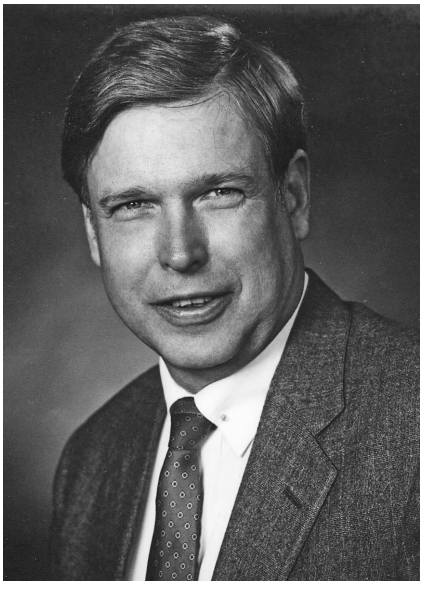
AAPG Honorees, 2008



FRED F. MEISSNER
Sidney Powers Memorial Award (Posthumously)

Citation—To Fred F. Meissner, distinguished scientist, remarkable educator, admired mentor to thousands of students and associates, and above all, a petroleum geologist who has repeatedly demonstrated to our profession that efficient exploration for hydrocarbons requires the proper melding of geology, mathematics, physics, and organic chemistry.

Fred F. Meissner was born in Denver, Colorado, in 1931, and for all his national and international travel and work assignments, he remained a dedicated Rocky Mountain Man.

Fred became an Eagle Scout in high school, and attended the Colorado School of Mines, winning the Shell Fellowship and receiving his M.S. degree in geological engineering in 1954. His ROTC commission led him into service in the Corps of Engineers during the Korean War. After finishing his tour, he joined Shell as a geologist in the Roswell, New Mexico office.

Two research assignments at Shell's Bellaire Laboratory provided a technical springboard for much of Fred's impressive later accomplishments. His first research assignment was as a protégé of Shell's renowned scientist, M. King Hubbert, then developing his fundamental contributions on hydrodynamics, pore pressure, and fracturing. In 1967, Fred returned to the Lab as a valued contributor to Shell's pioneering research project on "Origin and Migration of Oil".

His engineering training and his research assignments allowed Fred to provide quantitative insights into the fundamental processes by which oil and gas formed, migrated, and accumulated.

Fred was delighted to return to the Rocky Mountains after leaving the Laboratory, so that he could resume his passion for finding new oil and gas fields, while living in Denver

Unfortunately for Shell, the consolidation of all Shell's outlying offices into the new campus in west Houston in 1973 caused a number of Shell's outstanding people to prefer to remain in current locations, rather than accept a transfer. Very reluctantly, Fred decided to resign from Shell so that he and his family could continue to enjoy his beloved Rocky Mountains.

Of course, Fred's abilities and stature in the industry were well known and he began a second career as a very successful exploration leader for Trend Exploration, for its successor, Filon, for Webb Resources, and Bird Oil.

In 1986, he began his third career as a sought-after independent consultant, as an associate with Thomasson Associates, and as a renowned teacher.

Fred was a brilliant teacher, held in respect and awe by his students. Fred received numerous honors from his university and from professional societies, including the prestigious Honorary Member Award from the AAPG in 2001. Fred especially valued his selection as the AAPG Grover Murray Distinguished Educator, in 2006. Fred always identified himself as a petroleum geologist, and he was delighted that his long service as a mentor and professor had also been recognized.

Fred authored more than 45 publications, papers, and poster presentations. A brief discussion of just three of these papers should illustrate the intellectual power and innovations Fred brought to modern exploration.

In 1978, his paper on the petroleum geology of the Bakken formation provided fundamental insight into the consequences of the maturation of the Bakken source rock as it became a pressured, fractured oil reservoir. Hundreds, if not thousands of wells, were subsequently drilled by the industry in its exploitation of Fred's concept that a thermally mature oil shale may become an attractive oil reservoir.

Since 1987, his paper on "Mechanism and Patterns of Gas Generation, Storage, Migration, and Accumulations Associated with

Coal Measures" continues to guide explorers in understanding the principles needed to focus their search and development for much of the coalbed methane in the United States.

In 2001, Fred, with M. Ray Thomasson, published a landmark paper in AAPG Memoir 74, "Exploration Opportunities in the Greater Rocky Mountain Region," which has become required reading for any explorationist who needs to see the proper integration of source rock, reservoir, trap, and seal information in evaluation of unconventional resources.

In one of my phone calls to Fred after learning of his fight with cancer, the call was intercepted by Jackie, Fred's beloved wife, who warned me that the doctor had given Fred a very short time to live, although Fred was determined to avoid sympathy, and to continue his life as always. In that vein, Fred and I continued our plans for a joint publication on changes in fracturability of gas shale reservoirs as depletion creates widely different pore pressures in various parts of the shale reservoir; I suspect both of us realized we would never finish the paper.

The Sydney Powers Award was announced a few weeks before his passing; Fred, with typical modesty, personally expressed his appreciation for the honor and recognition bestowed by his peers.

Fred had led a field trip to Leadville, Colorado, just weeks before his gentle death at home in Denver, on September 18, 2007. He was 75.

We'll see you later, friend, …I hear the outcrops are all in fresh road-cuts, and you can collect diamonds as big as walnuts.

Marlan W. Downey

Response

Jackie Meissner, Fred's wife, asked that I prepare a response for Fred's acceptance of this award. She had also asked that I, along with others, speak at Fred's funeral. At the funeral I told how Fred had come into my office several months prior and sat down and said, "Ray, I need to tell you something. I've learned that my illness is terminal." I immediately started saying how sorry I was to learn about it and he waved his hand and said, "Ray, I have no regrets." He then went on to say how privileged he had been in his life – the fabulous people he had worked with, the fabulous opportunities he had been given, and the tremendous experiences he had over his professional career and personal life. He expressed no concern except for those around him.

In discussions with Jackie and with friends like Bob Weimer, Marlan Downey, Larry Meckel, Ed Dolly, and others we came up with these words that Fred might have said. Most of them are previous quotes from Fred.

"To say I am amazed and humbled by this award is a gross understatement. I want to thank AAPG and all those involved in my selection. But I want to thank so many other people also. I hope to do that with this response.

"To begin with I want to thank Marlan Downey for taking the time to write my biography. He has, like Bob Weimer who wrote my biography for Honorary Membership, done a masterful job.

"I was overcome with amazement when President Will Green called to inform me of this award. I most humbly accept it. I have tried throughout my checkered career simply to be the best professional geologist that I could be. Frankly, I have never ever really had a job since practicing geology has never seemed like work. I truly have loved all of what I've done.

"As I look back at my life I believe I was born to be a geologist. I was fortunate in being a child of the west. My Utah grandparents were pioneer homemakers, miners, merchants, railroad people, and investors in natural resource businesses. My mother was a teacher and homemaker. My father was a civil engineer. They were unusually good and nurturing parents. Much of my early youth was spent camping, hiking, skiing, fishing, and hunting in the Colorado Rocky Mountains. I wanted to work in the outdoors when I grew up.

"At the age of nine years, when I saw my first beautifully colored and crystallized mineral specimen on a Utah mine dump, I knew that I wanted to do something in later life that was connected to rocks and minerals. I have been an avid mineral specimen collector ever since. My grandparents died early and an elderly childless couple that lived close to my parents took their place. My surrogate grandfather was a true pioneer.

"He had been a homesteader, prospector, placer miner, and country lawyer. He was also an outdoorsman and amateur mineralogist. His interests and sense of values greatly affected my later life.

"My life was also greatly influenced by my time becoming an Eagle Scout and as a Scout Master for 17 years. The Boy Scout pledge is not a bad guide to live by.

"I was fortunate to have attended Denver Public Schools through twelfth grade. At the time, this school system was arguably the finest in the United States. It gave

me an excellent background for attending the Colorado School of Mines (CSM), where I enrolled in their Department of Geology and Geological Engineering.

"At Mines I was strongly influenced by some great teachers and mentors. These included Dr. Francis Van Tuyl, Dr. Leslie LeRoy, Paul Keating, Warren Mateer, and especially Dr. Truman Kuhn. Bob Weimer and John Haun have been both great mentors and friends. I want to thank them all.

"My undergraduate courses at CSM qualified me as an engineer, and I believe this background has been useful to me. Although the applied geology courses I took qualified me as both a mining and petroleum geologist, I was probably more interested in pursuing the mining option. While in graduate school, I continued taking both mining and petroleum-oriented courses to gain eventual exposure to the widest range of future employment opportunities. My thesis concerned a mining property that contained a supergene replacement zinc ore deposit in a karsted limestone. At this point I felt I was destined to be a mining geologist; however, I attended graduate school on a Shell Oil Company fellowship and they offered me a job. I ended up going to work for them as a petroleum exploration geologist. The Shell recruiter explained to me that they were more interested in a solid background in scientific fundamentals and general geology than any specific specialty.

"I have since learned that I shared this 'hard rock' background, and early career with Shell Oil Company with another recipient of this award – Bob Sneider. Bob was someone for whom I had the highest respect.

"Between graduate school and Shell I spent two years in Alaska with the Sixth Army Corp of Engineers.

"Shell was (and probably still is) a great company to work with. Although I was exposed to a wide variety of jobs in a number of areas and basins, there were a few specific assignments that greatly influenced my career. I was sent to a three-month training course that included field studies of modern and ancient carbonate and clastic sedimentary rocks and environments. I learned about groundwater flow and its influence on petroleum migration and accumulation while working on a special study assignment with M. King Hubbert. I studied and did research on petroleum source rocks and migration mechanisms during a one-year assignment at Shell Development Company. I had tremendous opportunities with Shell and was able to successfully apply the hydrodynamics I learned from Hubbert and discovered three fields with tilted oil/water contacts in the Delaware Basin in west Texas.

"Shell left me in 1972 by moving its offices to Houston. Many like me left Shell at that time in order to stay in Denver. I worked first with Trend Minerals, then Filon Exploration, then Webb Resources and finally Bird Oil before becoming an independent. Most recently I am involved in a giant project with Thomasson Partner Associates and my old company, Shell Oil Company. This one is in Utah and Shell is the operator.

"I am neither an academic nor a professional educator. All of my professional life, I have simply been a practicing petroleum geologist. As such I learned a lot of things that were in books and also a lot of things that were not. I felt it was a worthwhile service to science and the profession to pass on some of my acquired knowledge. I taught the advanced petroleum geology course at CSM for 18 years. My students and the people I have met as an educator have always been an important part of my life. I probably learned more from them than they did from me. I sincerely hope that this has been of value.

"Although my students were exposed to the conventional dogma describing the science of petroleum geology, I encouraged them to question it and use their imaginations to come up with different ideas. My fondest hope is that some of them used these ideas to find and exploit some large oil and gas fields. "The profession has been good to me and I have tried to return something back to it through sharing knowledge, through serving on committees, and as an officer of various organizations I have belonged to. One of my great joys is the 75 year-old monthly Geologic Study Group in Denver. This is an opportunity to share concepts and information with one's peers and to get their criticisms.

"I joined the AAPG in 1954 while I was in graduate school. Membership has been an important part of my career. The organization's various publications, technical meetings, continuing education courses, and field trips have provided me with knowledge and skills that I have used to build upon. Membership has also allowed me to meet people and participate in enjoyable social activities.

"Many of you know my love of fly fishing and for what it's worth I would like to pass on to the younger explorationists coming up

through the ranks a bit of philosophy: Petroleum geology is a science, and the application of petroleum geology is an art form. Just as in fly-fishing, you have to have the right equipment–that's the science. But to be successful you have to think like a fish–that's the art form. To be successful at finding oil and gas you have to think like a bubble of oil and gas. Where and how was it matured, how did it travel through the rocks and why and where was the logical place for it to end up.

