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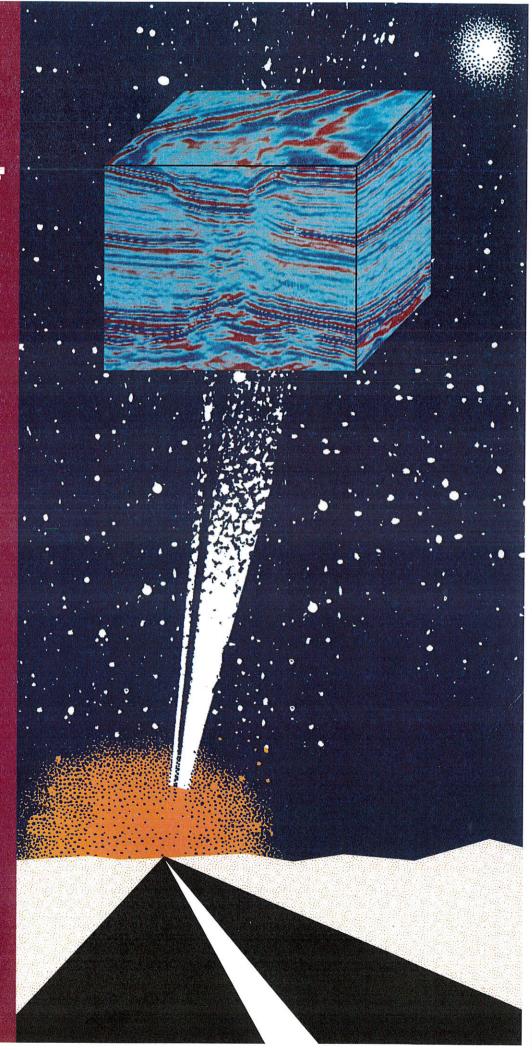
**Transactions** of the

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**Annual Convention** 



Shreveport, Louisiana October 20-22, 1993



#### **TRANSACTIONS**

#### **GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES**

A SECTION OF THE AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS







1993

and

NORMAN C. ROSEN, EDITOR (GCS-SEPM)

**AUSTIN SARTIN CO-EDITOR** MARY BARRETT CO-EDITOR (GCAGS)

#### Prepared For

The Forty-Third Annual Meeting of the **GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES** AAPG REGIONAL MEETING

and

The Fortieth Annual Meeting of the **GULF COAST SECTION OF THE** SOCIETY OF ECONOMIC PALEONTOLOGISTS AND MINERALOGISTS

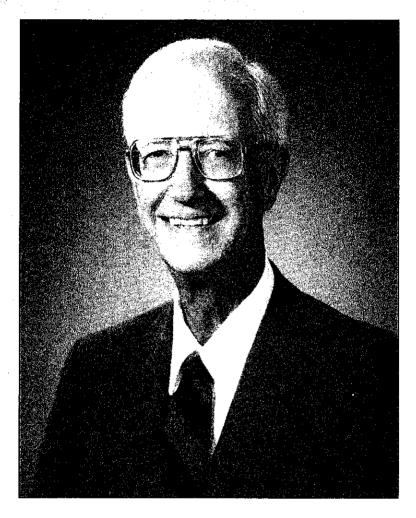
in

Shreveport, Louisiana October 20-22, 1993

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### DEDICATION OF 1993 TRANSACTIONS TO: C. Lane Sartor



The Gulf Coast Association of Geological Societies is pleased to dedicate the 1993 Transactions to C. Lane Sartor. This dedication is in recognition of his outstanding service to Gulf Coast geology, particularly through this Association.

Lane is first and foremost the consummate gentleman. His love for God, country, family, mankind, the oil industry and the geological profession is clearly evident through his life. Lane has unselfishly given his time during his successful geological career to organizations both inside and outside the profession. During these years, he has earned the respect of many for his leadership ability combined with his desire to serve others.

Born December 3, 1921, in Shreveport, Lane has remained a resident here his entire life. After attending Shreveport public schools, he attended Washington and Lee University from 1938 until 1942. Graduating Cum Laude, Lane earned a B. A. Degree with a major in Geology and a minor in Economics. He was active outside the classroom, including being an officer in the Kappa Alpha Order, the Interfraternity Council and serving as a Geology lab instructor.

In June, 1942, Lane enlisted in the Aviation Cadet Corps and was commissioned as an officer the following December. He studied and taught aerial photo interpretations at Harrisburg, Pennsylvania for one year until he was sent overseas. He served in the China-Burma-India Theater of Operation until he returned to the United States in January, 1946, when he was discharged with the rank of Captain. Prior to being sent overseas, he married the former Gloria Sanderson in November, 1943.

After working one year on his family's cotton and cattle farm, Lane began his career in the oil industry in January, 1947, when he was employed by Barnsdall Oil Company. He began as a land and geological scout before working as a subsurface geologist. Upon the sale of Barnsdall in 1950, Lane became District Geologist for Pan Am Southern Corporation. With the close of Pan Am Southern's exploration office in 1954, Lane began his long and distinguished career with Wheless Drilling Company. He served as Vice President and a member of the Board of Directors. When Wheless interests took over management of Tensas Delta Land Company, Lane also served as

geologist for Tensas Delta until later when he served as Vice President and Director. Lane retired in December, 1991, after 37 years with Wheless Industries and still remains a Director of Tensas Delta. Upon retirement, Lane opened an office with Ralph G. Richardson where they manage their own oil and gas investments. Lane is a Director and Officer of his family-owned businesses, the C. W. Lane Company and the Giddens-Lane Company. He serves in similar positions with East Texas Royalty Company and Caddo Mining Company.

Lane is a member of the AAPG and is a Certified Petroleum Geologist. He has served twice as a district representative to the AAPG as well as on both the Membership and Business Committees. He was made an Honorary Member of the Shreveport Geological Society in 1987, having served as Secretary-Treasurer and Vice President. He has presented three papers before the Society which covered these North Louisiana fields: Simsboro, Caddo Pine

Island and East Dykesville.

Lane began serving the GCAGS in 1970 when he was Program Chairman for the Convention in Shreveport. There he arranged for the first public display by a scientific organization of the samples from the first Lunar Expedition. Lane served the GCAGS in 1975 as Vice President, in 1976 as President, and in 1977 as a member of the Executive Committee. As President, he instituted a student paper awards program which eventually grew into the GCAGS Scholarship Program. He served on the first GCAGS Investment Committee after he and others urged that the Executive Committee consolidate all surplus funds at a single site. At the 1984 GCAGS Convention, he received the Third Place Award as co-author of "The Petroleum Geology of the Smackover 'C' sand of the East Dykesville Field." In 1986, he was awarded Honorary Membership in the GCAGS. Since 1990, he has been Chairman of the Long Range Planning Committee.

Lane is also a member of the Montana Geological Society, the Independent Petroleum Association of America,

the Mid-Continent Oil and Gas Association and the Louisiana Independent Oil and Gas Association.

Lane has always been an active leader in numerous areas of his church and has led a weekly Bible study there for the past 13 years. Ever the leader, Lane has served as President of eight of sixteen civic organizations and clubs in which he is a past or present member.

A devoted family man, Lane has three daughters and six grandchildren. He and Gloria plan to celebrate their

50th wedding anniversary in November of this year.

In spite of his busy schedule, Lane is an energetic golfer, belonging to that august group, the Mississippi Seniors. The Gulf Coast Association of Geological Societies takes great pride in dedicating this volume of the 1993 Transactions to C. Lane Sartor - gentleman, accomplished geologist, executive and a devoted servant to our profession and mankind.

- Robert L. Williamson

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### REPORT OF THE PRESIDENT GCAGS

Robert L. Williamson

I welcome each of you to Shreveport on behalf of the Shreveport Geological Society and the entire volunteer staff of this convention. We are very pleased to bring you this convention in cooperation with the East Texas Geological Society headquartered in Tyler. This is the sixth time the Association has met in Shreveport in its 43-year history. I hope our theme, "Into the 21st Century - Focus on the Future," captures your thoughts for more than a moment. As we approach a new century milepost, we can be preparing our minds for fresh ideas to blend with experiences of the past. New technology may bring heretofore unimaginable data to our use. Our cover page uses a 3-D seismic cube as an example of new technology currently sweeping our industry.

We are dedicating the 1993 Transactions to one of Shreveport's most deserving servants of the Association, Lane Sartor. Lane, a native of Shreveport, has been an involved member of the Shreveport Geological Society since 1947. Lane continues to serve you through his duties as Chairman of the Long Range Planning Committee.

My thanks go to General Chairman Roger Berg and to Vice General Chairman Johnnie Wanger for their excellent leadership exhibited in the planning of this conven-Other members of the Steering Committee are: Secretary Mark Schroeder, Treasurer Ross White, GCSSEPM Vice Chairman Austin Sartin, Past President of the Shreveport Geological Society Chris Johnson and current President Joe Lott. These volunteers, along with the numerous committee chairmen listed in this index and their dedicated committee members, deserve much praise for the entire Convention and resulting Transactions. The Steering Committee decided early to include the services of the AAPG to better ensure the success of the Convention. Special



thanks go to Meeting Coordinator Sondra Biggs and Exhibits Manager Bruce Lemmon.

The GCAGS Board of Directors held its mid-year meeting in Shreveport on April 13, 1993. Gerald Cooley, Financial Committee Chairman, reports that even though our Convention last year suffered a substantial loss, the Association is in sound financial condition. A total of \$51,609 has been disbursed since 1990 to member societies under the GCAGS Matching Scholarship Fund. Financial Aid to Students Committee Chairman Ralph Richardson recommended, and the Board approved, that a total of \$10,000 in scholarships be awarded equally to the top 20 applicants. Many thanks go to outgoing Chairman Valerie Ewing for her service to this committee for the past three years. We offer a much deserved thank you for the fine job Gary Lauman has done as Chairman of the Awards and Nominations Committee. Welcome to Bill Meaney as incoming Chairman. We are always grateful for the consistent work Bob Boyer does as Chairman of the Publications Committee. I wish to thank Lane Sartor for his continuing service as Chairman of the Long Range Planning Committee. This is a vital committee which has been charged with considerable responsibility in planning for your Association. We thank Dave Pope for his continuing

efforts as our Historian and Howard Kiatta for his service as our representative on the AAPG Advisory Council. I wish to personally thank Executive Secretary Birdena Schroeder for the invaluable continuity and dedication she provides to the Association.

