered at the meeting for publication in the volume. He shall cooperate with the editors of the Society of Paleontologists and Mineralogists' journals by helping to arrange for publications 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**

10.1 - 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 no 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, 1974, 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, 1990, and 1991. These Bylaws embody all of the provisions of the original Constitution and its amendments.

*Basin Without Borders*