"I am grateful for the many professional honors and awards I have received but the person who deserves and gets my greatest thanks is my wife Jackie. I have been blessed with a loving wife and a loving family of three children and eight grandchildren. They have tolerated my peculiarities and I love them all.

"Thanks again to this wonderful organization for this great honor you have bestowed on me."

M. Ray Thomasson

JAMES A. GIBBS
Michel T. Halbouty Outstanding Leadership Award

Citation—To James A. Gibbs, for his robust energy and focused enthusiasm to his profession and community; for his outstanding and dedicated leadership to the AAPG and other professional institutions; for his commitment to support and improve geological science education at all levels; and for his continuing efforts to promote the expansion of professional career opportunities in the geosciences.

Jim has enjoyed a long and successful career as a geologist involved in petroleum exploration and production, corporate management, and in dedicated leadership to his profession, his community, and his church.

Jim was born in Wichita Falls, Texas, graduated from high school in Dallas, and enrolled at the University of Oklahoma in 1953. Upon graduation, he served two years in the U.S. Naval Reserve as a lieutenant and communications officer aboard the carrier *USS Intrepid*. After completion of naval service, Jim continued his education attending graduate schools at The University of Texas and the University of Oklahoma, where he received a master's degree in geology.

Jim's earliest oil field employment was in his undergraduate years with Atlantic Refining Company. He worked summers on seismic crews in Wyoming and Montana, and on surface mapping crews in New Mexico and Colorado.

Following graduation, Jim was employed by the California Company (Chevron/Texaco) and assigned to the Gulf Coast District in New Orleans, and later Lafayette. In 1964, Jim decided to initiate his career as an independent and opened an office in Dallas as a consulting geologist and independent oil and gas producer. He soon founded Petroleum Resources, Inc. as an exploration company, later selling his interest to his partner. Prior to founding Five States Energy Company LLC in 1984, Jim served as the exploration manager for Petrus Operating Company (1975–1978), Cornell Oil Company (1978–1981), and Lyco Energy Corporation (1981–1983). During his tenures as an independent he initiated drilling prospects, purchased and sold oil and gas leases, operated wells, and participated in drilling more than 600 wells, primarily in Texas, Louisiana and Oklahoma. Today, Jim serves as Chairman of Five States Energy Company, LLC, a successful entity which forms and manages investment partnerships. Corporate activities include project financing, property acquisitions and leasehold development.

Jim is not only an active member of multiple professional

organizations, but is also a devout contributor to the improvement and well-being of those organizations. He joined the AAPG in 1957, and during his fifty-plus year membership has served on a host of committees and councils, chairing several. He has twice been a member of AAPG's Executive Committee, including a term as Association Secretary (1983–1985) and another as President (1990–1991).

He has been a member of the AAPG Foundation Trustee Associates since 1979, and served a term as chairman. He is currently one of the six Foundation Trustees, a position to which he was elected in 1999. As a trustee he proposed the establishment of named Public Service funds, which have proven attractive to donors.

Jim became a member of the Dallas Geological Society (DGS) soon after returning to Dallas in 1964. It was a quiescent period of petroleum activity at the time, and many exploration companies were closing their doors and destroying files and data. Jim was instrumental in founding the Geological Information Library of Dallas (GILD) to collect, organize, catalog, and make available to the public much data which had theretofore been proprietary. GILD later became an affiliate division of The University of Texas at Dallas. Preserving geological and geophysical data became one of Jim's career-long priorities.

Jim was elected president of the DGS in 1975. One of his initiatives was to reinstate society field trips, an activity that had become moribund during previous years. That year's railroad trip through Mexico from El Paso to Los Mochis rekindled the society's interest in planning future trips.

Jim was selected AAPG representative to the American Geological Institute's (AGI) Member Society Council in 1991. When AGI established its Government Affairs Program, Jim was elected chairman. During the five year period Jim served on the committee, it initiated publication of a series of position papers, covering a broad range of public affair issues about which AGI member organizations share consensus views. The series has since been expanded to include additional papers. They allow AGI to respond rapidly to policy queries from legislators, the press, or the public. The committee also recommended to the AGI Foundation that funding be obtained for an endowment to permanently underwrite a congressional fellows program, ultimately resulting in the establishment of the William L. Fisher Congressional Geoscience Fellowship.

As the initial chairman of AGI's National Geological Data Repository Project, Jim and his committee worked to preserve geological and geophysical data and core that were in danger of being discarded as a result of corporate mergers and acquisitions. Not everything could be saved, but at least in part through the efforts of the Repository Project, several large corporate core repositories were assigned to public institutions.

Jim is well known at several universities for his support of university and student programs. For the University of Oklahoma, he is one of the founders of the Sarkeys Energy Center and a guiding force behind the $7.5 million "Second Century Plan" for the School of Geology and Geophysics. He has given long and diligent service to the SGG's Alumni Advisory council, serving a term as chairman of the Council. In 1996, Jim was a recipient of the Regents Alumni Award presented each year to honor alumni and friends for exceptional dedication and service to the University of Oklahoma. Jim has also served on several presidential appointed faculty search committees, and helped jump start the SGG's exquisite mineral display by donating specimens from his personal collection. Most recently Jim initiated the Everett L. DeGolyer scholarships, awarded each year to two outstanding graduate students, one in the geosciences, the other in the history of science.

Southern Methodist University has also benefited from Jim's talents where he serves as a Trustee of the Institute for the Study of Earth and Man, and a member of the Board of Dedman College. At University of Texas at Austin, Jim is a member of the Advisory Council of the Jackson School of Geosciences and has served on the Advisory Board of the Texas Bureau of Economic Geology. At Brookhaven Community College in Dallas, he has been an enthusiastic supporter of the Ellison Miles Geological Institute since its establishment, especially the summer programs for high school science teachers.

On several occasions he spoke before the Texas State Board of Education in support of policy to allow Texas public schools to offer four years of science in high schools in the Recommended or Distinguished Plans. By a slim margin, the board voted in favor of the program and now allows schools to include a course which includes earth science as one of the allowed curriculum components.

Jim has long been interested in helping geology graduates to obtain professional employment, and his door is always open to those seeking his counsel. For 10 years he was a member of the AAPG Visiting Geologist Program, speaking to students at various universities about employment opportunities in the geosciences, within or outside the petroleum industry. He is the author of *Finding Work as a Petroleum Geologist: Hints for the Jobseeker* (1985), *and Becoming an Independent Geologist: Thriving in Good Times and Bad* (1999), both published by AAPG.

In addition to the activities mentioned, Jim has been a member of the National Petroleum Council since 1992, and currently serves on the boards of Texas Alliance of Energy Producers, Highland Park Education Foundation, C.C. Young Retirement Community Foundation, and the foundation board of his local church. He was a founding board member of Believe and Achieve, a program of Dallas' Trinity River Mission, designed to provide supplementary college scholarship funds to children in a low-income community.

Many organizations have recognized Jim's active participation and leadership. He has been awarded Honorary Membership by the AAPG, the Dallas Geological Society, and the national Society of Independent Professional Earth Scientists. The AGI conferred the William B. Heroy Outstanding Service Award on Jim in 1994.

I am continually impressed with his strong commitment to serve, his encouragement to others to always aim high in setting priorities, and his diligence in attaining lofty goals. I am further impressed by his focused energy, astute business acumen, dedicated service and generosity to his profession, academia, church and community; and particularly, by his willingness to provide assistance, both advisory and financial, to his fellow geologists by supporting their ideas and participating in their drilling prospects.

Jim is truly a worthy recipient of the Michael T. Halbouty Outstanding Leadership Award.

Thomas Mairs

Response

I am greatly honored to be selected as a recipient of the Michel T. Halbouty Outstanding Leadership Award, and wish to thank the selection committee for their kind and generous consideration of me for this honor.

I also wish to thank my long term, deeply loved and revered close associate, wellsite partner, hunting companion, and far-too-young-to-leave-our-presence biographer, Tom Mairs. I had asked Tom to serve as biographer only days prior to either of us learning that his doctors would soon commit him to hospice care. After he informed me of their decision, I suggested that I ask another to serve as biographer. However, Tom insisted that he wanted to continue to work on the citation, and for that I shall always be grateful.

I am very pleased to have my name associated with that of Halbouty. Mike was an icon, a monumental figure who exemplified the principles of leadership. I greatly admired his ability to present his ideas with eloquence, clarity and conviction, and I enjoyed our infrequent visits together. There were several years during which Mike and I spent hours trying to sell drilling prospects to each other. However, Mike usually didn't like mine, and I couldn't afford his. But we always had fun talking about them.

I would be remiss if I didn't mention the contributions of a few others who have been instrumental in making it possible for me to receive this award. One is my father, James F. Gibbs, the second in the line of three generations of prospector-geologists. Dad ignited my early oil industry interest by taking me along on his frequent rig-sites visits when I was still too young to stay away from the mud-pits. On several occasions it was only his skill in reading soft-sediment ripple marks that allowed me to be retrieved alive. In those days, many wells were being drilled around Wichita Falls, and almost all seemed to be successful. I decided at a young age that the oil business would be a fun and apparently easy way to make a living.

From my Bible-toting mother I learned that no bad deed ever goes unpunished, and that if there's a heaven one has to pay a heavy price to get there. She thought that there must be some divine purpose for everyone on earth, and often ladled out terse admonitions to "participate fully in life, work hard, make good use of time, help others, and don't let the devil catch your coattails."

I'll also mention Dr. A.J. Williams, the person who actually set my career course toward geology. During my senior year in high school, my father took me on several college visits. At OU, we met with Dr. Williams, OU's dean of the College of Arts and Sciences. When asked his opinion as to whether geology or petroleum engineering would be a better

choice as a career goal, he immediately responded, "Geology! Geologists get overrides. Who ever heard of an engineer getting an override?" I had no idea what an override was, but if geologists got them and engineers didn't I thought it better to become a geologist.

I'll admit that luck has played a dominant role during my career. I was fortunate to graduate during a time when companies were hiring and job offers were plentiful. I was hired by The California Company, or "Calco", one of the Standard of California subsidiaries, and sent to New Orleans to work as a development geologist.

Calco was a latecomer to south Louisiana, having been involved most of the years since its founding with exploration in California, the Rocky Mountains, Texas and elsewhere. However, Calco's discovery of the half-billion barrel Bay Marchand field in the Gulf in 1949 strongly stimulated interest in the area and created an environment of enthusiasm and growth. By the time I arrived at their offices in Harvey, Louisiana, I found myself already months behind in the assigned work. But by another stroke of good fortune, my office was adjacent to that of the late Dr. Arthur Meyerhoff, who mentored me through a year-long crash course in south Louisiana geology.

When I moved to Dallas in 1964 to open an office as an independent, major companies were selling producing properties and moving their district offices elsewhere. Needing a source of sustaining income, I began buying stripper oil properties. With the price of oil at $3 a barrel and natural gas at 12 cents per thousand cubic feet (mcf), and few other competitor bidders, I was able to acquire a handful of properties that I believed could be operated for several years before depletion. The subsequent unforeseen increases in commodity prices have allowed many of the properties to continue to produce profitably far longer than I had anticipated.

I joined AAPG in 1957, as soon after graduation as possible, but did not become truly involved in Association activities until I became an independent. Then, the benefits of an organization that provided opportunities for continuing education and introduction to a professional peer group became obvious. The many friendships, personal associations and business contacts that have resulted through my involvement in AAPG have been invaluable, and have been the source of much happiness and satisfaction. I am truly grateful for the role that AAPG has played in my life.