I wish to gratefully acknowledge all of the loyal independents, oil companies and service companies which helped so much to make this Convention possible through their direct contributions, exhibits and advertisements. These are challenging times for our industry, and the sacrifices made by both these contributors as well as our host of volunteers is deeply appreciated by the GCAGS.

Finally, it has been a great honor and distinct pleasure to serve as President of the GCAGS. It has been most rewarding to work with the dedicated officers, Board members, committee chairmen and members over the past two and one-half years. My desire has been to uphold the excellent tradition of the GCAGS, particularly as it relates to serving our nation through our exciting, challenging and rewarding profession.



VICE PRES. William L. Fisher



SECRETARY Mark Schroeder



TREASURER B. Ross White

#### REPORT OF THE PRESIDENT GCS-SEPM

John M. Armentrout

Welcome to Shreveport and the 43rd Annual GCAGS and 40th Annual GCSSEPM Convention.

As is the tradition, the local committees for the convention have organized an excellent technical program supported by exhibits and social activities providing an enjoyable meeting. The SEPM committee has been led by Austin Sartin, SEPM

Vice-Chairman, with excellent support by Mary Barrett. The local committee's other leaders are: Nolan G. Shaw, SEPM Program Chairman; Michael J. Nault, SEPM Awards; and Norm Rosen, SEPM Editor. These five members are the driving force behind this years program.

John M. Armentrout, President

While the over-all health of the petroleum industry continues at levels below the boom days, our local section has maintained a vigorous program. The GCAGS Annual Convention, active participants in the Annual AAPG Convention in New Orleans, and the annual GCS-SEPM Foundation Research Conference, all reflect an active membership of dedicated professionals. Our membership has stabilized at approximately 425 which is the average "long-term" level of the last fifteen years. Despite this healthy profile, many members continue the quest for employment having been "out-placed" by the reorganization of the last few years.

Biostratigraphers have been, and continue to be, disproportionately affected by the reorganizations. Many now work as consultants to their former employers as the industry adopts the strategy of "out-sourcing" technology. GCS-SEPM is sponsoring an effort to support biostratigraphers through a committee chaired by Ed Picou. This committee has the goal of defining industry standards for time-stratigraphic events and paleoecologic units used in the Gulf Coast. Rather than dictating a single standard, the committee seeks to clarify existing usage of various companies so correlation and facies interpretations can be correctly merged in regional studies. Independent contractors and petroleum companies will both benefit from this effort through consistent, technically correct correlation.

The next GCS-SEPM program will be the December 5-8, 1993 GCS-SEPM

Foundation Research Conference, to be held in Houston. The program focuses on Rates of Geologic Processes: Tectonics, sedimentation, eustasy and climate - Implications for Hydrocarbon Exploration. Approximately 30 papers and posters are planned with the proceedings volume available at the meeting. Sediment-flux rates, salt mobility, fault patterns and hydrocarbon migration are but a few of the included topics. I encourage you to plan on joining me at the meeting.

As Section President, it has been my honor to work with a group of dedicated volunteers who have developed and carried out the GCS-SEPM program. Section officers are: Nancy Engelhardt-Moore, President-Elect; David Ford, Vice-President; Missy Jackson, Secretary; and Elaine Collison, Treasurer. Foundation Trustees are Art Waterman, Sheila Barnette and Denise Butler. Foundation Executive Director is Bob Perkins. This team and their supporting cast of section members continues the tradition of technically excellent programs and publications that assures the health of the GCS-SEPM.

As I transfer the leadership of GCS-SEPM to Nancy Engelhardt-Moore, I look forward to continued participation in section programs. I believe that the Gulf Coast of North America is the most important area of future potential for domestic exploration. The GCS-SEPM has provided leadership in exploring and exploiting the resources of the Gulf Coast and is certain to continue that role.



President-Elect Nancy L. Engelhardt-Moore



Vice-President David W. Ford



Secretary Mary (Missy) Jackson



Treasurer Elaine H. Collison

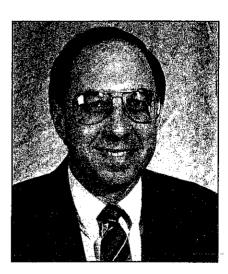


Past-President Michael J. Nault

# REPORT OF THE GENERAL AND VICE GENERAL CHAIRMAN FORTY-THIRD ANNUAL MEETING - 1993 ORVILLE ROGER BERG, GENERAL CHAIRMAN JOHNNIE P. WANGER, VICE GENERAL CHAIRMAN



Orville Roger Berg



Johnnie P. Wanger

On behalf of the Shreveport Geological Society we are pleased to welcome you to Shreveport and the 43rd annual meeting of the Gulf Coast Association of Geological Societies.

For the last few years the geological profession has been embroiled in the changes that the oil and gas industry has been undergoing. There is considerable concern as to whether there is any future for our science. The theme for the convention "Into the 21st Century, Focus on the Future" is an attempt to break away from the problems of today, look at tomorrow, its challenges and, most importantly, its promises for the geological profession.

Preparations for this convention began two years ago when members of the Shreveport Geological Society were asked to become chairpersons for the different functions of the convention. The decision was also made to ask the AAPG to assist us in preparing for this meeting. This convention is a result of the cooperation and effort of the society committees and the AAPG.

Johnnie Wanger undertook coordinating the efforts of the different technical groups in order to provide a program for this year's convention.

The East Texas Geological Society expressed an interest in assisting with this convention. They chose to put together and handle the East Texas Lignite Field Trip. The Shreveport Geological Society wishes to express a "Thank You" to the East Texas group for their effort and participation.

The oral sessions of the GCAGS and GCS-SEPM will include salt tectonics, sequence stratigraphy, geochemistry, diagenesis, enhanced recovery, biostratigraphy and environmental geology. The poster and core presentations, a tradition started only a few years ago, are an important component of this convention. They should be a source of useful and educational information.

Two short courses are offered at this convention; one on sequence stratigraphy provided in a two part session (which includes a 300' Smackover core) and a 3-D seismic school, with hands-on computer usage. Field trips include the East Texas Lignite Field Trip and a field trip to the Ouachitas of Southern Arkansas. The short courses and field trips continue to be open to non-convention registrants. The convention also includes the Tobin Theater, alumni functions and employment assistance.

The Icebreaker Cocktail Party starts entertainment activities on Wednesday night in the Exposition Hall. "Thursday Night at the Races" will be held at the Louisiana Downs racetrack on Thursday evening. Sporting events include golf and tennis at the Shreveport Country Club on Wednesday. A 5-K run will be held at the Clyde Fant Parkway Wednesday morning. The spouses' program includes an English High Tea, a Racetrack Day at Louisiana Downs and a Luncheon and Style Show at the Shreveport Country Club.

We would like to express our thanks to the committee chairpersons and society members who worked so diligently on this convention. The time and effort that these people put into their committee functions ensured that this convention would become a reality.

We both hope you will find your stay in Shreveport to be a pleasurable experience and that the 43rd annual convention does focus you "Into the 21st Century."

### REPORT OF THE EDITORS 1993 TRANSACTIONS

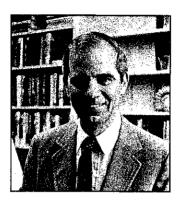
The continual international focus of the major oil companies is resulting in a "brain drain" of the United States oil industry. Such a pattern is especially harmful to the Gulf Coast petroleum industry, where much of the world's



Mary L. Barrett Co-Editor GCAGS

hydrocarbon technology was developed. The important present and future role of the GCAGS Transactions in providing a forum for technology transfer cannot be overstated. It is imperative that we continue to produce a high-quality publication to serve those remaining in the Gulf Coast region. Thanks to the many authors and presenters for doing just that.

We were able to get each manuscript edited and improved by readers prior to the final printing. Thanks to the following individuals for editing the manuscripts: David Bieler, Carey Crocker, Tom Ehrhart, Leo Hermann, Gary Kinsland, David Kopaska-Merkel, Ernie Ledger, and Tom Wyche.



Austin A. Sartin Co-Editor GCAGS



Norman C. Rosen Editor GCS-SEPM

In the 1991 Transactions, I made a comment that Thomas Wolfe was wrong: you can go home again; if you did not believe me then, you will now, as here I am once again! Why would anyone want to do this more than once? I said it before and I say it again: To me, the chance to see again old friends and hear papers about the area that is the spiritual heart of the industry (or what's left of it) can not be adequately described in words. As a result, the chance for me to be an editor for the Transactions is not regarded as an indignity but an opportunity to do something for my extended family. And when someone from the family calls and asks you for help, how can one turn them down?

Despite the fact that business conditions are worse than two years ago, the quality of papers we received is much improved. I congratulate and thank the authors for the effort. I also admit that most people were within acceptable limits of the time deadline, something appreciated by me as well as our printers, Mid-South Press.

I would like to thank Mike Nault and Bruce Bowen for their help in reviewing manuscripts; special thanks go to my wife, Rashel, for putting up with "wasted weekends" while I edited manuscripts. To the reader of the Transactions, I hope that you enjoy the articles contained herein.

#### REPORT OF THE PROGRAM CHAIRMEN FORTY-THIRD ANNUAL MEETING – 1993 LARRY G. FRIZZELL AND NOLAN G. SHAW



Larry G. Frizzel GCAGS

We sincerely appreciate the time and effort of those who submitted papers and abstracts for this year's convention. Without the hard work of these authors and those before them, the GCAGS; GCS-SEPM meetings would not be possible. Certainly their work is the cornerstone of a long and proud tradition of informative and enjoyable conventions.

In keeping with the theme of this year's convention, "Into the 21st Century-Focus on the Future", we have arranged a program which we feel is both timely and technically compelling. Our technical session topics include "Sequence Stratigraphy", "New Exploration Techniques in Mature Basins (3D and Enhanced Seismic Techniques and Non-Seismic Methods)" as well as "Salt and Its Role in the Gulf Coast" just to name a few. Our key goal was to present a program that was strong technically yet offered something for everyone who works the Gulf Coast area.



Nolan G. Shaw GCS-SEPM

We hope that the quality of this year's program will help make this an educational and enjoyable convention that upholds the fine tradition of the GCAGS and the GCS-SEPM.