I also owe a great debt of gratitude to my two business partners of more than two decades, my good friend, Don Malouf, who initially encouraged me to establish Five States as a business entity, and Arthur Budge, Jr., a financial guru who now serves as president of the company. Without their support and the other loyal and professional members of our staff, I'd never have had the available time to travel throughout the world and to participate in the number of extracurricular activities that I've so enjoyed.

Finally, I'd like to acknowledge the contributions of my wife, Judy. Without her early willingness to live on short rations, her paychecks during several years as a sixth grade teacher, and her encouragement for me to stay "unemployed", (as her father regarded my employment status), I'd never made it as an independent, and certainly would not be here today as the recipient of the Halbouty Award.

I will always treasure this honor, and the memories of those with whom I have had the privilege of working with and for, through these many years. Thank you all so very much.

James A. Gibbs

GEORGE EYNON
Honorary Member

Citation—To George Eynon, in recognition of his significant contribution to the science and profession of petroleum geology, his selfless service to AAPG, and his leadership and friendship to colleagues worldwide.

George was born in London, England in 1948 and grew up in suburban northwest London.

George received his B.Sc. from the University of London in 1969 and was a high school teacher in London before pursuing his M.Sc. at McMaster University in Hamilton, Ontario, Canada, which he received in 1972. George was awarded the Canadian Society of Petroleum Geologists (CSPG) M.Sc. graduate thesis award for his dissertation which began a career-long relationship with the CSPG. George has also attended MIT's Sloan School of Management Senior Executive Program. Upon graduation from McMaster, George moved to Calgary, Alberta.

After arriving in Calgary, George met Joyce and they were married (very) shortly thereafter. Joyce—"his muse"—is a lifelong educator, now preparing high school leavers for the real world. George and Joyce are the proud parents of two daughters who were both born in Chicago. Tirian (whom George describes as having more people skills than he will ever have) resides in Calgary, and Tamsyn (with her ex-USMC officer husband, Matthew) live in Denver, where she is a forensic scientist with one of the police departments and he attends law school.

George began his career at Amoco Canada Petroleum where he worked for eight years highlighted by postings in Chicago (twice) and Stavanger, Norway, in increasingly senior roles. In 1980, George left Amoco to become exploration manager at Paramount Resources in Calgary. Following two years at Paramount, George returned to Norway as general manager for Superior Oil's Norwegian and Danish subsidiaries. In 1984, George joined Suncor, returning to Calgary following Mobil's purchase of Superior. George worked in strategic planning and economics roles at Suncor prior to becoming vice president of exploration in 1987. In 1989, George became vice president of worldwide exploration for Bow Valley Industries prior to becoming vice president of Canadian Operations. George's career in energy and management consulting began with the formation of GEOS Energy Consulting where he focused on domestic and international exploration and development projects, management training, and operations management. George helped establish SMI Oil and Gas Inc. in 1993 and was president and CEO until a merger in 1996. In 1997, George became vice president of E&P services for Ziff Energy. From 1998 to 2004, George worked with Cambridge Energy Research Associates prior to joining the Canadian Energy Research Institute where he has held the position of senior director of research and is currently the vice president of business development and external relations. George is responsible for marketing CERI's research projects, managing their conference program and training initiatives, building and maintaining relations with CERI's member organizations and developing relationships with the media where he is a frequent guest contributor to local and national radio, television, and newspapers. George maintains an active role in research at CERI where his primary interest is in the North American gas market. George also sits on the Board of Directors of Derek Oil & Gas Corporation.

George has always had a keen interest in our science and has published and presented papers as well as chaired sessions on a variety of technical, commercial and professional topics throughout his career. Areas of interest include fluvial sedimentology, geochemistry and basin modeling, reservoirs of the North Sea, field case histories, dipmeter analysis, petroleum industry trends and development of Canada's northern gas resources.

George has been a mentor and leader in the CSPG and AAPG throughout his career. An active member of CSPG since he joined the industry 35 years ago, his volunteer highlights include being on the editorial committee of "Oil & Gas Pools of Canada", vice-chair and technical program chair of the CSPG's 1986 annual convention "Reserves Canada 21", a member of the Medal of Merit selection committee, a member of the Environmental Geology Division's steering committee as well as being a frequent lecturer in the Visiting Petroleum Geologist Program. From 1994 to 1997, George served as the Society's vice president, president and past president. His service to the CSPG has been recognized by being awarded the prestigious Tracks Award in 1987 and President's Award in 1993.

George has been an active member of the AAPG since 1990 and was a charter member of the Division of Environmental Geosciences. George is also a Certified Petroleum Geologist and was the International Councilor for the Division of Professional Affairs from 2004–2005. George was chairman of the AAPG's 1992 Annual Convention in Calgary and represented Canada Region on the Advisory Council from 1999–2002. A three-term delegate, George has served on and chaired numerous committees within the House culminating with his election to chair-elect and chairman of the House in 2003–2004. George was

also a candidate for vice president of AAPG in 1996–1997. George's service to AAPG has been recognized by being awarded a Certificate of Merit in 1992, the AAPG's Distinguished Service Award in 1996 and House of Delegate's Recognition of Service Award in 2004.

Since 1974, George has been a registered Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta and sat on APEGGA's Practice Review Board. An advocate of our industry's outreach to the public, George has volunteered on several industry associations including the Petroleum Communications Foundation. George has also been active in his community as a business consultant to Junior Achievement.

In his spare time, George is an avid golfer and member of Calgary's Pinebrook Golf & Country Club. Drawing and painting have been a lifelong passion of George's and in 2007 he had the first public exhibition and sale of his watercolors in Calgary. As one would suspect, much of his inspiration comes from geology and the landscape.

I have had the benefit of several mentors throughout my life, personally and professionally, and I would include George in both categories. I'm often struck by the parallels between George's career and mine, some by coincidence and some I must admit by design! I'm deeply honored that George asked me to be his biographer and hope that I can follow his legacy of achievement and service to his science, industry, and profession.

Martin D. "Marty" Hewitt

DONALD W. LEWIS
Honorary Member

Citation—To Donald W. Lewis, a strong contributor in the worldwide search for oil, unselfish leader in services to the AAPG, and major participant in improving K-12 education and the recognition of outstanding teachers.

Donald W. Lewis was born in Los Angeles in 1934 and lived his early life atop the large Cheviot Hills oil field, perhaps a precursor of a long and successful career as an outstanding oil finder. As a boy, Don took a strong interest in the outdoors, the sciences and the pursuit of an excellent education. Don graduated from Caltech in 1956 with a B.S. in geology and in 1959 from Northwestern University with an M.S. in geology. Summer jobs with Mobil in Venezuela and Pure Oil Company in Amarillo confirmed his interest in the oil industry and from graduate school he went to work in Utah for Western Operations, a subsidiary of what was then called the Standard Oil Company of California, now Chevron Corporation.

Don had numerous assignments and positions throughout the world during his 37 years with Chevron from the years 1958 to 1995 when he retired as Chevron Corporation chief geologist. Don worked for Chevron in various West Coast assignments for 14 years, followed by major foreign assignments in Indonesia and Australia. In 1973, he moved his young family to Perth, Australia, where he was district superintendent of the prolific Carnarvon basin for Wapet at the time when the supergiant Gorgon field was first being mapped. In 1975, he transferred to Jakarta, Indonesia as exploration manager for Amoseas Indonesia, a joint venture exploration operation between Chevron and Texaco.

After meeting at Northwestern, Don and Sue Lewis were married in 1959. It is interesting to note that the love of foreign work and travel was obviously passed on to their two children, David and Charles, who lived and worked in Asia for a significant period of their careers and married into Pacific region families.

On return to the U.S. in 1978, Don was assistant to the exploration vice president of Chevron's Western Region, then, after a stint on the corporation planning staff, successively became exploration manager for Chevron Overseas Asia-Pacific and European Regions and general manager, exploration, Chevron USA Western Region. By 1990, Don was well prepared for the role of Chevron's Corporate Chief Geologist.

Within Chevron, the corporate chief geologist was the closest advisor to the vice president of worldwide exploration and production and was closely involved with all geoscientists and exploration

managers in all their operations. His breadth of knowledge and experience in worldwide geology made Don an important contributor to both operations and exploration research. Don played a lead role in the evaluation of opportunities and personnel. His advice was recognized for both its objectivity and quality. His responsibility also included promoting within the workforce the highest degree of professional scientific work, training, and technical quality throughout Chevron's worldwide exploration operations and research organizations.

Don was always full of ideas and deeply interested in mentoring the younger generation. His enthusiasm, creativity, and interpersonal skills were widely recognized throughout the company.

Not unlike his work ethics in business, Don brings the same enthusiasm to AAPG and its member societies. During the past 15 years, Don has held numerous leadership positions, one of the early ones being technical program coordinator for the 1996 Annual Convention in San Diego. He contributed and authored several major studies and received several major awards. He was the vice president of AAPG in 2001–2002, president of Northern California Geological Society in 1999–2000 and a member of the House of Delegates from 1995 to the present. Within the House of Delegates, he chaired the Nomination and Election Committee, 1998–1999, and the Future of Earth Scientists Committee, 2000–2002. In the latter assignment, he was the primary author of "The Future Need for Petroleum Geoscientists," a major study and forecast of the long term employment of petroleum geologists. While engaged in these major activities he served as an active member of many other committees too numerous to list here.

Tom Wright wrote the following account in his citation when Don received the AAPG Distinguished Service Award in 2003, "Throughout these years, one of Don's steadfast interests has been the improvement of Earth Science education at the K-12 level of America's schools. In 1992 he joined the American Geological Institute's Advisory Committee established to develop a new Earth Science curriculum and textbook for Grades 5–8 and has been active on that and three successor AGI curriculum committees. The only industry member on these committees, he ensured the inclusion of energy resources in those curricula.

"While on AAPG's Corporate Liaison Committee, Don lobbied for funding of a strong K-12 program within the Association and was instrumental in initiating the Earth Science Teacher of the Year program in 1995. In 1998, after restarting the Teacher of the Year program, he joined the Youth Education and Activities Committee and became chair of its Teacher of the Year subcommittee. Presentation of the national K-12 Earth Science Teacher of the Year Award at the All-Convention Luncheon, and the recipient's response, has been a very moving experience for all of us who value Earth Science, our nation's young people, and the teachers who inspire them. Don Lewis has worked with skill and dedication at both ends of the process to improve K-12 curriculum and textbooks in Earth Sciences and to bring recognition and our profession's acclaim to the Earth Science teachers in America's classrooms."

Don has always been a strong supporter of the AAPG. He found the *Bulletin* and the conventions a constant source of new ideas and techniques. His enthusiastic interest in professional education provided him stimulation in his work. He also encouraged others to stay active in improving their professional education.

For his tireless effort on behalf of AAPG and its member societies, Don has received numerous awards including the AAPG's Distinguished Service Award (2003), the HOD Distinguished Member of the House Award (2004), and the Pacific Section Honorary Life Member Award (2007).

Don's biography would not be complete without mentioning that, at the same time as dealing with all these activities, he has had an avid interest in birding. He came to this during his latter years with Chevron and has greatly enjoyed pursuing this avocation in retirement.

I am certain that Don's many friends and associates will look at this very distinguished award of Honorary Membership as a fitting tribute to his outstanding career and devotion to our profession. To quote an old adage: "if you want something done give the work to a busy person"…a person like Don Lewis.

Bill Crain

Response

Looking at the list of AAPG Honorary Members, I see a lot of really deserving people, so I was surprised and extremely gratified to be placed among them. I thank the Advisory Council for selecting me and the Executive Committee

for agreeing to what for me is a signal honor.

Bill Crain in his citation mentioned that I was raised atop the Cheviot Hills oil field in Los Angeles. Actually, it was yet to become an oil field because when I was chasing rabbits in the fields which have long since become established suburbia, it was a number of years before the discovery. My dad may have helped to slow things down because, when he passed away, I found in his papers a copy of a two-color poster decrying the proposed issuance of drilling permits ("A Menace to Your Home") which I believe he had a hand in producing during the thirties or forties. That, of course, was long before urban directional drilling matured and when oil fields were covered with derricks, messy facilities, and the sweet smell of petroleum.

I always enjoyed the outdoors and spent six summers from age 16 onward working in the Sierra Nevada. This led me to choose geology at Caltech, mainly because I wanted to work outdoors and partially because of a terrific Geology 101 course taught by the esteemed Robert Sharp. My professors included such luminaries as Sharp, Dick Jahns, Hugo Benioff, Lloyd Pray and, in graduate school at Northwestern, the triumvirate of Krumbein, Sloss, and Dapples. The grand plan, however, of working outdoors only lasted for four years with Chevron after which time I, like most of us, was turned into an indoor geologist.

I spent about half my career with Chevron involved with America's west coast exploration and the other half in worldwide operations. They were all good years, perhaps highlighted by my and my family's five years in Australia and Indonesia. The geology was great, we were drilling wells, and the family liked both where we lived and the long home leave trips throughout east and southeast Asia. I got my first exposure to professional society activities in Jakarta, chairing the Indonesia Petroleum Association's technical program committee.

After returning to the States, I was a Visiting Petroleum Geologist for a few years but didn't get really involved in AAPG until Tom Wright, Pacific Section guru and a long-time friend who was my first party chief on the North Slope in 1959, roped me into putting together the opening ceremony and speaker for Pacific Section's annual meeting in San Francisco in 1995. I learned there that getting a senior-level politician to be your keynote speaker isn't a good idea when he begged off at the last moment and sent a junior, uninspiring staffer as a substitute.

My next step was in agreeing with Tom Wright again, this time to help find a technical program chairman for AAPG's annual meeting in 1996 in San Diego. I failed in that assignment and finally fell back on doing it myself (Wright's original intention, I still suspect). I thoroughly enjoyed that entire exercise, in particular getting to know some national-level active members and the ever-helpful AAPG staff. I retired about then and accordingly had the time and definite interest to spend in my local society and in AAPG activities. One thing led to another and here I am.

This year marks my fifty-year anniversary as an AAPG member. During my career working with a major company, I benefited mainly from the technical side of AAPG. In retirement, the technical side is still interesting but the exposure to a phalanx of AAPG members and the networking with them has been wonderful. With this experience, perhaps the only thing I would change in my career, if I had it to do over again, would be to get involved sooner in society and AAPG activities.

I deeply appreciate receiving this honor from AAPG. I sincerely thank all my colleagues from work and the many friends I've made in AAPG for helping me along the way. My family has always been supportive and a solid foundation from which I could work for a living and now spend some of my own time with AAPG. I hope that all geologists can have as much challenge and fun as I've had in the exploration business.

Donald W. Lewis

PETER M. LLOYD
Honorary Member

Citation—To Peter Lloyd, for his tireless efforts in promoting the internationalization of

petroleum geoscience and the AAPG through his dedication to the profession he loves.

Peter Lloyd is a true international petroleum geoscientist, having lived or worked in over 15 countries on 5 different continents. He was born on March 26, 1952, in Welwyn Garden City, just north of London, England. He won an Exhibition Scholarship to Cambridge University, where he received a bachelor's degree with honors in geology in 1974, and then a master's degree in 1978. After the hallowed halls of Cambridge, Peter entered into less salubrious though by no means less educational surroundings working as a rig and regional geologist for BP on the UK, German, and Dutch sectors of the North Sea. In 1978, Peter joined Deminex in Essen, Germany, as their senior geologist for South America. Peter was involved in evaluating the development of a significant gas field in Trinidad, helped win his employer some valuable acreage in one of the Brazilian offshore exploration rounds and worked up some successful prospects offshore Tierra del Fuego, Argentina.

Peter joined Schlumberger in 1981. His first years with "Big Blue" involved stints as lead geologist for South America, then Europe. He worked on log interpretation and taught client schools and workshops in log analysis and dipmeter interpretation. Peter did the required term in Marketing where he worked closely with clients in the then very active North Continental Europe. For his next assignment, between 1985 and 1987, he was a member of the Schlumberger team that built and commercially introduced the first formation micro-scanner (the FMS tool) and Peter was appointed world-wide field-test coordinator for the first six tools. In this role he helped train interpretation specialists, wrote the first papers on the tool for publication and helped commercialize the service.

Peter has dedicated a large part of his career to the education and training of others. From the late 1980s through to the mid 1990s Peter took on increasingly senior responsibilities with Schlumberger including senior project engineer and manager of quality assurance in the Austin Systems Center (their worldwide center of excellence). During this period in Texas, Peter took on another role as adjunct professor at University of Texas at Austin, teaching part of the software engineering master's program. Peter spent 1995 to 1997 in Jakarta as lead geologist for Southeast Asia and Australasia. A major part of his portfolio was training, and he gave schools as far apart as China, Japan, Australia, and New Zealand. In 1997, Peter transferred to Kuala Lumpur where he took on the role of interpretation manager for Thailand, Malaysia & Vietnam, and in 2000 he became business manager of Schlumberger's Network of Excellence in Training (NExT) across their Middle and Far East Geomarkets.

Peter retired in 2004, and is now an Honorary Lecturer for Heriot Watt's petroleum engineering master's program, and also teaches applied petroleum geoscience, subsurface facies analysis, petroleum exploration and production, and petrophysics for NExT and Schlumberger. He has had two stints as visiting professor, University of Brunei, was twice an SPWLA Distinguished Lecturer ("chasing channel sands" and "evaluation of fractured reservoirs") and has been a European Association of Geoscientists and Engineers (EAGE) Distinguished Lecturer ("attracting, developing, and retaining top technical people"). As a short course instructor he has given more than 70 classes all around the world on petroleum geoscience, subsurface facies analysis, basic petrophysics and more advanced petrophysical applications in complex lithologies.

Peter has been an avid and enthusiastic mentor, supporter and leader of several international professional societies. He was a founding member and president of the Formation Evaluation Society of Malaysia, elected SPWLA Board Member for the Far East, 1998, 1999, and 2000, sat on the Geological Society of Malaysia (GSM) council, as well as being the GSM's AAPG HoD delegate. Peter helped initiate the Association of Petroleum Geologists (APG) in India, and was instrumental in the APG becoming an AAPG Affiliated Society. Peter has been the key driver in forming student chapters at various universities in India, Indonesia, Malaysia, and Vietnam. He has always been a supporter and advisor to these chapters, giving 40 visiting geoscientist talks and helping them grow from strength to strength; in fact, Peter's wife Christiane sponsored four of these chapters.

His dedication to the AAPG is truly admirable. He was the Society's vice president and EC member, (2002–2003), and presidential candidate, (2005–2006). He was team leader for Asia Pacific region (1998–2002) and then the inaugural president of the Asia Pacific Region and member of the Advisory Council, (1999–2002). Peter was a member of the Technical Organizing Committees for AAPG

International Conferences in Nice 1998, Bali 2000, and Perth 2006. He was also chair of the International Regions Committee (2001–2002) and was recently re-appointed for a second stint (2007–2010), having been a member of the committee since 1998. He is an associate editor for the DEG, was Vice chair of the Visiting Geoscientist program, 2003–2005, a member of the Distinguished Lecturer program committee (1998–2006), chair of the European Distinguished Lecturer Committee 2002–2006, and a member of the Membership committee, 1999–2001. A HoD member for Asia/Pacific 1999–2005 and Europe 2006–2009, he was vice chair (2004–2006) and then chair of the HoD Resolutions Committee, and sits on the HoD nominations committee.

Peter is a Certified Geologist (DPA-5696), a chartered geologist of the Geological Society of London, a member of EMD and DEG, a Life Member of affiliate societies SEAPEX (Singapore) and GSM (Malaysia) affiliate societies, and a Member of the Indonesian Petroleum Association as well as of the SPWLA and SPE. He received the AAPG's Distinguished Service Award (International Commendation) in 2000.

As exemplary as it may be, this "checklist" of Peter Lloyd's accomplishments only partially recognizes his achievements and abilities. Peter's 8 years of U.S. and 23 years of other international experience has made him sensitive to the needs and aspirations of the membership both domestically and internationally. Peter's strengths are primarily in communication and teaching others. He has demonstrated time and again a unique ability to translate challenge into opportunity. Peter is a scientist, a friend, and colleague with energy, enthusiasm, vision and a "can do" attitude. He is a proven leader who has been tireless in his efforts in promoting the internationalization of petroleum geoscience and the AAPG through his long service and dedication to the profession he loves. Peter Lloyd is a true gentleman, a credit to our profession, and an extremely deserving recipient of this Honorary Member award.

John Kaldi

Response

It is a great honor to be recognized in this way; and John Kaldi's review of my career has brought back some great memories. It has been a privilege to work in this industry with people like John, and I'd like to thank him personally, and so many others who have helped make my career so enjoyable. I'd especially like to thank my wife, Christiane, for the wonderful support she has given. In addition to sponsoring those early student chapters, she has joined me on many of my student lecture tours. On a couple of occasions she even hauled around the LCD when the universities I visited could only offer a 35mm projector. I hardly need to mention how many people she needed to dance with at all those parties when I have been running for office (and most of those elections I managed to win, so she can dance!).

I believe this award reflects the tremendous efforts of all my team and their affiliate societies when we first started to build the international regions back in the mid 1990s. John Kaldi, Chuck Caughey, and Jeff Aldrich all played a big part in getting our Asia Pacific region started, and Ian Collins, Richard Lorentz, James Peters, Herman Darmen, and countless others have all helped to consolidate and grow the various initiatives that we put in place and developing exciting new ones.

But success in the regions has not just been the result of those working and living there. The commitment of the whole organization, especially the HoD leadership in the mid-late 1990s who pushed through all the legislation to make the regions a reality, and those AAPG Presidents who came out and visited us in the process was truly impressive. I'd like to take this opportunity to thank everyone who played a part in making the AAPG the global organization that it has become.

Challenges lie ahead. It has been encouraging to see just how committed our leadership continues to be in making the regions grow, but I sometimes wonder if their enthusiasm and hard work is always reciprocated by all the potential members of the international community themselves. Putting in sliding scales for membership fees and simplifying the membership admission process is all well and good, but is it not also reasonable for us to expect the national oil companies, who employ so many geoscientists in the developing world, to see the value of AAPG membership at its current, very reasonable value? I also wonder why it is sometimes proving so difficult for some of the regions to put together the strong slate of candidates their members deserve, and why we have so many overseas affiliates who have not sent a single delegate to the HoD in the last five years? And why do we manage to have such thriving

student chapters in many parts of the world, and yet in others (after a lot of effort to get them started) they appear to have become dormant? The answer may be simple. As I learned in 2005 and 2006 when I was running for the office of AAPG president-elect, the domestic sections have used their own internal resources to become vibrant and self supporting. Our international community must strive to do the same; for wherever we see strong local affliates we see impressive results at the regional level. Several of the international regions have successfully managed to become strong entities in their own right, but in others there is still work to do. My goal will be to try and help all the regions to reach the same high standards that have made the domestic sections flourish.