#### 1993 GCAGS FINANCIAL AID TO STUDENTS

During 1993 the GCAGS received a total of twenty-six requests for financial assistance from students enrolled in graduate and undergraduate geology programs in thirteen Gulf Coast colleges and universities. Grants totaling \$10,000.00 were awarded to twenty successful applicants. Each of the individuals received \$500.00.

A committee chaired by Valerie M. Ewing, New Orleans, along with members Charles Sprague, Mandeville, Louisiana, and Ralph Richardson, Shreveport, Louisiana, made awards to the following students:

Glen Bixler
Zi-Qiang Chen
Peter A. Claypool
Douglas T. Collins
Richard L. Corley
William Lee Esch
Dominic Esker
Rachel A. Eustice
Baoshun Fu
Michael D. Hamilton

Baylor University
Florida State University
University of Houston
Texas A & M University
Auburn University
Louisiana State University
University of Miami
University of Houston
Louisiana State University
Rice University

Leslie A. Jeske
Thomas Kirkpatrick
Merrick A. Mainster
Jose Luis Masaferro
Stephen Schellenberg
Berry H. Tew
Saiwei Wang
James V. White
Lee S. Yokel
Hongliu Zeng

Stephen F. Austin
University of Houston
University of Houston
University of Miami
University of South Florida
University of Alabama
University of Alabama
University of Texas, Austin
Auburn University
University of Texas, Austin

#### OFFICERS AND COMMITTEES FORTY-THIRD ANNUAL MEETING 1993

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Director, Bureau of Economic Geology
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Austin, TX 78713

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Alumni Functions Charles Cook - Chair

Contributions Craig Barclay - Chair

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John C. Grunau - Chair
T.R. McClellan

Employment Assistance Steve Cowgill - Chair Steve Singletary

Entertainment
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Karen Wooldridge
Kevin Byram
Will Downs
Tal Walker

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s\Program GCAGS Larry Frizzell - Chair Joe Lott Tal Walker

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Registration Content Cortese - Chair Simeon Horton

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Bill Meaney

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Golf: Gregory Rembert
Tennis: Will Downs
5K Run: Kevin McMaster

Spouse Activities Janie Black - Chair Myrna Sigler Susan Schroeder Mary Jo Shelton

**Tobin Theatre** Johnnie Wanger - Chair

**Transportation** Anthony Spano - Chair



**Thomas Edward Ewing** 

Dr. Tom Ewing was born in Elgin, Illinois. He attended The Colorado College, receiving a B.A. in Geology in 1975. Tom then went on to further his studies at New Mexico Institute of Mining and Technology and received an M.S. in Geochemistry in 1977. He was awarded with a Ph.D. in Geological Sciences from the University of British Columbia in 1981. From 1980 to 1985 he worked as a Research Associate with the Bureau of Economic Geology at the University of Texas at Austin. Tom participated in many structural and stratigraphic related projects using all geophysical disciplines including the statewide Tectonic Map and text recently published by the Bureau.

Tom left the Bureau in 1985 to join his wife, Linda, as Geologist and Geophysicist, in Frontera Exploration Services - an independent industry consulting firm. He prepares regional exploration studies combining geological and geophysical research, generates and evaluates prospects and operates a MIRA seismic modeling work station.

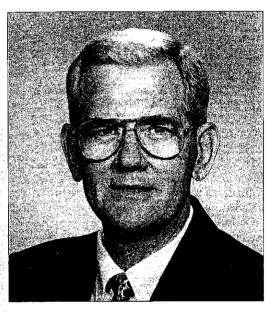
While in Austin, Tom was active in the Austin Geological Society, serving as Secretary and Publications and Program chairman. After moving to San Antonio in 1985 as a consultant his active participation in South Texas Society functions resulted in his serving as President in 1991. He has led field trips for AAPG, GCAGS, and GSA in association with their conventions. He served in the AAPG House of Delegates from 1991-1994 and as Vice-President for the

1992-1993 term. Besides being Editor for the GCAGS 1985 Transactions, Tom has received the Best Paper Award in 1982 and twice has been awarded for Third Best Paper.

The mark of an outstanding, dedicated, professional always shows up in the work that they do not have to do. Tom Ewing has worked with the Explorer Scout program, prepared the "Urban Geology of San Antonio" for educational use, served on scholarship committees, participated as a visiting Instructor at local Universities, taught numerous short courses and workshops throughout Texas, and served on the Board of Directors for German Heritage Park. His professional associations include membership in AAPG, SIPES, GSA, AIME, AGU, and GAC. Being a member is easy, being an active contributor is dedication.

When we present to Dr. Tom Ewing the Distinguished Service Award, the GCAGS is saying well done to a member who is know for his energy, intellect, cooperation, and genuine love of our profession and industry. He has shown all organizations his desire and willingness to serve. Most amazing is Tom's retention and work capacity. GCAGS and all of us are fortunate to have him as our friend, colleague, and fellow geologist. By giving this Distinguished Service Award to Tom Ewing, we make it even more an Honor to those yet to come.

E. Gerald Rolf



William R. Payne

William R. Payne was born in Rule, (Haskell County) Texas. He received a B.A. in Geology from Baylor University in 1955. After serving two and one half years in the Air Force as a Navigational Instructor he returned to Baylor to receive his M.A. in 1960.

Bill married the former Deanna Stephens of Dallas, Texas in 1955,

and they have a son, three daughters and one grandson.

Bill began his career in 1960 as a geologist with the Bureau of Economic Geology in Austin, Texas, where he worked on a High Calcium Limestone Project for one year. He was employed in 1961 by Texaco, Inc. in Corpus Christi, Texas as a petroleum geologist. In 1967 Bill joined Southland Royalty Company where he became District Geologist in 1969. Since 1972 Bill has been an independent geologist except for 1987-1988 when he was a partner in Sagex, Inc. in Corpus Christi.

Bill also taught Physical and Historical Geology at night school at

the University of Corpus Christi from 1963-1969.

Throughout his career Bill has been active in professional organizations. He joined the local Geological Society immediately after moving to Corpus Christi where he served on numerous committees in addition to being First Vice President in 1970 and councilor in 1977-1978 and 1984-1985.

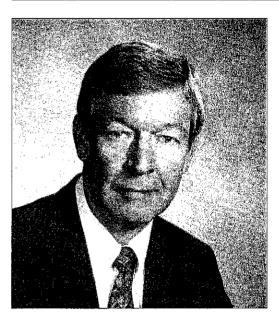
Bill has been an active member of AAPG since 1961. He was a CCGS representatives to the AAPG House of Delegates in 1982-1984

and served on the Stratigraphic Correlations Committee and Committee on Drilling Statistics.

Bill's many contributions to the GCAGS include serving on the Field Trip Committee in 1964, Arrangements Committee Chairman in 1972, Finance Committee 1982-1984, Treasurer in 1981, Vice President in 1988 and President in 1989.

Bill Payne is well known for his thoughtful and easy going personality. He has served his profession well as exemplified by his contribution to the Corpus Christi Geological society the AAPG and especially the GCAGS. For his outstanding service and dedication to his profession, he is truly deserving of the Distinguished Service Award.

Paul M. Strunk



Daniel L. "Dan" Smith

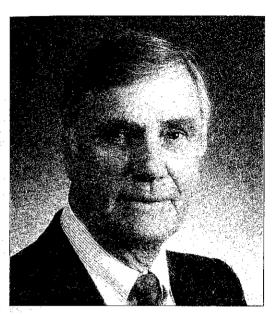
Dan Smith has led a distinguished and active career from his Eagle Scout youth to present day multiple duties chairing several key SIPES Committees, GCAGS business, and the HGS Memorial Scholarship Board. All this in addition to distinguishing himself as a successful petroleum exploration company executive and currently a successful exploration independent, consulting for Texas Meridian Resources Corporation. Dan is a member of many Gulf Coast Geological Societies and is a member of SIPES, AIPG, and AAPG.

I fist met Dan at Amoco in Houston (1966) where he worked as a successful young Geologist from 1958-67 after graduating from the University of Texas in 1958. He worked in Corpus Christi, New Orleans and Houston with emphasis on South Louisiana. He set up Amoco's first practical computer geological study on the Upper Cretaceous Sand Trend in South Texas. From 1970, he helped build Houston-based Texoil to a mid-sized aggressive exploration team featuring ten geologists responsible for discoveries at Buras, Kenner, Pointe A la Hache, Diamond, Bayou Villars, Dorcyville and elsewhere. He is currently associated with Texas Meridian primarily working South Louisiana where, I am sure, he will continue to be successful. Through these years he and his lovely wife, Laura, have raised three beautiful daughters and a fine son, with whom he was able to traverse the scouting program once again.

In 1982, Dan made the decision to repay his profession for his suc-

cess by becoming professionally active. He has been an AAPG delegate several terms and foreman in 1985. He was Vice President and Technical Chairman of HGS in 1986, President-elect in 1987, and President in 1988. In 1989 and 1990 he served as Vice President and President for the local SIPES Chapter and currently presides over the National SIPES Foundation. He served with me on the HGS nominating committee during the same period. We subsequently Co-chaired the GCAGS Convention in Houston in 1991. Laura, Dan's wife, developed the title and log "Winds of Change" for that very successful meeting. Due to the untimely passing of Clyde Harrison, President of GCAGS in 1991, all GCAGS officers at that time were called upon to increase their efforts. He keeps GCAGS, HGS and local AAPG delegates current on all state registration matters. He has been available to represent all Gulf Coast geologists admirably in the other administrative matters for GCAGS members. Dan is obviously one of our best informed and most active petroleum geologists, and we are fortunate to have him representing our constituency. The Gulf Coast Association of Geological Societies is proud to honor him for his many contributions with their Distinguished Service Award.

C.R. "Chuck" Noll



Dr. Edmund Gerald Wermund

This year the GCAGS honors Dr. Edmund Gerald Wermund with a Distinguished Service Award. Jerry is a native of Arlington, New Jersey, received his undergraduate education at Franklin and Marshall College in Lancaster, Pennsylvania, and began graduate study with an emphasis on metamorphic petrology at Washington University in St. Louis. At that point, however, a serendipitous event intervened, changed the course of Jerry's career, and set him on a path that has greatly benefited Gulf Coast geology and GCAGS in particular.