I am certainly looking forward to receiving the award itself in San Antonio. We spent eight very happy years in Austin, still have many friends in Texas, and it will be good to go back to what became a second home for us.

Peter M. Lloyd

ERNEST A. MANCINI
Honorary Member

Citation—To Ernest A. Mancini, for exceptional leadership in the geosciences, outstanding achievements as an educator and researcher of petroleum geology, and distinguished service to the Association.

Ernest A. Mancini, better known as Ernie by his many friends and colleagues, was born in Reading, Pennsylvania, on February 27, 1947. He attended both grade school and high school in the Reading area, where he remained to earn his B.S. degree in biology from Albright College in 1969. His insatiable scientific curiosity led him to graduate studies earning an M.S. degree in zoology from Southern Illinois University in Carbondale in 1972 and his Ph.D. degree in geology from Texas A&M University in 1974. While at Texas A&M, Ernie worked under the supervision of Dr. Robert J. Stanton, Jr. His earliest publications in 1977–1979 on depositional environments, biostratigraphy, and paleoecology of the Grayson Formation of Texas emanated from his Ph.D. studies under Dr. Stanton.

Ernie began his professional career as a petroleum exploration geologist for the Alaska Peninsula and Bering Sea areas with Cities Service Company in Denver in 1974. His interest in teaching and research led him to Tuscaloosa, Alabama in the summer of 1976 where he accepted dual appointments as an assistant professor with the Department of Geological Sciences and as a petroleum research geologist with the Mineral Resources Institute at the University of Alabama. He was promoted to associate professor in 1979 and Professor of Geology in 1984. Ernie was appointed Distinguished Research Professor in Petroleum Geology and Stratigraphy by the Board of Trustees of the University of Alabama System in 2005, and was named the Blackmon-Moody Outstanding Professor by the University of Alabama in 2007.

His willingness to share his knowledge on the geology of the Gulf Coastal Plain is truly exceptional. He has supervised theses and dissertations on micropaleontology and paleoecology, biostratigraphy and sequence stratigraphy, depositional systems and sedimentology, and sedimentary basin studies and petroleum geology. Ernie has given a host of technical presentations to a broad range of academic, industrial, regulatory, and governmental organizations and agencies. He has conducted scores of technology transfer workshops for the petroleum industry and has led numerous geological field trips for professional societies. He has co-organized and/or co-convened professional society conferences and technical sessions for AAPG, GCAGS, SEPM, and GSA.

Ernie has been a member of AAPG since 1979 and has served AAPG as elected editor (2004–2007), as chair of the Research Committee (2001–2004), as associate editor for the Bulletin (2003–2004), as a charter member of the Division of Environmental Geosciences (1993), as a member of the DEG Advisory Board (1994–1997), as a member of the AAPG Executive Committee (2004–2007), and on a myriad of AAPG committees. He has served on the Editorial Boards for the *Journal of Stratigraphy* (2005-) and *Environmental Geology and Water Sciences Journal* (1991–1992).

Although widely recognized and honored as an outstanding speaker for his ability to communicate and educate, Ernie has also published many and significant geoscientific papers in professional journals and abstracts in society journals. He has received the AAPG-GCAGS Levorsen Petroleum Geology Award (1980) and awarded five Best Paper Awards from GCAGS/GCS-SEPM (1980–1982, 1985, and 2001) for his research contributions in the field of petroleum geology. He has served as president or chair, leader or co-leader, chair or co-chair, director or principal investigator, or member of numerous local and national professional associations, societies, and research programs and projects, including president of the American Geological Institute (2005–2006) and chair of the North American Commission on Stratigraphic Nomenclature (1999–2000). Ernie is a committed member of numerous professional organizations and societies, and has received much deserved recognition from these organizations. He has enthusiastically served his profession in an exceptional manner.

In 1998, he received the GCAGS Outstanding Educator Award and in 2000 Ernie was awarded the AAPG Distinguished Educator Award. He was the AAPG Pratt-Haas Distinguished Lecturer in 1987–88. He was awarded Honorary Membership to the GCS-SEPM in 1991, Honorary Membership to the Association of American State Geologists in 1996, and Honorary Membership to GCAGS in 2003. Ernie received the Ian Campbell Medal from the American Geological Institute in 2004, was elected Fellow by the Geological Society of America in 1995, and serves as a Trustee for the American Geological Institute Foundation.

Although being known as an outstanding educator, Ernie's achievement as an administrator is equally widely recognized. The most notable among his several administrative positions was initiated on February 8, 1982, when he accepted an appointment to the challenging position of State Geologist of Alabama and Supervisor of the Alabama State Oil and Gas Board. During his 14 years as their principal administrator, he successfully guided these organizations through many years of change dictated by shifting emphasis in local and national research priorities and budgetary constraints. Because of his dedication to the citizens of Alabama and his steadfast integrity, Ernie established the Geological Survey and the State Oil and Gas Board as two of the most productive, efficient, and respected governmental agencies within Alabama. During his tenure as State Geologist, over 500 technical reports and maps were published on the mineral, energy, water, and biological resources of Alabama, a new geological map of Alabama was published, and Alabama became a major producer of natural gas. On January 16, 1996, he returned to devote himself to full-time teaching and research at the University of Alabama, and to serve as director of the Eastern Gulf Region of the Petroleum Technology Transfer Council and later as the director of the Center for Sedimentary Basin Studies at the University of Alabama.

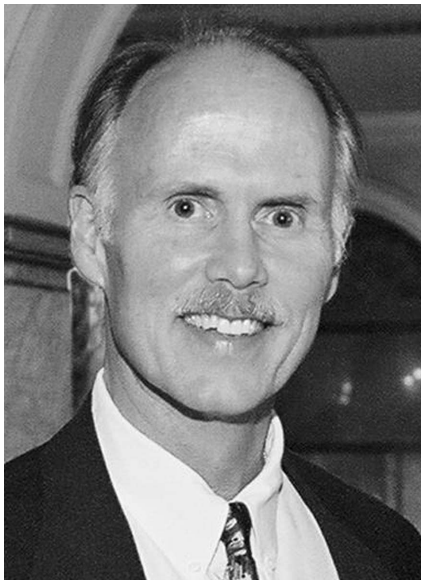
Clearly, Ernie is most deserving of the AAPG Honorary Membership Award for his many years of dedicated service to AAPG and petroleum geology for his numerous contributions to the science and profession of geology and the favorable reflection that he has bestowed on both the geologic profession and AAPG.

Bennett L. Bearden

Response

I thank the Executive Committee, Advisory Council, and all those who were supportive of my selection for Honorary Membership in AAPG. It is indeed a high honor to be recognized by the Association for my teaching and research contributions in the field of petroleum geology and for my service to AAPG and the geosciences. I especially would like to thank Bennett Bearden, longtime friend, colleague, and biographer for this award, for his kind words regarding my career. Over these past many years, I have been fortunate to have had the opportunity to work with visionary leaders, inspirational geoscientists in the petroleum industry and academia, talented students, and dedicated members of AAPG. I look forward to continue to further the science and profession of petroleum geology and to serve the members of AAPG.

Ernest A. Mancini



STEPHEN A. SONNENBERG
Honorary Member

Citation—To Stephen A. Sonnenberg, an outstanding leader, teacher, author and dedicated geologist for his distinguished service and commitment to the AAPG and the petroleum industry.

Stephen A. Sonnenberg, born in Billings, Montana on Saint Patrick's Day in 1952, is a second generation geologist who owes his initial interest in geology to his father. Growing up, Steve was captivated by science and an innate love of the outdoors. He has lived in Montana, Colorado, Oklahoma, Texas, and Bolivia but has called Denver his "home" for many years.

Steve received B.S. and M.S. degrees in geology from Texas A&M University under Bob Berg and a Ph.D. in geology from the Colorado School of Mines under Bob Weimer. Steve feels privileged to have been mentored by two distinguished AAPG Sidney Powers Medal winners.

Steve has been honored by both of his alma maters, receiving the Young Alumnus, Outstanding Alumnus, and Mines Medal from CSM and the Geoscience and Earth Resource Council Distinguished Achievement Medal from Texas A&M.

Spanning the past 31 years, Steve has worked for Exxon, Bass Enterprises, North America Resources, PanCanadian, EnCana, Kerr McGee and Anadarko in various geological, exploration/exploitation and management roles. Steve is a successful oil and gas finder with varied experiences in the Gulf Coast, Rocky Mountains, Mid-Continent, Pacific Northwest and the former Soviet Union (Turkmenistan and Uzbekistan). His recent emphasis has been on U.S. resource plays. As a teacher, Steve has led multiple field trips and taught courses for SIPES, RMAG, DPA-AAPG, Pertamina Oil, and the Colorado School of Mines. In 2007, Steve achieved one of his major life goals, becoming a professor at the Colorado School of Mines as the Charles Boettcher Distinguished Chair in Petroleum Geology.

Steve has authored numerous relevant geological publications, primarily focused on the Rocky Mountains and Mid-Continent, but also extending to the former Soviet Union. Steve's research contributions include the relationship between tectonics and sedimentation, sequence stratigraphy of Lower Pennsylvanian and Cretaceous rocks and reservoir description/characterization, as well as topics on professionalism for petroleum geoscientists.

Steve joined AAPG in 1975 and became an AAPG Certified Petroleum Geologist in 1983. During the last 32 years, he has served on many committees and in key leadership capacities for AAPG, including, vice president (1995–1996), president-elect (2002–2003), and president (2003–2004). His extensive committee service record includes: Distinguished Lecture, Visiting Geologist, Education, Treatise of Petroleum Geology, Sample Preservation, Budget and Finance, Mentoring, Ethics, Resource Evaluation, International Pavilion, 100th Anniversary, Corporate Advisory, Conventions, Imperial Barrel, and Committee Oversight Committee, Advisory Council (Chair), Division of Professional Affairs (Vice President and President) and the House of Delegates since 1983 (Rules and Procedures, Constitution and Bylaws, Resolutions, Credentials, Future of Earth Scientists, and Honors and Awards). Steve served as general chair for the 2001 Annual Convention in Denver and is Technical Program Chair for the 2009 Annual Meeting. Steve actively supports the AAPG Foundation and became a Trustee Associate Member in 2000. Steve has been honored by AAPG with its Distinguished Service Award in 1999 and has also been the recipient of six Certificate of Merit awards. The DPA has also honored Steve with its Distinguished Service Award (2001) and Exemplary Service Award (2002).

Steve also has an impressive record with the Rocky Mountain Association of Geologists (RMAG) as Secretary (1984), President (1991) and Honorary Member. His RMAG committee service includes Program Chairman, Editor of *The Mountain Geologist* and several RMAG guidebooks. RMAG has awarded Steve the Distinguished Service Award (1992), 75th Anniversary Special Service Award (1998) and Public Service Award (2003).

Steve has been president of the Rocky Mountain Section AAPG, Rocky Mountain Section SEPM, Colorado Section AIPG and the Colorado Scientific Society (1993 Honorary Member). Steve has been General Chairman for two Rocky Mountain Section AAPG meetings (1990, 1997) and also a RMAG-Colorado Oil and Gas Association Convention (2006). He was elected a Fellow of the Geologic Society of America in 2003.

In addition, Steve has served two terms with the Colorado Oil and Gas Conservation Commission (appointed by two governors of Colorado from 1997–2003, including chair of the Commission from 1999–2003). Steve has been a board member of the Colorado Energy Research Institute (2004–present) and the Colorado School of Mines Foundation (1995–1997). He also has served on advisory committees for the departments of geology for both Texas A&M University and the Colorado School of Mines. He is a recent founding member and president of the Colorado School of Mines Department of Geology and Geological Engineering Enhancement Committee.

Steve has always had an active interest in sports and outdoors activities. He attended Texas A&M University on a swimming scholarship and currently enjoys hiking, biking, fly fishing, snow shoeing, and skiing in Colorado. Steve has also led numerous geological rafting excursions down the Grand Canyon much to the delight of those young and young-at-heart.

Steve derives great personal satisfaction by giving his time and talent back to our professional and scientific organizations. He considers this part of his professional responsibility but it is also his true passion. As a direct result of this dedicated and sincere approach, Steve has garnered respect and fellowship in an ever-expanding circle of friends and colleagues. Thank you, Steve, for what you have selflessly given to all of us!

James J. Emme

Response

I am greatly honored to receive honorary membership and also want to thank all who were responsible for my selection, especially the Advisory Council and the Executive Committee. Many thanks also go to my longtime friend, Jim Emme, for being my biographer.

I became interested in geology as a natural fallout from enjoying science in high school. In addition, my father, Frank Sonnenberg, is a petroleum geologist and his enjoyment of his career and science also got me interested in the profession. My parents always encouraged their three sons to find a career that they would enjoy for a lifetime. Growing up our family lived in Billings, Montana; Cochabamba, Bolivia; Denver, Colorado; Houston, Texas; Oklahoma City; and Houston, Texas a second time. We enjoyed these oil towns and the opportunities they afforded our family.

I attended Texas A&M University on a swimming scholarship, a sport my brothers and I enjoyed immensely. After completing my bachelors degree and I elected to stay at A&M and work on an M.S. degree under Bob Berg. Bob had a special way of getting his students excited about various aspects of petroleum geology and stratigraphy. I went to work for Exxon Company, USA in Houston which was a great experience for me. I worked in exploration onshore Gulf of Mexico in the Wilcox and Edwards trends. During this early stage in my career, I decided that I would like to pursue a Ph.D. degree in geology and applied to the School of Mines where I was accepted. I went to Mines to study under Bob Weimer to further my understanding of stratigraphy and sedimentation. Both Bobs have been long time friends, mentors, and colleagues. I feel especially honored to have had two Sidney Powers medalists as my main advisors and teachers at A&M and Mines.

After graduating from Mines, I elected to stay in Denver for my career. Petroleum companies generally like to transfer people around but I decided to stay in one place and also let my son stay in one place without any disruptions for his K-12 years. That decision along with mergers, acquisitions, and companies exiting Denver has given me an enjoyable and sometimes bumpy career in the Rockies. During my career, I have worked for a major company, small and large independents, and for myself. The biggest thrill I have had is having new field wildcats come in. I can remember logging several discoveries in the middle of the night (do logs ever get run during daylight?) and feeling the excitement of watching the logs indicate pay and success.

The latest chapter in my career is teaching petroleum geology at the Colorado School of Mines. The reason I decided to get a Ph.D. in the first place was to teach and do research one day in my career. A large part of my petroleum geology lectures come from my education from Bob Berg and Bob Weimer.

I learned early on that success as a petroleum geologist comes from having two important attributes: vision and imagination. I hope to instill these qualities into my students.

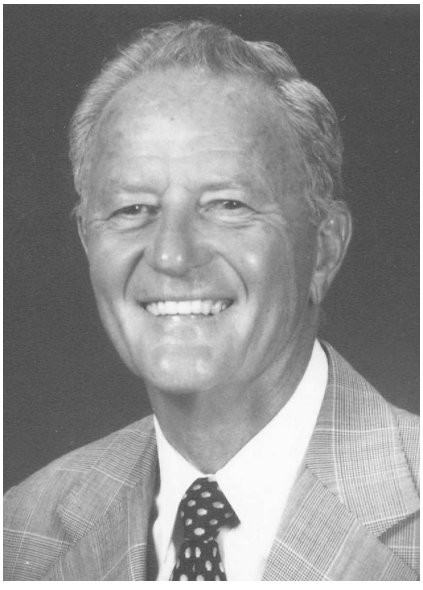
My first professional society meeting was in Shreveport, Louisiana at a GCAGS meeting. I presented my first paper at that convention. One on the highlights of the meeting was having dinner at the petroleum club with Bob Berg and Bob Gunn. Bob Gunn was running for AAPG presidency at the time. Between the two Bobs I saw their love for the profession and AAPG. Later, attending the School of Mines, Bob Weimer emphasized the importance of professionalism, supporting the profession, getting active in professional societies to me and his other students. I became hooked on AAPG, RMAG, and other organizations and have greatly enjoyed working on conventions, committees, and being elected to various leadership positions. The highlight of the professional society side of my career was being AAPG president and representing AAPG to the world. I feel that I have hundreds of friends throughout the world as a result of being AAPG president.

There are many lessons one learns in a career and here are some of my thoughts:

1. Enjoy what you do for a career.
2. Have a professional development plan.
3. Your career may not be roses all the time, have faith and persevere.
4. Always keep learning (know what you know, and also what you don't know).
5. Always be building your network (it will keep you intact through the cycles).
6. Give back and support your profession.
7. Have vision and imagination.
8. Always have the highest professionalism and ethics in what you do.

AAPG has played a key role for me in most of these lessons. The satisfaction I have from being involved in AAPG is immeasurable.

Stephen A. Sonnenberg



JACK C. THREET
Honorary Member

Citation—To Jack Threet, in recognition of exemplary leadership of AAPG Foundation, his devoted service to our profession, and his remarkable mentoring skills.

Jack Threet's extraordinary professional career can be described in two segments; 36 years with Shell Oil, which overlaps and continues with 51 years service to the AAPG and the AAPG Foundation.

Jack was born in the village of Dundas, Illinois in 1928. He attended a three-room schoolhouse until he was 12, when his father moved the family to Champaign, home of the University of Illinois.

Jack was a standout in baseball, his high school prowess good enough to earn tryouts with the Chicago Cubs and the St. Louis Cardinals. Jack enrolled at the University of Illinois, worked his way through school, and fell in love with geology and Katy (Catherine Hall). He took a summer job with Shell Oil, and found petroleum geology so interesting that he deferred finishing his M.S., married Katy, and became a junior stratigrapher with Shell in Tulsa in 1951.

Of course, Jack's wisest decision has always been to marry Katy, as their marriage has been the rock on which Jack's career and happiness has been built.

His career with Shell Oil got off with a catapult start when a subsurface prospect he created became South Autwine Field in Oklahoma, notching an exploration success less than 24 months after joining Shell.

Jack's qualities of hard work, persistence, teamwork, and mentoring skills caused him to rapidly rise in Shell Oil. His management skills were recognized early; he had three separate international assignments and was one of Shell's youngest leaders at every stage of his career.

He put his personal stamp of excellence on Shell's exploration program and led it during some of its greatest years, from 1979 to 1987.

As exploration vice president of Shell Oil, one of Jack's many notable contributions was bringing a systematic approach to exploration reviews and analysis. Jack insisted on rigorous documentation of the technical and economic aspect of exploration plays; play sheets, (quickly nicknamed "Threet" sheets) were prepared for each new play on its

initiation. Each exploration review would feature a re-analysis of the play material; i.e., what had been considered the major risk elements; what had been considered the scope for success; what had been considered the costs and timetable for evaluation; …all to be contrasted and compared with latest progress and current evaluation.

Data extracted from these "Threet" sheets proved to be extremely helpful to monitor exploration progress, and to provide a dynamic learning set for young managers. As an aside, they also guided Shell to an early understanding of flaws in Shell's risking system, which had caused under-risking of high risk plays and over-risking of low risk plays.

Jack was a "hands on" VP for Shell. For example, as head of Shell Oil's International Ventures, he became convinced of the power of "bright-spot" technology being developed by Shell in the Gulf of Mexico. Understanding that the bright-spot" technology may be directly applicable to Shell's modest interest in offshore Cameroon, Jack flew to Paris and personally negotiated an agreement to earn a further 29% working interest in Elf's Rio del Rey concession by spending 100% of the next $29 MM in partnership drilling costs. Aided by a first-class team of Shell geophysicists, Shell temporarily took over operations and proceeded to find twenty offshore oil fields during the brief earning period.

When Jack retired from Shell in 1987, he stayed active in the oil business for several more years by forming Threet Energy, Inc. and being a founding partner in Energy Exploration Management Company. Beyond these activities, he concentrated his newly freed energy on service to the AAPG Foundation, on civic, charitable, and educational activities, and travel, family, and golf.

Some of the breadth and depth of Jack's drive and initiative can be gathered by noting that he (1) has been a Trustee Associate of the AAPG Foundation since 1987 and served as Trustee, then Chairman of the Foundation from 1994 to 2006, and recently volunteered, with Larry Funkhouser, to chair a major fund-raising campaign for the Foundation; (2) was granted AAPG's Robert H Dott Sr. Memorial Award in 2003, and Distinguished Service Award in 2005; (3) continues to be involved in dozens of local, national, and international charitable organizations including Rotary, YMCA, United Way, Habitat for Humanity, and the Methodist Church, to name a few; (4) is a long-time member of the Advisory Committee of the Geology Department at the University of Illinois and, with his brother Richard has endowed a professorship in sedimentary geology at the university; (5) has been recognized every year since 1985 in Marquis' *Who's Who in America;* and (6) was inducted into Senior Golfers of America Hall of Fame in 2005.

Retired, yes; inactive, no!

We have been greatly enriched by the mentoring skills, leadership, personal generosity, and service of this remarkable man, and we are pleased to welcome him to the select circle of Honorary AAPG Members.

Marlan W. Downey

Response

I am humbled and grateful to be named Honorary Member of AAPG. I extend a sincere "thank you" to all who were instrumental in my selection for this high honor, especially to those seated on the Advisory Council and the Executive Committee. I also express my deep appreciation and thanks to Marlan Downey, my friend and most esteemed colleague for over 50 years, for so kindly and generously writing my citation and biography.

As I pause to respond to this award and citation, I think of what Albert Schweitzer once said, "Each of us has cause to think with deep gratitude of those who have lighted the flame within us." I know that my flame was lighted first by my father, a great man of very modest means and a limited education, who recognized the value of advanced education and motivated me to achieve it, even though it was rare for those of us young men from rural down-state Illinois to do so in those years.

After my father there were countless mentors and valued colleagues. Since space is limited it is always treacherous to cite names; still, I am compelled to name a few. In early years particularly noteworthy were Harold Scott, professor of geology at the University of Illinois and R. E. McAdams, my first and longtime boss at Shell Oil Company, who so successfully headed exploration for Shell for the first 20 years of my career. Subsequently, others who unselfishly supported and challenged me along the way include hundreds of top quality geologists and geophysicists who were, for my entire career, the heart and soul of Shell's exploration organization. These explorers, together with our solid Shell Research organization and a

continuing cadre of very talented colleagues at the top including John Bookout, Charlie Blackburn, Bob Nanz, Gerry Burton, Jim Wilson, Tom Hart, Billy Flowers, and Marlan Downey formed one of the industry's most successful exploration organizations for four decades. I shall always be grateful for having been a small part of that organization. Its accomplishments are a matter of public record.

But, in retrospect, even more important to me in the long run my career at Shell provided me with the resources–monetary, professional, and personal–and the strong desire to "pay back" to others who had so unselfishly supported me all those years. And it was in the spirit that I have strived to support AAPG and its Foundation. Even so, the reward there is still mine because of the privilege I have had and the experiences I have gained, especially from my active involvement with the AAPG Foundation Trustee Associates of which I have been a member for 20 years and being a Trustee, later Chairman, of the Foundation's Board of Trustees and now Trustee Emeritus and co-chairman of the current major fund raising campaign for the Foundation.