Jerry, a World War II veteran who had served in the Navy aviation program, offered to serve his country again during the Korean conflict. He returned to military service as a scientist. While serving in the Army Corps of Engineers at Ft. Belvoir, Virginia, he met Harold V. "Andy" Anderson, a professor of geology at Louisiana State University who was also applying his civilian skills in the service of his country. Together they developed a geology course and training manual and taught Army engineers. When he returned to civilian life in 1952, Jerry forsook metamorphic petrology and headed straight for the Gulf Coast, following his friend and colleague Andy Anderson to Louisiana State University in Baton Rouge. At LSU Jerry taught a variety of undergraduate courses and summer field camp, pursued graduate studies in sedimentology and clay mineralogy, and completed requirements for the Ph.D. degree in 1961.

Jerry began his professional research career at Mobil Research and Development Corporation in Dallas, Texas, in 1957. There he worked on a wide range of stratigraphic and sedimentological studies and published numerous company reports on Gulf Coast geology, as well as basic research studies of new mapping techniques, statistics, and remote sensing technology. He left Mobil in 1970 to work as a manager for Remote Sensing, Inc. in Houston, which led to consulting for the United Nations Trans-Saharan Highway project.

In 1971 Jerry joined the research staff of The University of Texas at Austin Bureau of Economic Geology, where he has remained since. Jerry has held a variety of research and research administration posts at The University of Texas, including Associate Director of the Bureau of Economic Geology (1975-1988) and Director of the Land Resources Laboratory (1988-present). His Gulf Coast research has run the gamut from sedimentological/stratigraphic investigations and hydrocarbon-resource assessment studies to geologic mapping and environmental geology studies. Jerry has also served the University and the community in numerous other capacities. He has been active in the Austin Geological Society, for which he has served as Vice President and President; the Federal government, for which he serves as Chairman of the Gulf of Mexico Technical Working Group of the Department of the Interior Outer Continental Shelf Advisory Board and the Scientific/Technical Advisory Committee of the Galveston Bay National Estuary Program; and State government, for which he serves on the Texas Water Commission Committee on Freshwater Inflow to Nueces Bay and the Task Force for the Texas Natural Resources Information System.

It was as an active member of the Austin Geological Society that he began his long history of service to GCAGS. The 1977 GCAGS meeting was held in Austin, and Jerry served as General Chairman of the meeting. That was the first year GCAGS had come to Austin and there was, no precedent and no blueprint for how to proceed. In those days the membership of the Austin Geological Society totaled less than 100. Nonetheless, Jerry assembled a superb team of volunteers, and the meeting was heralded a success with an attendance of 2,200. In 1985, when Austin hosted the GCAGS meeting for the second time, Jerry was again tapped for service on the management team as President of GCAGS. When disaster struck and the general chairman had to leave Austin 6 months before the meeting, Jerry shouldered much of the added work load and, with the help of Ed Garner as the replacement general chairman, hosted another highly successful meeting.

Those of us involved in preparing for the 1994 GCAGS meeting in Austin continue to look to Jerry for help and guidance. It is fitting and a great pleasure to formally recognize our friend and colleague, Jerry Wermund, for his past contributions to the GCAGS with its Distinguished Service Award.

#### HONORARY MEMBERSHIP GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES



Gerald (Jerry) A. Cooley

Gerald (Jerry) A. Cooley was born in Jackson, Michigan. He entered the University of Michigan where he received his BS (Geology) in 1946 and his MS (Geology) in 1947. Jerry married Jeanne Arnold, Alvin, Texas, in 1949 and they have a son and three daughters.

He began his career as a geophysicist with Phillips Petroleum in Bartlesville, Oklahoma in 1947 and remained for 38 years of outstanding service before electing to take early retirement in 1985.

Early in his career, he transferred to the Gulf Coast where his various assignments took him from South Florida to South Texas, onshore as well as in offshore exploration. He was recognized as a prodigious producer of quality work and as an outstanding supervisor and leader. Upon retirement, he became co-founder of PetCons & Associates, Bellaire, Texas, where he is President and CEO.

In 1953, he joined the Houston Geological Society where he has served on several standing committees as well as in all executive positions from Treasurer to President in 1984. He continues to serve his local society as Chairman of the Exhibits Committee and on the Office Management Committee. For his outstanding leadership and dedication to the profession, he was made an Honorary Life Member of the Houston Geological Society in 1987.

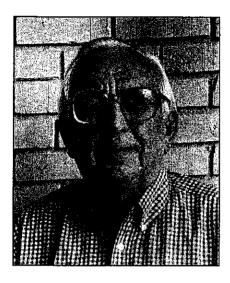
Since joining the AAPG in 1947, he has served on several standing committees as well as five terms as delegate. He has been a DPA member since 1982. His other professional affiliations include active membership and committee service in SEG, the Geophysical Society of Houston, the OTC, SIPES and the GCAGS where he has been Finance Committee Chair since 1987.

He has been active in community affairs in Bellaire, Texas where he has resided for the last 37 years. He is a longtime volunteer in the Boy Scouts of America where he has served as Scoutmaster and Explorer Advisor for 27 years, past Chairman of his District Training Committee and is currently on the Sam Houston Area Council Relationships Committee. For outstanding service to the youth of our community, he was awarded the Silver Beaver in 1981.

"When you want a job done, and done well, give it to a busy person" typifies the character of Jerry Cooley. For his long and outstanding service to his profession, all who know him are pleased that he has been awarded Honorary Membership in the GCAGS.

Marvin L. Smith

#### HONORARY MEMBERSHIP GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES



Maurice Gordon Frey

Maurice Gordon Frey was born in Cincinnati, Ohio in 1913. He attended the University of Cincinnati in the heart of the Depression, receiving a B.S. in geological engineering in 1936. While at Cincinnati, Gordon was influenced by such notable geologists as John L. Rich, Walter H. Bucher, and N.M. Fenneman. He attended graduate school at the University of Minnesota receiving his M.S. in geology in 1937 and his Ph.D. in 1939. He has been married nearly fifty years to Marjorie Wells Frey.

Gordon began his professional career in 1939 as a geologist-geophysicist with the Standard Oil Company of California. In the fall of that year he was sent by the company to Saudi Arabia petroleum province. This work was

cut short by the growing unreast of what was to become World War II.

Enticed by his former mentor, J.L. Rich, Gordon left industry in 1948 for a teaching position at the University of Cincinnati, where he immediately advanced to Associate Professor. When Rich became ill in 1951, he asked Gordon to serve as Departmental Head. Gordon acted in this capacity through the 1952 academic year, at which time he succumbed to entreaties by the California Company to return to the industry.

In his second employment period with the California Company (later Chevron), Gordon served in many capacities, including District Geologist, Supervisor of Geophysics, Chief Geologist, Assistant to the Vice President and

General Manager for Exploration, and Consulting Geologist for Environmental Affairs.

Gordon retired by Chevron in 1978 after thirty-six years of service and took an appointment as Adjunct Professor of Geology at the University of New Orleans. During his fifteen years at UNO, Gordon has influenced the careers of hundreds of students through his wise council, classroom instruction, and direction of theses. In 1991, he was appointed as the first recipient of the Braunstein Professorship of Subsurface Geology.

Gordon is an Honorary Life Member of the New Orleans Geological Society, which he has served in many capacities, including President in 1969-70. He is charter member of the Southeastern Geophysical Society and Emeritus Member of the AAPG. In 1978, the GCAGS dedicated its Transactions volume to him. Gordon served as Chairman of the AAPG Annual Meeting in New Orleans in 1976 and was awarded the Association's Human Needs Award in 1979

Doc Frey, as he is affectionately known among his colleagues and students, has given fifty-five years of dedicated service to our profession. This receipt of Honorary Membership in the GCAGS is a fitting tribute to his exemplary career.

W.W. Craig

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#### HONORARY MEMBERSHIP GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES



Peter G. Gray

Peter G. Gray is an individual whose dedication and service to his chosen profession would be difficult to match. During his 37 year career he has devoted his time and talents unselfishly, in a real and meaningful way, to the numerous professional, civic and religious organizations to which he has belonged.

Peter was born in Houston and moved to West Texas as a teenager. After graduation from Abilene High School, he served in the United States Navy for two years, including a year as a Midshipman at The University of Idaho. Following his military service, he entered Texas Western College (now, The University of Texas at El Paso) where he received a Bachelor of Science in

Geology in 1956.

He began his professional career that same year with the Pure Oil Company in Houston. His tenure with Pure included stops in Lafayette, New Orleans and Midland, working on various geological assignments. Pete returned to New Orleans in October of 1964, to work for Leslie Bowling, a prominent consulting geologist. After four years, he joined An-Son Corporation in New Orleans as District Geologist. In April of 1969, he moved to CNG Producing Company, also in New Orleans, as an Exploration Geologist. In July of 1973 he joined the newly-forned Stone Oil Corporation in New Orleans, moving to Lafayette in March of 1977 when Stone relocated its main office. With Stone, he served as both Division Exploration Manager and Chief Geologist, becoming involved in all phases of the company's activities. In July of 1981, he resigned from Stone to become an Independent Consultant, which is his current professional status. During this period he has been associated with Cornell Oil Company, Lyco Energy, Sooner Resources and Citation Oil and Gas Corporation. In his career, Pete has touched numerous phases of the geological spectrum, including prospect generation and evaluation, field work, unitization and expert witness testimony and the various administrative duties surrounding oil and gas activities.

Pete has been an active member and dedicated supporter of a number of professional organizations. He became a member of AAPG in 1956, and a Certified Petroleum Geologist in 1966. He has served as a Delegate, Vice-Chairman of the House of Delegates, on the Division of Professional Affairs Advisory Board, and is currently the President of the Division of Professional Affairs. In 1970-71 he became Treasurer of GCAGS and later served twice as Vice-President and finally as President in 1989-90. Pete is a member of the Lafayette Geological Society. He had the unique honor of serving as President of both the New Orleans and the Lafayette Geological Societies, and has been awarded Honorary Life Membership by both groups. He is also a member of the Society of Independent Professional Earth Scientists, IPAA, and the Louisiana

Independent Oil and Gas Association.

Pete solidified his ties to Louisiana early on when he met, courted and married Julaine Roy, a native of Parks, Louisiana. They have two grown sons. Despite the demands of a career and participation in various professional organizations, Pete has also found time to devote considerable effort to his church, The Episcopal Church of the Ascension in Lafayette, serving on numerous lay committees, as Treasurer from 1987-92, and most recently, as the Finance Committee Chairman. For many years he and Julaine have been active in the Ulster Project, opening their home on numerous occasions for this international program, which attempts to promote peace and understanding between Catholics and Protestants in Northern Ireland.

Honorary membership is properly an award bestowed on individuals who have made outstanding contributions to the GCAGS. Pete Gray not only meets this criterion, but also represents the highest standards of professionalism and exceptional

service to geology and to his community as well. He is truly deserving of this auspicious award.

#### HONORARY MEMBERSHIP GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES



John T. Palmer

John T. Palmer, the son of Dean Phillip Mason Palmer (Dean of the College of Arts and Sciences at Lehigh University, Bethlehem, Pennsylvania) and Anne Marie Bauer Palmer, was born February 21, 1928 in Bethlehem, Pennsylvania. He married Marilyn Grube also of Bethlehem, Pennsylvania, on March 12, 1949. They have three children and seven grandchildren. Their children are: Barbara Pou, Susan Whitehurst and Richard W. Palmer, all of which are associated with him in the oil business.

After graduating from Lehigh University in June, 1948, with a Bachelor of Arts degree in Geology, he was hired by Stanolind Oil and Gas Company's Shreveport, Louisiana office as a Scout/Geologist. It was during the deep drilling that occured after World War II, along the North Louisiana Smackover Trend, that Mr. Palmer became known as the Geologist with the golden touch because he was always present when a discovery was made. Throughout his oil and gas finding career this "golden touch" has been very evident. In December, 1951, he accepted a position with Lyons Petroleum Inc., an independent oil and gas exploration company as Geologist and Partner.

During his tenure with Lyons, Palmer was responsible for finding discoveries and extensions of oil and gas fields; including: Carthage, South Hallsville, Woodlawn, Willow Springs, Shamburger Lake, Molly Jane, Slocum, David Gail, West Good Springs, East Rodessa, Oak Hill, New Diana (11 MMBO), S.W.

Slocum, & West Tyler (Bankhead Sd) in East Texas; and North Carlton, South Downsville, Spider, Mean Lake, Gahagan, and Bayou Middlefork (Bodcaw Sd) in North Louisiana; and North Fouke, Bradley West, Cypress Lake Ext., Walker Creek, and Center Field in South Arkansas.

On January 1, 1970, he left Lyons Petroleum to work as an independent exploration geologist. During this period, his geology led to discoveries and extensions of oil and gas fields including: Ann McKnight, Rischers Store, North Henderson (Pettit, T.P.), Percy Wheeler, E. Shiloh, E. Bridges James, E. Bridges Mooringsport, Gooch, West Tyler Paluxy, Bellwood Lake, Dixie Drive, Larissa, and Gooch Travis Peak in East Texas; and Danville, Oaks, Leatherman Creek, Red Oak Lake, S. Drew, & McKenzie in North Louisiana, and Cornish Branch Ext. in South Arkansas.

In January, 1978, he formed Palmer Petroleum, Inc., an independent exploration and production company. Palmer served as President until March, 1993. Today he serves as Chairman of the Board.

Palmer Petroleum, Inc. is credited with discoveries and extensions of oil and gas fields including: North Henderson (Cotton Valley), S.W. Kilgore (Travis Peak), Alabama Ferry, N. Reynard (Woodbine), Chapel Hill, Lane's Chapel, Whitehouse, Aventura Ranch, and Overton E. (Woodbine) in East Texas; and N. Red Oak, North Shongaloo in North Louisiana; and Beech Creek, West in South Arkansas, and North Dinan, Pickens, N. Yellow Creek Tuscaloosa, and E. Yellow Creek Tuscaloosa in Mississippi.

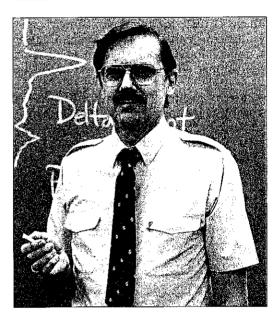
Palmer Petroleum, Inc., under Palmer's leadership, is presently active in exploration for new fields in East Texas, South Arkansas, North Louisiana, Mississippi and Alabama.

Throughout his career, Mr. Palmer has readily offered his talents and leadership in professional societies, and he is a member of the following oil and gas related associations: Shreveport Geological Society, serving as Vice-President (1959-1960), President (1972-1973), and Honorary Member; Gulf Coast Association of Geological Societies, serving as Secretary (1976), Vice President (1983), and President (1984); American Association of Petroleum Geologists; Certified Petroleum Geologist #728; Independent Petroleum Association of America, serving as Regional Vice-Presidnet (1982-1985), Executive Committee (1985-1988) and Gas Committee (1989-present) serving as President; Louisiana Association of Independent Producers and Royalty Owners, service as Board Member, and President (1975-1976); Louisiana Independent Oil and Gas Association, serving as Board Member; Texas Independent Producers and Royalty Owners; and Mid-Continent Oil and Gas Association.

Mr. Palmer has also given generously of his time to civic and community activities and has served as Past President and Past Board Member of Southfield School; Board Member and Vice-Chairman of United Way of Northwest Louisiana; Broadmoor United Methodist Church; Committee of 100; Community Foundation of Shreveport-Bossier, and is on the Board of Trustees of Centenary College of Louisiana.

Erwin W. Saye

# CITATION FOR OUTSTANDING EDUCATOR AWARD GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES



W.E. Galloway

Recognition of William E. Galloway as an Outstanding Educator by the Association is thoroughly appropriate and deserved. While Bill has studied a number of basins throughout the world, a significant part of his research effort has been concentrated in the Gulf Coast. His first published paper, a version of his UT Masters thesis on the Lower Wilcox of Louisiana, was published in the Transactions. Several others have followed. A paper by Bill Galloway at a GCAGS convention always draws a crowd, simply because he always has something worthwhile to say.

Bill Galloway is a native Texan, born in Waco just a year under a half century ago. His academic pedigrees are mixed with a B.S. in Geology from Texas A&M University in 1966, and with an M.A. and Ph.D. in Geology from UT Austin in 1968 and 1971. Dr. Galloway started his professional career with Conoco in their Exploration Research Division. In short order, he became Research Group Supervisor and soon was named Director of the Geology Section of the Exploration Research Division at Conoco. Toward the end of 1975, Frank Brown and I heard that Bill was interested in returning to University life. We invited him for the position of Research Scientist at the Bureau of Economic Geology and by November he was back in Austin. His industrial experience was to serve him well for the real world has always had an influence on Bill's research and perspective.

Although being in research at the BEG, Galloway's teaching interest was real. While at the Bureau, he served as a Lecturer in the Department of Geological Sciences and later held the title of Bowling Professor, a professorship named for that well known Gulf Coast Geologist, Leslie Bowling. During the Fall Semester of 1981, Bill took leave to serve as the Klabzuba Visiting Professor of Geology and Geophysics at the University of Oklahoma. In 1985, Bill went full time to the Department as the Brick Elliott Professor. He was the Nordic Visiting Professor in Petroleum Geology at the University of Bergen in 1990. In the Fall of 1993, Bill Galloway was appointed to the Morgan J. Davis Chair in Petroleum Geology at UT Austin, named to honor the distinguished Texas geologist, Morgan J. Davis, Sr.

Since joining the Department, Bill Galloway has supervised nearly two dozen Masters and Ph.D. students. The bulk of them have taken employment in industry and many will be names we will read about in the years to come. At UT, Bill has taught a number of courses in the areas of basin analysis and sedimentary economic geology. Galloway is a superb, well organized teacher; his classes are always full and most students leave, challenged and ready. Bill currently serves in the critical role of graduate advisor in Geological Sciences.

Bill Galloway is a prolific and influential writer. He has well over 100 titles to his credit including two that received the A.I. Levorsen Memorial Award and one on the Frio that won the coveted Wallace Pratt Memorial Award. The bulk of Bill Galloway's papers involved aspects of the Gulf Coast Basin; many have been important in uranium, oil, gas, and other mineral exploration and development and many have paved new thinking for depositional and stratigraphic concepts, applied within and outside the Gulf Coast Basin.

Bill is a great synthesizer with the important ability to organize and put complex ideas into straightforward presentations. This serves him well in teaching and makes his papers pleasant to read. It is a rare gift.

Bill Galloway is always in demand as a lecturer, having lectured literally throughout the world. He has spoken to just about every geological society in North America, many several times, as an AAPG Continuing Education Lecturer since 1977 and as a Distinguished Lecturer of AAPG in 1985 and 1986. He is a frequent lecturer at other universities and as well in corporate seminars. Bill is currently preparing the second edition of his well known and best selling book on terrigenous clastic depositional systems.

Bill Galloway is a first class, well respected scientist and teacher and an excellent choice for the 1993 GCAGS Outstanding Educator.

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#### 1993

## DISTINGUISHED SERVICE AWARD GULF COAST SECTION SOCIETY OF ECONOMIC PALEONTOLOGISTS AND MINERALOGISTS

Charles Clarence Albers

Charles Clarence Albers has been chosen as one of two recipients of the 1993 Distinguished Service Award of the Gulf Coast Section SEPM. Clarence was born in Brenham, Texas on June 9, 1925. He is known to his associates and friends as C2. After an interruption due to WWII service, he received his Bachelor of Science degree in geology from the University of Texas in 1948.

Clarence began his professional career in micropaleontology with Stanolind Oil and Gas Co. (AMOCO) in 1948 in Houston, Texas under the tutelage of J. B. Garrett. With Clarence's inquisitive interest in paleontology, he developed a keen interest in the interpretation and application of paleoenvironmental and biostratigraphic data as applied to Gulf Coast petroleum exploration. In 1962, he was transferred to New Orleans where he was one of the senior paleontology professionals in Amoco's newly organized New Orleans paleontology department. He did pioneer on the down Pliocene/Pleistocene of offshore Louisiana. His professional ability and knowledge of paleoecology was acknowledged by his fellow professionals in the industry when, in 1965 he served as chairman of the GCS-SEPM New Orleans Paleoecologic Committee. This committee produced a consensus paleoecologic chart entitled Foraminiferal Ecologic Zones of the Gulf Coast which was published in the 1966 GCAGS Transactions. This pioneer paper has been generally accepted as a basic paleoenvironmental reference for the industry in the Gulf Coast. In 1987, Clarence authored the paper Forty Years Behind the Scope:



Recollections of a Recalcitrant Bug-Picker or Reflections on the Evolution of Gulf Coast Foraminiferal Biostratigraphy published in the Proceedings of the GCS-SEPM Eight Annual Research Conference in Houston.