While all these experiences and persons, to whom I am eternally indebted, have "lighted the flame within me" I fully realize that the most important and influential of all has been–and still is–Katy, my dear wife of 57 years. Through over 30 sometimes challenging moves, domestically and to several foreign countries, Katy was a devoted wife in every way imaginable and a wonderful mother to our two daughters, Linda and Judy.

To the extent that I may deserve this high honor of Honorary Member of AAPG I clearly know that the honor really goes to all those along the way who have so generously and unselfishly "lighted the flame within me."

Jack C. Threet

DUDLEY J. HUGHES
Outstanding Explorer Award

Citation—To Dudley J. Hughes, scientist, gentleman, gifted oil finder, whose unique understanding of petroleum geology was clearly ahead of his time and his peers.

"The search for petroleum is a fascinating business. Once caught in its web, few are ever content with any other lifelong occupation." (Excerpt from Oil in the Deep South, A History of the Oil Business in Mississippi, Alabama, and Florida, 1859–1945, published in 1993 by Dudley J. Hughes.

Dudley could just as well have been describing his own passion for the search for petroleum. This soft spoken, unassuming gentleman has, by any measure, been the dominant oil finder in the southeastern states since he came to prominence in the early 1960s. Subsequent drilling and the application of 3-D seismic have largely proven Dudley's early theories of how structures are formed and how hydrocarbons are trapped in the subsurface. He has put his own money into his geologic concepts and innovations and has been richly rewarded for it. Dudley has been a willing teacher and many who have listened and learned from him have also had success.

Dudley J. Hughes was born in Monroe, Louisiana, on August 14, 1929, and raised in East Texas. Dudley's father was with United Gas Pipeline and he and his identical twin brother, Dan, were literally raised in the oil patch. Dudley and Dan received their B.S. degrees in geology, and 2nd Lt. US Army Reserve in 1951 from Texas A&M University. Both were hired by Union Producing Co. as geologists. Dudley was sent to Beeville, Texas, Dan to Monroe, Louisiana.

After only three months with Union, Dudley and Dan were called to active duty. They reported to the United States Army at Ft. Bliss in El Paso, TX. While off duty, they became interested in a shallow oil play in the Carlsbad, New Mexico, area. They filed for a federal lease on their first prospect in Eddy County, New Mexico. Before he and Dan were shipped out to Korea, Dudley married Robbie Watson on November 10, 1951. Dudley was fortunate in finding Robbie, who has stood by him and has been supportive of his work. They have been happily married for 56 years and have two wonderful daughters, Vikki and Cindy.

Dudley and Dan were both sent to Japan and then on to Korea where they served five months in

combat on the front lines. Dudley has since written a book about this experience, *Wall of Fire, A Diary of the Third Korean Winter Campaign*, published in 2003. While in Korea, they received notice that their New Mexico lease had been granted. They returned to the United States in May 1953, and were released from active duty. Rehired by Union Producing Co., Dudley was assigned to Jackson, Mississippi, and Dan to New Orleans and later to Beeville, Texas.

Union allowed them to keep their New Mexico lease, and in 1956, George Riggs, a local geologist who had befriended them while at Fort Bliss, completed a 25 BOPD oil well at 673 ft, to discover the Saladar Field. A discovery on their very first prospect was a harbinger of things to come.

Dudley and Dan formed a partnership, Hughes & Hughes (H&H), to own the producing lease and agreed that all future oil and gas interest would be owned jointly as H&H regardless of which name the entity was of record. This arrangement was in effect for about 30 years, most of which time each partner was active independently.

Prior to 1953, most of the drilling in the Mississippi Salt Basin had been for shallow trends. In 1953, a deep well in the Soso Field (then only a shallow gas field) discovered multiple oil reservoirs in Lower Cretaceous to about 12,000 ft. Union had a substantial leasehold in the field, and Dudley arrived just in time to sit on many of their wells and gain invaluable knowledge of the deeper Lower Cretaceous play.

Soon two other Lower Cretaceous oil fields were discovered that established a trend some 200 miles long. Dudley concentrated his geological efforts on subsurface mapping of the many structures outlined by shallow well control along the trend.

Dudley next served a three year stint with American Petrofina which resulted in only a single million barrel Lower Cretaceous discovery and some development wells in other fields. At Fina, he worked with professionals who would become his future partners in his next venture, Triad Oil and Gas Co.

In 1960, Dudley won the GCAGS "Best Paper" for his paper on faulting associated with deep seated salt structures in the Mississippi Interior Salt Basin, and was selected as an AAPG Distinguished Lecturer in 1961 for this play concept.

Dudley's new company, Triad, would continue to pursue the deeper Lower Cretaceous trend. Triad's first major success came from Dudley's revolutionary subsurface mapping of an inter-graben "rollover anticline" near the Summerland community. There was not enough subsurface control to prove his structure map. The map was largely constructed from what Dudley understood about how the geologic structure should look. Summerland Field has produced over 26 million barrels of oil from Lower Cretaceous strata. After Summerland, numerous more similar Lower Cretaceous discoveries by Dudley and other companies followed.

By 1964, Triad's success ironically caused disunity among the general partners. Dudley moved on and in 1967, he partnered with the legendary Chesley Pruet just in time for the Smackover trend to be discovered in Mississippi.

Dudley's vision to drill in Alabama along the regional peripheral fault system for Jurassic reservoirs was ingenious. Their Smackover discovery at Choctaw Ridge in 1967 demonstrated that substantial oil accumulations occurred in Jurassic strata in Alabama, and put Alabama on the map for oil finders. The play concept he developed to make this discovery he again used to find six additional Smackover fields, including Womack Hill Field, which is the largest producing Jurassic oil field in Alabama (35 million barrels).

Dudley also developed exploration strategies to revitalize the Lower Tuscaloosa play in Alabama resulting in two discoveries in 1987, the Norphlet play in Alabama resulting in two discoveries in 1985 and 1996, and the Mississippi sandstone play in the Black Warrior Basin resulting in seven discoveries from 1973–1980. He participated in the development of the Jurassic Frisco City play of southwest Alabama with two discoveries in 1994 and 1997 and the Miocene gas play of coastal Alabama with a discovery in 1984.

In 1992, Dudley Hughes, as CEO of Hughes-Rawls, Corp. participated with two other independent oil companies to explore for Smackover prospects in North Louisiana and Arkansas. Working jointly with the other geologist, Dudley was instrumental in developing a structural prospect in Union County, Arkansas. This was drilled in 1993 and completed as a Smackover oil producer at 8500 ft. This was the discovery well for the Grayson Field, which has produced some 14 million barrels to date.

The rest is history. This remarkable oil finder has been involved in the discovery and development of 65 oil and gas fields

from 1961–2006. Thirty-seven of these fields have produced over 1 million barrels of oil and 5 Bcf of gas. The significance of Dudley's discoveries is highlighted by the number of fields found and established in Alabama and Mississippi after he made the initial discovery for the play. Many explorationists have used the play concepts he developed.

More recently, Dudley bought into the concept of a Smackover stratigraphic play in Alabama, which has resulted in the extension of the one well Little Cedar Creek Field to, at this writing, 44 wells with estimated reserves of up to 26 to 30 million barrels of oil.

Dudley has also used his talents in the international arena. He has been deeply involved in two very lucrative finds in two separate countries. Dunvegan Field in Canada, which has produced 1 Tcf of gas, and Woodada Field in Australia, which has produced 50 Bcf of gas.

Dudley has been recognized with numerous honors for his remarkable contributions to the field of petroleum geology. In 1971, he was elected to membership in the All American Wildcatters (the top 100 Oil Finders in the United States). In 1994, he was presented with the lifetime achievement award from the Alabama Oil and Gas Board in recognition of his pioneering success in the Smackover of Alabama. In 1997, Texas A&M University honored Dudley with the Geosciences and Earth Resources Distinguished Achievement Award. In 2002, Dudley was appointed to the National Petroleum Council.

Dudley's interest in science goes beyond geology. His studies and publications have delved deeply into subjects such as our atmosphere and the errors associated with the now popular global warming theory. In 1998, he published *A Geologic Reinterpretation of the Earth's Atmospheric History, Inferring a Major Role by* CO_2.

If a geologist finds a large oil field, that might be considered luck, two large oil fields, possibly incredible luck. As many significant discoveries as Dudley has made is beyond luck. He is a genetically gifted oil finder. The proof—his identical twin brother, Dan, also is an extremely successful oil finder.

In the deep south and beyond, the name of Dudley Hughes is legend.

Robert Schneeflock
Ernest Mancini

Response

No honor could have pleased me more than receiving this AAPG Outstanding Explorer Award. My association with the AAPG has been very rewarding and educational throughout my career.

After I was released from the military, in 1953, Union Producing Company's Chief Geologist, Fred Schroeder offered me the opportunity, to resume my job as a geologist, with a choice of being stationed in Beeville, Texas or Jackson, Mississippi. My wife quickly said, "I've been to Beeville, let's go to Jackson." It was the right decision. Oil and gas exploration in Mississippi (and Alabama) was relatively immature and there were large sparsely drilled areas to explore.

Production in Mississippi was mostly from shallow fields. Soon after we arrived, my company participated with Gulf to drill a 12,000-ft deep test in the Soso Field, a 6500-ft Upper Cretaceous gas field. The deep well found a series of prolific oil sands in the Lower Cretaceous to establish the first significant production from those formations. This proved to be an exciting new exploration trend for the state. As the field developed, I sat on many of the wells.

Soso was a simple anticlinal structure, but many of the shallow fields in the State were producing from traps formed by large salt uplifts with overlying complex graben fault patterns. At that time seismic data consisted mostly of single shot records that were correlated like electric logs. With little help from seismic data, the complex structures made deep exploration difficult.

In 1960, three of us left our company jobs to establish our own independent oil company. Utilizing structure maps on the shallow horizons of the major structures, along with control from the few deep wells, I spent months studying the fault patterns, the increase in fault throw with depth, angle of dip of the faults, etc. Eventually, I was able to project the shallow structures to the deeper Lower Cretaceous horizons with reasonable accuracy.

At the GCAGS meeting in 1960, I presented a paper entitled, "Faulting Associated with Deep Seated Salt Domes in the Northeast Portion of the Mississippi Salt Basin." It won the "Best Paper" award and I was later asked to review it at the AAPG convention.

In 1961, I accepted an invitation by AAPG to go on a Distinguished Lecture Tour with the paper, but did not have the money to pay for the trip. AAPG agreed to finance the trip and made all the arrangements. They gave me one airline ticket, about as thick as our monthly bulletin, with over 30 stops on it. Also, reservations were made in some 25 hotels.

I left my wife and two young daughters and was gone for over six weeks, speaking daily to geological societies throughout the United States and one in Calgary, Canada. It was more grueling than combat in Korea, but it opened a lot of doors for me for the future.

The ideas expressed in the paper worked. We found a number of oil fields in Mississippi in the following three years. The rest is history that seems to have repeated itself again and again.

Dudley J. Hughes

KATHARINE LEE AVARY
Distinguished Service Award

Citation—To Katharine Lee Avary, a driving force behind the Eastern Section's annual Student Job Quest, consummate professional who quietly assumes responsibility of long-term, outstanding service to AAPG.

The Distinguished Service Award is bestowed on AAPG members in recognition of their singular and beneficial, long-term service to the association. Katharine Lee Avary's record of service to AAPG certainly qualifies her for this award. For nearly 30 years, even before she became an AAPG member, Lee has participated in a broad spectrum of AAPG activities at the local, section and national levels.