In 1969 Clarence transferred to the Amoco Research Center in Tulsa, where his professional career was enhanced with duties as a Research Scientist, responsible for worldwide foraminiferal biostratigraphic studies. In 1972, Clarence transferred once again to Houston, and was promoted to Amoco Division Paleontologist. In 1978, he requested a lateral career move to Senior Paleontological Associate, returning to the microscope and conducting regional biostratigraphic studies. During this period he authored key company reports on the biostratigraphy of the lower Frio and Wilcox of the coastal Texas area. Clarence concluded his Amoco career with his retirement in 1986. He remained active in his profession in consulting and professional society participation until a deliberate reduction in these activities in early 1993.

Throughout his career Clarence Albers has been a dedicated professional striving for excellence. He is a charter member of GCS-SEPM and has always been cognizant of and dedicated to the promotion and achievement of the objectives and goals of the Section. He has given energetic, constructive service to the GCS-SEPM as Secretary (1963-64), Business Representative (several years), member Nominating Committee, Chairman Paleoecologic Committee, GCS-SEPM Poster Chairman on GCAGS Program Committee, and GCS-SEPM Representative on AAPG Field Trip Committee. Since 1987, Clarence has served as a trustee, and chairman of the Board of Trustees of the GCS-SEPM Foundation, providing counseling and leadership to the Executive Council. He has a genuine interest in other related professional organization and is a member of the national SEPM, AAPG, Houston Geological Society and NAMS.

In 1990, he had the distinction of being awarded an Honorary Membership in the GCS-SEPM.

For the many years of contributions to the GCS-SEPM, and for most recently, the diligent participation as a two term member and chairman of the Board of Trustees of the GCS-SEPM Foundation, it is fitting and proper at this time to recognize Clarence for his distinguished service.

-Benjamin J.Petrusek -Samuel P. Miano

#### 1993

## DISTINGUISHED SERVICE AWARD GULF COAST SECTION SOCIETY OF ECONOMIC PALEONTOLOGISTS AND MINERALOGISTS

David T. Dockery III

David T. Dockery III, recipient of the 1993 Distinguished Service Award of the Gulf Coast Section SEPM, was born (1950) and raised in Jackson, Mississippi. It was there, at an early age, that he acquired an interest in rocks (chert gravel). Fossiliferous outcrops within the Jackson Group (Upper Eocene) proved more interesting, and his attention turned to fossil collecting. He later found that he could make a living at his hobby and graduated from Mississippi State University in 1972 with a B.S. in Petroleum Geology. David continued his education, attending graduate school at the University of Mississippi from 1972-1975. He finished his thesis and received an M.S. in geology from Ole Miss in 1976 after entering Tulane University to begin work toward a Ph.D. He was one of the first students to participate in a consortium Ph.D. program between Tulane, Emery, and Duke universities and attended Duke for one year. After completing classes at Tulane and Duke in 1978, David joined the Mississippi Geological Survey (now the Mississippi Office of Geology) where he serves today as Chief of the Surface Geology Section. He completed his dissertation on Cretaceous gastropods and received a Ph.D. in paleontology from Tulane in 1991.

David has broad interests in the paleontology, stratigraphy, and geochronology of the Gulf Coastal Plain. One of his first publications was Mississippi Geological Survey Bulletin 120 on the Mollusca of the Moodys Branch Formation, the fauna that first turned his interests toward paleontology. Other publications include Mississippi Bureau of Geology (MBG) Bulletin 122 on



Paleogene invertebrate fossils and stratigraphy of eastern Mississippi, MBG Bulletin 123 on Oligocene bivalves from the Vicksburg Group, MBG Bulletin 124 on Oligocene gastropods from the Vicksburg Group (Stearns MacNeil senior author), and Circular 4 on Upper Cretaceous vertebrate fossils (Earl Manning senior author). Bulletin 129 on the Upper Cretaceous gastropods of the Coffee Sand is in the works. In addition to these, he has published some 70 articles and abstracts. Many of these articles are published in Mississippi Geology, a journal for which he serves as assistant editor.

David was GCS-SEPM Representative for the 1983 GCAGS Annual Meeting. He served as the GCS-SEPM Business Representative for Mississippi from 1983-1992 and served on the Program Advisory Committee and participated in the 1990 Eleventh Annual Research Conference. David served as both GCS-SEPM Vice Chairman and Technical Program Chairman for the

1992 GCAGS Transactions and Annual Convention in Jackson, Mississippi.

David is a member of SEPM, GCS-SEPM, AAPG, the Paleon-tological Research Institute, The Paleontological Society, the History of Earth Sciences Society, the American Malacological Union, and the California Malacozoological Society. He and his wife Mary live in Hinds County, Mississippi, just north of the Clinton city limits and are active members of Pocahontas Baptist Church.

Michael B. E. Bograd
 Assistant Director
 Mississippi Office of Geology

## 1992 BEST PAPER AWARDS GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES







Dr. George B. Asquith



Gary L. Causey

Dir George D. Hoquitat Garage 2.

First Place awarded to: Kenneth T. Barrow, Dr. George B. Asquith, and Gary L. Causey

For: Shaly Sand Analysis as an Indicator of Hydrocarbon Production Potential in the Olmos Formation, Las Tiendas Trend, South Texas

Kenneth T. Barrow is a geologist on the research staff of The University of Texas at Austin Bureau of Economic Geology. He received a B.S. degree in geology from Oregon State University in 1977 and an M.S. degree in geology from Stanford University in 1983. He is currently a Ph.D. candidate in the Department of Geological Sciences at the University of Texas at Austin.

Prior to joining The University of Texas, Mr. Barrow had ten years industry experience as a Senior Geologist at Chevron, USA and an exploration geologist at Chevron Resources Co. As an economic geologist, he explored for and evaluated precious, base metal, and strategic mineral deposits, primarily in the western United States. As a petroleum geologist, he has exploration and production experience in the Rocky Mountain, Midcontinent, Permian Basin, and Gulf Coast.

Mr. Barrow's research interests focus on the integration of geological, geophysical, geochemical, and pale-ontological data in petroleum exploration and evaluation. Current research projects include the structural history and petroleum geochemistry of the Delaware Basin, hydrocarbon reservior characterization in South Texas, and the application of quantified micropaleontological data to sequence stratigraphic studies in the northern Gulf of Mexico. Mr. Barrow is a member of AAPG, AAAS, SEPM, the Austin Geological Society, and the West Texas Geological Society.

George B. Asquith, Ph.D. Adobe Chair of Petroleum Geology, Professor of Geosciences and director of The Center for Applied Petrophysical Studies Texas Tech geologist ARCO., staff geologist with ALPAR Resources, chief geologist Search Drilling Co., district geologist Pioneer Production Corp., and project leader Mesa Limited Partnership.

Ided Hugoton and West Panceservoirs from the Gulf Coast,

University. B.S. degrees (honors) in geology from Texas Tech University M.S. and Ph.D. University of

Twenty five years of petroleum industry experience that included research

(Madison).

Wisconsin

Industry projects included Hugoton and West Panhandle fields, selected reservoirs from the Gulf Coast, Permian, Alberta, San Juan, Williston, Arkoma and Anadarko basins.

Sixty publications including 5 books in the fields of carbonate and clastic sedimentation, sedimentary petrology, computer geology and petrophysics. "Basic Well Log Analysis for Geologists" won the AAPG award for best book in 1984.

Lecturer and science advisor for the AAPG Basic Well Log Analysis, Carbonate Well Log Analysis and Shaly Sand Well Log Analysis schools. Distinguished Lecturer (1991-1992) SPWLA. Lecturer for the AAPG Subsurface Carbonate Depositional Modeling school (1980-1986).

Research interests include: relationships between petrophysical responses and depositional and/or diagenetic lithofacies, the petrophysical analysis of carbonate and shaly sand reservoirs and the application of computers to petrophysical analysis.

Gary Causey received a Bachelor of Science degree in geology and a minor in computer science from Texas Tech University in 1988. In 1991 he obtained a Master of Science degree in geology from Texas Tech University where he worked as a research assistant under Dr. George Asquith on the State Land Energy Resource Optimization (SLERO) grand administered by the Energy Management Center of the Governor's office, for the State of Texas.

Gary has had exploration and development experience as a summer hire with Tenneco, Oxy, and Unocal. Currently Gary is working as a development geologist with Unocal on the East Texas Asset Team located in Sugar Land, Texas. Current areas of work involve computer mapping, reservoir characterization, and 3-D seismic interpretation of Van Field, Van Zandt County. Texas.





Dr. Raymond A. Levey

Mark A. Sippel

**Second Place awarded to:** Dr. Raymond A. Levey, Mark A. Sippel, Dr. Robert J. Finley and, Dr. Richard P. Langford

For: Stratigraphic Compartmentalization Within Gas Reservoirs: Examples from Fluvial-Deltaic Reservoirs of the Texas Gulf Coast

**Dr. Raymond A. Levey** is a clastic sedimentologist and hydrocarbon resource specialist. He is the Deputy Associate Director for Gas Research at the Bureau of Economic Geology, the University of Texas at Austin. He holds a B.S. degree in geology from the State University of New York at Fredonia, and both a M.S. and Ph.D degree in geological science from the University of South Carolina.

Prior to joining the Bureau in 1990, Dr. Levey was involved with domestic exploration, production and research, evaluating and managing development of oil, gas and coal resources. He spent ten years with various subsidiaries of Shell Oil Company in Houston, Texas. His domestic petroleum resource and geologic research assignments have included stratigraphic analysis of the Gulf of Mexico Basin, Williston and Michigan Basins, Great Basin, Western Interior Basins of Wyoming, Colorado, Utah and New Mexico and the Wyoming, Utah Thrust Belt region. He has been co-instructor for field seminars by the AAPG and Shell Oil Co. head office training. He was project coordinator for research in coal seam geometry and depositional systems for a subsidiary of Union Pacific Resources Corporation. As a member of the U.S.G.S. his research focused on modern fluvial depositional systems and reservoir heterogeneity.

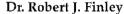
At the Bureau of Economic Geology, Dr. Levey is currently involved in defining additional natural gas resources in the Gulf Coast Basin. He is also investigating tight gas and coal bed methane reservoirs. He is currently the project manager for the Bureau's Secondary Natural Gas Recovery Project known as SGR.

He is co-author of the best paper award for the Energy Minerals Division at the AAPG annual meeting in 1980. He served as chairman for the field trip program of the 1988 annual meeting of the AAPG in Houston, Texas.

Mark A. Sippel is a senior engineer with Research and Engineering Consultants, Inc., Englewood, Colorado. His primary activities involve petroleum reservoir engineering. He holds a B.S. degree in mechanical engineering from South Dakota State University and is a registered professional petroleum engineer in Colorado.

Prior to joining Research and Engineering Consultants in 1990, he was involved with production, exploration and development of oil and gas reservoirs with independent operators in Denver, Colorado and with Texaco in Andrews, Texas. For three years, he was involved in drilling, production and reservoir work for Texaco. In elevent years with Luff Exploration Company, Denver, Mr. Sippel was engineering manager and responsible for all production and reservoir engineering. His production and development experience covers a range of reservoirs in the Permain, Williston, Green River, Uinta,







Dr. Richard P. Langford

Powder River and Denver basins. He has worked also in the Mid-continent areas of Nebraska and Kansas.

His activities have included reservoir engineering studies of gas reservoirs in the Texas Gulf Coast basin with the Bureau of Economic Geology, The University of Texas. He is involved with oil and gas mineral evaluations and is project manager for a U.S. DOE cooperative project for secondary oil recovery in fluvial reservoirs in the Denver basin.

**Robert J. Finley** is an Associate Director of the Bureau of Economic Geology, The University of Texas at Austin, and has been with the Bureau since 1975. His areas of expertise include oil and gas resource assessment and analysis, increased recovery, project direction in energy resources research, and remote sensing.

Dr. Finley has served on the Stanford University Energy Modeling Forum North American Natural Gas Markets assessment and on the National Academy of Sciences Committee on Undiscovered Oil and Gas Resources. He is a member of several committees of the AAPG and is past Chairman of the AAPG Committee on Development Geology. He recently served on the National Petroleum Council's study of the U.S. natural gas resource base and distribution system and is currently serving on the State of Texas Energy Policy Partnership (STEPP) Committee.

Rob Finley has published more than 95 articles, bulletins, and reports. In 1988 he co-directed, with Bill Fisher, a major assessment of the natural gas resources of the United States for the Department of Energy. He directed preparation of, and co-authored, "An Atlas of Major Texas Gas Reservoirs." Most of his recent work has focused on natural gas resources distribution and recovery and on technical issues related to low permeability gas sandstones, incremental recovery from conventional reservoirs, gas reservoir play delineation, and coalbed methane.

Rob Finley has a B.S. from the City University of New York, an M.S. from Syracuse University, and Ph.D. from the University of South Carolina, all in geology.

Richard P. Langford has been a research associate with the Bureau of Economic Geology at the University of Texas for the last 4 years. His primary activities at the Bureau involved stratigraphic correlation, sedimentologic analysis, and geomorphorlogic analysis. He holds a Ph.D. in geology from the University of Utah where he specialized in interpretation of fluvial and eolian depositional environments.

His primary duties on the Secondary Gas Recovery project involved stratigraphic correlation and depositional environmental interpretation of fluvial and deltaic sandstone gas reservoirs in the Vicksburg and Frio Formations on the Texas Gulf Coast. He has specialized in the study of sandstone geometries and the relationships between sandstone deposition and resulting geometry.

He is currently conducting studies of Quaternary and historical deposition and erosion in arid basins of Trans Pecons Texas as part of the site characterization for the Texas Low Level Radioactive Waste Repository.

"Investigation of the hysteresis effect in steam stimulation

methand resources analysis,

Mr. Yeh's research interests have been in hydrocarbon reservoir characterization, black oil and compositional reservoir simulation, investigation of spatial distribution of petrophysical attributes, and three-dimensional stratigraphical modeling. Since joining the U.T. Bureau of Economic Geology he has participated in projects investigating coalbed methane production in the San Juan Basin, coal and coalbed

processes."





Joseph S. Yeh



Dr. J. Ulises Ricov

Formation, Lavaca Bay Field, South Texas

Third Place awarded to: Dr. J. Ulises Ricoy, Joseph S. Yeh, and Dr.

R.P. Major For: Evaluation of Reserve-Growth Potential in Barrier/Strandplain Compartmentalized Reservoirs of the Frio

Dr. J. Ulises Ricoy, a native of Guanajuato, Mexico, conducted the research on which this paper was based while a Research Fellow at The University of Texas at Austin Bureau of Economic Geology. He received a bachelor's degree in petroleum engineering from the Universidad Nacional Autonoma de Mexico in 1971 with a thesis titled "Permeability evaluation through well logs." His undergraduate education was funded by a scholarship from the Instituto Mexicano del Petreleo. He earned a master's degree in geology from The University of Texas at Austin in 1976 with a thesis titled "Depositional systems in the Sparta Formation (Eocene), Gulf Coast Basin of Texas, and a Ph.D. degree in geology, also from The University of Texas at Austin, in 1989 with a thesis titled "Terrigeneous depositional systems in the Mexican Isthmus Basins."

Dr. Ricoy has served as a formation evaluation specialist with the Instituto Mexicano del Petrleo, where he conducted research and authored papers on depositional systems, seismic and well-log stratigraphy, design and well-log and transient pressure digital filters in the context of basin analysis, field development, and reservoir characterization. He has also served as a professor of petroleum geology in the graduate division of the engineering school of the Universidad Nacional Autonoma de Mexico, where he taught graduate and undergraduate courses in subsurface geology and hydrocarbon resources, and designed and established a graduate program in subsurface energy resources exploration.

Since September 1992 he has been an assistant manager of Gerencia de Desarrollo Tecnologico, Subdireccion de Produccion for Pemex Exploracion y Produccion in Mexico City, Mexico, where he is responsible for overseeing the geological aspects of numerous reservoir characterization projects.

Joseph S. Yeh, a native of Taiwan, Republic of China, is a petroleum engineer and geological computer application specialist on the research staff of The University of Texas at Austin Bureau of Economic Geology. He received a B.S. degree in chemistry from Fu-Jen Catholic University in Taiwan, with honors, in 1977. He was a candidate for a Ph.D. degree in Chemistry at The University of Texas at Austin, with a dissertation project titled "Synthetic aspects of iron-carbon chemistry of Fischer Tropsch processes." This research project was terminated upon the death of his supervising professor. Mr. Yeh will receive a M.S. degree in petroleum engineering in 1993, also from The University of Texas at Austin, with a thesis titled

Dr. R.P. Major

and curvature analysis in fracture zones. He co-authored "Geologic and hydrologic characterization of coalbed methane reservoirs, Fruitland Formation, San Juan Basin, Colorado and New Mexico," which won the 1991 best paper award from the Energy Minerals Division of the American Association of

Petroleum Geologists. Mr. Yeh is presently a petroleum engineer responsible for geological computing support for the State Lands Energy Resource Optimization (SLERO) project. His main responsibilities are to collaborate with SLERO researchers using various advanced geological and engineering tools for reservoir characterization studies. These include well testing, three dimensional geological modeling, integrated reservoir flow model simulation, integrated geological database mapping, and log analysis.

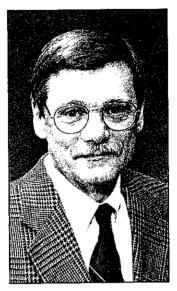
Dr. R.P. Major is a carbonate sedimentology and geochemistry specialist on the research staff of The University of Texas at Austin Bureau of Economic Geology. He holds a B.S. degree in geology from Union College, a M.S. degree in geology from the University of Connecticut, and a Ph.D. degree in geology from Brown University. He served as a National Research Council Postdoctoral Associate at the U.S. Geological Survey, where his research was recongized by an Excellence of Service Award from the U.S. Department of the Interior.

Before joining The University of Texas in 1985, Dr. Major was a Senior Geologist with Amoco Production Company in New Orleans and a professor of geology at the University of Colorado at Denver. At the U.T. Bureau of Economic Geology his research interests have been in carbonate petrology, especially petrographic, geochemical, and stable and radiogenic isotopic aspects of carbonate diagenesis, modern carbonate depositional and diagenetic environments as models for interpretation of ancient carbonate rocks, and facies, stratigraphic, and diagenetic models as predictive strategies for petroleum exploration and production in carbonate reservoirs.

Dr. Major's experience includes projects involving atolls of the western Pacific, the subsurface geology of Texas, rocks and sediments of the Bahamas, dolomite of Bonaire, Netherlands Antilles, and ancient basin deposits of the eastern Transvaal of South Africa. He is presently the principal investigator and project coordinator for the State Lands Energy Resource Optimization (SLERO) project, which is a five-university consortium investigating the distribution of geologic characterization of oil and gas reservoirs on Texas State Lands.

Dr. Major is a member of the editoral boards of the Journal of Sedimentary Petrology and the American Association of Petroleum Geologists Bulletin. He is the immediate Past President of the Austin Geological Society and will be the editor of the 1994 Gulf Coast Association of Geological Societies Transactions.

### 1992 A.I. LEVORSEN MEMORIAL AWARD\*



Dr. Harry H. Roberts

Awarded to: Harry H. Roberts, Douglas J. Cook, and Mark K. Sheedlo

For: Hydrocarbon Seeps of the Louisiana Continental Slope: Seismic Amplitude Signature and Sea Floor Response.

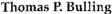
Dr. Harry H. Roberts is currently director of Coastal Studies Institute at Louisiana State University where he began his career in 1969 as an assistant professor. He is recognized both locally and on an international level for his research in the general fields of marine geology and sedimentary processes. He has worked both carbonate and terrigenous clastic depositional systems. Although his research interests during his initial years with CSI focused on understanding the role of physical processes in reef and reef-associated depositional systems, he has recently concentrated his research efforts on deltaic and related continental shelf and slope plus basinal terrigenous clastic environments. He worked on the DSDP Leg 96 Mississippi Fan boring program, has taken an active role in the Gulf of Mexico Shelf-Slope Consortium shelf-edge delta boring project, continues research on the Atchafalaya-Wax Lake delta complex, and most recently has centralized his effort on the northern Gulf of Mexico continental slope with specific interest on the impacts of natural hydrocarbon seeps.

The author of over 150 scientific publications he is an advisory editor for two international scientific journals and serves on national/international scientific steering committees. Dr. Roberts has conducted research in Africa, Australia, Indonesia, South American, Central American, and many sites throughout the Caribbean as well

as in the U.S. Several of his talks and scientific papers have won awards at professional meetings. He also frequently lectures, conducts seminars, and runs field trips for industry and academic institutions, both domestically and in foreign countries, including Australia, Indonesia, Singapore, and Nigeria. Dr. Roberts is a professor in the Department of Oceanography and Coastal Sciences where he regularly teaches and advises graduate students.

## 1992 BEST POSTER AWARDS GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES







Al J. Krecji



William C. Dawson



Donald F. Reaser

First Place awarded to: Thomas P. Bulling and Al J. Krecji

For: Prospect Lucky: Understanding contour anomalies and velocity gradients in offshore Texas.

Thomas P. Bulling is a geologist in the Plio-Pleistocene Exploration group at ARCO Oil and Gas Company in Houston. He began in the Gulf Coast in 1987 and has worked both development and exploration projects. Tom received a BA in geology from LaSalle University in Philadelphia (PA) in 1985 and a MS in geology from Texas Christrian University in Fort Worth (TX) in 1987. During that time he began his career with ARCO in the summer of 1986 in Bakersfield, CA as a summer professional.

Al J. Krejci has 24 years of experience exploring for hydrocarbons. He received a BS in Geophysical Engineering from St. Louis University, St. Louis, MO in 1969. He has worked with the various exploration arms of the Atlantic Richfield Co., mainly in the lower 48 states. Al grew up in St. Louis, and has lived in Lafayette, LA; Dallas, TX; Denver, CO; Bakersfield, CA; and is now residing in the Houston, TX area.

The majority of Al's career has been involved with seismic interpreation and exploration management. Al has prospected in the onshore areas of the Gulf Coast, Rocky Moutains, and the Pacific Northwest, and the offshore areas of California and the Gulf of Mexico. Al is an active member of the SEG, AAPG, HGS, and GSH. His main interests are 3-D, stratigraphic, and subsalt seismic interpretations.

**Second Place awarded to:** William C. Dawson and Donald F. Reaser

For: Significance of Vein-Filling Calcites: Richland Creek Fracture Zone, Lower Austin Chalk (Upper Cretaceous), North Central Texas.

William C. Dawson is a senior research scientist for TEXACO Exploration and Production Technology Department in Houston. He received a B.S. degree in geology from the University of Illinois at Urbana-Champaign in 1974 and a M.S. degree in geology from the University of Texas at Arlington in 1976. From 1976 to 1977 he was a staff geologist for Fossil Petroleum Corporation in Dallas. He worked as an exploration geologist for Eason Oil Company in Oklahoma City from 1977 to 1979. In 1984 he was awarded a Ph.D. degree in geology from the University of Illinois at Urbana-Champaign. Dr. Dawson joined TEXACO's research staff in 1984 where he specializes in the diagenesis of carbonate reservoirs. He is a member of the American Association of Petroleum Geologists. Society of Economic Paleontologists and Mineralogists, and International Association of Sedimentologists and is currently an associate editor of the AAPG Bulletin.

Donald F. (Don) Reaser received a B.S. (1953) and M.S. (1958) in geology from Southern Methodist University and a Ph.D. (1974) in geology from The University of Texas at Austin. Dr. Reaser has conducted extensive field work along the upper Cretaceous outcorp in northeast Texas. His current research is centered on fractures near the site of the Superconducting Super Collider in the Dallas/Fort Worth metroplex. Presently, he is a faculty member at The University of Texas at Arlington.

#### 1992

## BEST PUBLISHED PAPER AWARDS GULF COAST SECTION SOCIETY OF ECONOMIC PALEONTOLOGISTS AND MINERALOGISTS



**Ervin Otvos** 



Wade E. Howat

First Place awarded to: Ervin Otvos and Wade E. Howat

For: Late Quaternary Coastal Units and Marine Cycles: Correlations between Northern Gulf Sectors.

Ervin Otvos has been conducting coastal research in the five Gulf states as the Head of Gulf Coast Research Laboratory's Geology Section (GCRL) in Ocean Springs, Mississippi since 1970. GCRL, the state's research-teaching center for marine/coastal sciences, started operation as a small field station in 1948.

Dr. Otvos is focusing on the Quaternary development and the identification/Gulfwide correlation of Pleistocene-Holocene litho-and morphostratigraphic units. He has authored more than seventy papers, guidebooks, invited book chapters and encyclopedia articles. These publications involved beach processes, barrier island and lagoon genesis, chenier and pseudokarst nomenclature, Neogene and Late Quaternary stratigraphy - history of coastal plain development. Dr. Otvos also published three papers on the 1956 revolution in his native Hungary. As Adjunct Professor at the Center for Marine Science, Stennis Space Center and the University of Southern Mississippi's Geology Department, he teaches classes in coastal marine geology and other fields, and is involved in various interdisciplinary environmental studies.

In 1958, Dr. Otvos received his geology diploma from the University of Science, Budapest, and worked as the geologist of a mineral mining company until 1960. Shortly after arriving in this country, he earned a masters degree at Yale University and in 1964, a Ph.D. from the University of Massachusetts, Amherst. Following nearly four years with BP Canada and Mobil Oil, between 1968-71, he taught at Louisiana State University in New Orleans. Dr. Otvos is a Fellow of the Geological Society of America; life member of the Mississippi Academy of Sciences, past Chairman of it's Geology-Geography Division; member of the INQUA Coastal Subcommittee on the Americas; and 1981 recipient of the Henry S. Kaminski Memorial Award of the Society of Sigma Xi. As expert witness, he also testified in front of a US Supreme Court Special Master in the State's lawsuit concerning Federal jurisdiction over the Mississippi Sound.

Wade E. Howat joined the GCRL in 1971. He supervises the Sedimentary Laboratory where he manages drilling and laboratory activities. Mr. Howat undertakes microfossil analyses for the determination of depositional environments and stratigraphic relationships of coastal units. His research interests include micropaleontology and Quaternary stratigraphy of the northern Gulf of Mexico.

Mr. Howat holds a B.S. degree in Geology from the University of New Orleans (1971) and a B.S. degree in General Studies (with an emphasis in civil engineering and economics) from Louisiana State University, Baton Rouge (1964).



Danny W. Harrelson



James A. Saunders



William F. Tanner

Second Place awarded to: Danny W. Harrelson and James A. Saunders

For: Age and Petrology of The Jackson Dome Igneous-Volcanic Complex, Mississippi: Implications for The Tectonic History of The Mississippi Salt Dome Basin.

Danny W. Harrelson received his B.S. (1976) and M.S. (1982) in Geology from the University of Southern Mississippi, Hattiesburg, Ms. In 1974, he worked for the Oil Development Company of Texas, Amarillo, Texas, prospecting for copper sulfides in southeastern Alaska. While completing his M.S. thesis in igneous petrography at U.S.M., he worked as a ground water geologist for the Mississippi Geological Survey from 1977-1982, rising to Chief of the ground water section. From 1982-1983, he was employed as an exploration geologist for Placid Oil Company working the southeastern United States and the Gulf of Mexico. In 1983, Danny joined the U.S. Army Corps of Engineers as a geologist while working part time as a consulting petrographer for Location Sample Service in Jackson, Ms. In 1991, Danny transferred to Waterways Experiment Station, Vicksburg, Ms. where he is currently employed as a research geologist.

Mr. Harrelson has authored or co-authored some 45 papers and abstracts on a variety of geologic subjects and published in numerous professional journals.

James A. Saunders is an Associate Professor of Geology at Auburn University in Auburn, Alabama, where he teaches courses in geochemistry, economic geology, and hydrogeology. Saunders received a Ph.D. in Geology from the Colorado School of Mines, and M.S. and B.S. degrees in Geology from the University of Georgia and Auburn University, respectively. He conducts research on water-rock interactions involving sedimentary brines and salt-dome cap rocks, shallow volcanic-hosted gold deposits in the western US and groundwater geochemistry. Saunders has also taught at Boise State University (Idaho) and the University of Mississippi (1986-1991), worked for the USGS Branch of Geochemistry in Denver from 1984-1986, and was a Project Geologist for Law Engineering in suburban Atlanta from 1980-1983.

Third Place awarded to: William F. Tanner

For: Oversize Oxbows: Tentative Dates, Effects, and Risks.

William F. Tanner is a professor at Florida State University, Tallahassee, Fla. He is an instructor in Subsurface Geology, Sedimentary Petrology (graduate), Near-Shore Marine, Shoreline Geology, Granulometric Analysis and Basin Analysis. Specialties include sedimentology, paleogeography, paleoclimatology, basin analysis, granulometry, geological statistics and stratigraphy (including numerical log analysis of lithology, porosity and fluid content from geophysical logs). Primary field projects between 1989-92 involved the following localities: Skagen, Jerup and Tversted, Denmark; Heiligenhafen, Schleimunde, Geltinger Birck, and the Darss, Germany. His secondary projects (1990-93) were in Louisiana (cheniers), West Florida (storm surge deposits on the coast), Alabama and Oklahoma (Paleozoic coastal sandstones), and Central America (beach ridges).

Original research includes the following topics: grain-size suite statistics, transport agency and energy level; granulometric parameters versus surfzone wave energy and sea level change; stability and use of the fifth and sixth grain-size moment measures (about the mean); detailed history of sea level changes over the latest 11,000 years; origin of barrier islands and the beach ridge-and-swale system; and computer programs to evaluate wave energy dissipation, sediment transport and beach erosion.

Tanner has published over 365 papers.

Edward C. Roy, Jr. William C. Ward E. G. (Jerry) Wermund

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