This service began in the 1980s when Lee assisted, then succeeded the late Dudley H. Cardwell as West Virginia Chairman on the old Committee on Statistics of Drilling (CSD), a joint effort between AAPG and the American Petroleum Institute (API). Lee held this position for six years, until the committee was disbanded in 1990.

In the mid 1990s, Lee became actively involved with AAPG at the section and society levels. She was technical program chair of the 1996 Eastern Section meeting in Charleston, West Virginia, and began a four-year commitment as an Eastern Section officer, rotating successively through the offices of Treasurer, Secretary, Vice President and President, that same year. Also at this time, she began to represent the Appalachian Geological Society in the House of Delegates and on the Eastern Section Council, positions that she still holds today.

The 1996 Eastern Section meeting was not the first in which Lee had actively participated, nor would it be the last. In 1979, shortly after arriving at the West Virginia Geological Survey with a degree in hand from the University of North Carolina at Chapel Hill, Lee organized and led a field trip for the Eastern Section meeting held in Morgantown and wrote a field guide and a summary on gas exploration in the field trip area. Lee did both of these on her own initiative, the first tangible examples of what has become one of her trademarks: noticing what has to be done, and then quietly assuming the responsibility for doing it without being asked. Over the years she has been on the Planning Committees for at least five other Eastern Section meetings, and was general chair of the 2005 meeting in Morgantown.

Lee's emergence on the national stage began with her role as a Delegate to the House of Delegates, and gradually grew into other activities, AAPG committees, the Advisory Council and the Energy Minerals Division. She has been a very active member, serving as secretary/editor and chair of the Newsletter Committee, and as a member of the Nominations and Elections, Credentials, Honors and Awards, and Resolutions committees. She also has served on at least nine AAPG committees, was chair of the Domestic Sections Ad Hoc Committee (2003–2004), and vice-chair of the Youth Educational Activities Committee (2001–2002). Since 2000, she also has served on the Student Expo, Mentoring, Professional Women in Earth Sciences, Public Outreach, Committee Oversight, and Research committees.

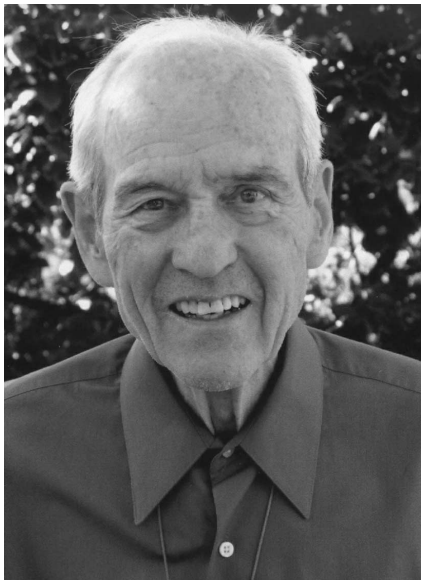
This excellent record of service to AAPG, plus her demonstrated work ethic, made Lee a logical choice as one of two candidates for the office of AAPG secretary (2002–2003). Although she was not elected to serve in that position, she was elected by the members of the Eastern Section to represent them on the Advisory Council for a three-year term beginning in 2004. During her term, Lee twice was asked by past presidents who chaired the Advisory Council to serve as their AC Secretary.

Lee always has been interested in helping geology students. She helped organize the West Virginia University AAPG Student Chapter and still serves as their faculty advisor. She also has been actively involved in summer intern programs at the West Virginia Geological Survey and has mentored these students while supervising their field mapping and office oil and gas project efforts. Lee's experience with these student-related activities, plus prior service on student-related AAPG committees, made her the logical choice to spearhead a student expo in the Eastern Section. Consequently, she organized the first "Eastern Section Student Job Quest" for the joint AAPG-SPE 2003 Eastern Meeting in Pittsburgh, and has continued to organize Student Job Quests for subsequent meetings in Columbus, Morgantown, Buffalo and Lexington. Lee has confided to me that of all her AAPG involvement and achievements, the success of the Student Job Quest has given her the greatest satisfaction.

The above narrative briefly outlines a long history of successful involvement in AAPG activities for this native of Atlanta, Georgia who was educated in the south, first at Emory University in Atlanta, then at UNC Chapel Hill, before migrating north to West Virginia in 1978. How Lee came to be employed at the Survey is an interesting and somewhat scary story. For her master's thesis at Chapel Hill, under the tutelage of John Dennison, Lee was mapping an Upper Devonian unit in eastern West Virginia that she named the Back Creek Siltstone. Lee needed some information, so she wrote me at the Survey requesting assistance. I replied that I would help her, but being too busy at the time, I handed her off to another person in the oil and gas section. But, shortly after he initially contacted her and informed her that now he would be her contact, he left the survey for another position, and passed Lee off to yet another survey person, who eventually provided her with what she needed.

In spite of the way in which we treated her, Lee finished her degree and applied for an opening with the survey. I attended her talk at the 1978 AAPG meeting in Oklahoma City and interviewed her for the position, which she accepted. Over the years, on occasions such as this, I have looked back on the sequence of events that occurred in the late 1970s and wondered what would have happened if Lee had grown so disillusioned with us that she had not applied for our position. Fortunately, she knew that she wanted the job more than I knew how much I needed her in the position. For that, we can all be thankful. If this had not been the case, then I would not have had the opportunity to write these words. And although someone else might have done so, this still would have been my great failure and perhaps a loss to AAPG as well.

Douglas G. Patchen



JOHN D. EDWARDS
Distinguished Service Award (Posthumously)

Citation—To Jack Edwards, for his important contributions in global energy predictions that help in the public's education of energy policy, as an editor, and for service on committees.

Dr. Jack Edwards has served the AAPG admirably in many ways during the past 30 years. He had widespread influence in petroleum exploration and development at Shell Oil from 1949 to 1987 including serving as their chief geologist, and later in academic settings at the University of Colorado and at Fort Lewis College. During the past decade, he has made important contributions in global energy forecasts of the twenty-first century.

Jack's work in energy predictions was completed while he was an adjunct professor at the University of Colorado, beginning in January 1992. He taught an undergraduate class titled, "Mineral Resources, World Affairs and the Environment" for 12 years. As part of the class materials, Jack

compiled and summarized the world's energy trends and made an effort to predict the future trends, based on current and past rates of consumption and demands. The results of this major work were included initially in the July 1997 *AAPG Bulletin* and was updated in AAPG Memoir 74. The work is particularly significant because (1) it is a public document, (2) it is a thorough piece of work done independent of any government or private-based research, and (3) it was initially published at a time where many others were predicting that "peak oil" was in the near future.

For future energy scenarios, Jack's prediction for peak oil is among the most optimistic amongst workers. Similar to Bill Fisher's work, he correctly points out the enormous impact that improving technology does in reserve growth within fields, offset exploration, and nontraditional fossil fuels. Jack also correctly points out the impact that deepwater oil has had, and will have, in future supply considerations, an important point missed by many peak oil advocates who consider these offshore resources as unconventional but present the most significant opportunities for future oil and gas discoveries (as estimated by the United States Geological Survey).

In refining his work, Jack has interacted with a number of people who work in future energy predictions including Tom Ahlbrandt (when he was the project chief of the United States Geological Survey global basin resource analysis), Colin Campbell, Al Bartlett, and others. I believe that these interactions were fruitful and educational for all. Jack has continued to modify and update his predictions with new information, and, most importantly, points out the real hard choices that all countries have to make in the future regarding the potential use of different resources.

Through this work, Jack has done an important service our profession and society. The work was accomplished because of his passion for educating the public about the future. He has given many presentations at local, regional, and international venues. As I read the public literature (newspapers), I commonly see one of Jack's graphs cited in many articles (even though there usually is inadequate explanation). Most notably, all of his work and publications were done voluntarily and nearly all of it was done after he turned 70 in 1995. The significance of Jack's work is manifested by the inclusion of his figures in several recent AAPG presidential addresses.

Jack has also done several other things for AAPG. He was a co-editor of AAPG Memoir 48 on divergent margins and later served as a Distinguished Lecturer (1988–1989) based on that volume. He served on the Future of Earth Scientists committee, and as treasurer of the AAPG Foundation. For the RMAG, he served on the Executive Board and in the House of Delegates representing the RMAG. He served on the Board of Directors for five Offshore Technology Conferences (OTCs). With AAPG, Jack presented his work on twenty-first century energy to members of the U.S. Senate in Washington DC.

In recognition of Jack Edwards' lifetime of work in exploring for and influencing public policy discussion on future energy needs, and his many important contributions to AAPG, he is being recognized with the Distinguished Service Award.

Paul Weimer

BARRY A. GOLDSTEIN
Distinguished Service Award

Citation—To Barry Goldstein, in recognition of his boundless enthusiasm, support, and service, on behalf of the AAPG, to petroleum professionals and to the industry.

Barry's services to the AAPG include the HoD (Member, 2002–2008); EMD's Asia-Pacific Councillor (2007–2009); International Distinguished Lectures (2001–2009); Rules & Procedures (2003–2005); Field Trip Chair–AAPG's 1992 International Conference; and Courses Chair–AAPG's 2006 International Conference.

Barry has served on the boards of the: Petroleum Exploration Society of Australia (PESA, 1999–2007), Australian Geoscience Council (2002–2007), Federation of

Australian Scientific & Technologic Societies (2004–2007). Barry also served as Chair for PESA's 2004 Eastern Australasian Basins Symposium.

Importantly, Barry has also been an effective advocate and supporter of university geoscience education and research.

Barry Goldstein is the younger of two children of Paul Martin (Dick) and Helen Goldstein. Barry and his sister, Leslie, graduated from Uniondale High School and the State University of New York (SUNY). He always introduces Jenny Reeve—the mother of their two daughters and nanna to five grandkids—as "his reason for living."

Barry concluded field research on Bermuda and Long Island under grants to his SUNY-Binghamton geology professors (Paul Enos, and Donald Coates) while gaining a B.A. in geology (1975). He next completed his master's in geology (1977) at the University of Missouri with wonderful guidance from Ray Ethington, Tom Freeman, and David Davies.

Barry was 'summer help' in 1976 for Phillips Petroleum Company's (PPCo's) deep water (SEAGap) exploration team in Bartlesville, when he completed desk-top studies of the southern Caribbean, east Africa and the Rockall Plateau. Barry returned to PPCo as a field development geologist (1977–1978 in Norway) and then an exploration geologist (1979–1981 in the UK) in the North Sea.

He moved to Australia as chief geologist for IEDC/Kufpec in Perth, a position he held from 1981 to 1986. In that term, Barry benefited from direction from John Bobbitt, Keith Huff, and Brian Luecke and the efforts of great professional colleagues–especially Ted Ellyard and Peter Botten–while exploring in Australia, Indonesia, and China. He published an account of lessons learnt from exploring the Canning Basin in the *APPEA Journal* in 1989 ("Waxings and wanings in prospects, leads and play concepts").

In 1986, Barry moved to Sydney, as chief geologist of Bridge Oil. Again, Barry had direction from wise people, especially Steve Koroknay and Keith Skipper and great professional colleagues while exploring Australia, the United States, the Philippines, Indonesia and Argentina. Barry introduced and implemented several exploration methods at Bridge Oil including PC-based burial modeling, PC-based quick-look log evaluation, probabilistic prospect risk assessment, and probabilistic exploration portfolio forecasts. His prospect risk assessment method was subsequently published in the *APPEA Journal* in 1994 ("Explicating a gut feel"). Barry was a stimulating JV partner, keen to debate the point to test ideas and always focused on the goal to find hydrocarbons.

In 1995, Barry became Exploration Manager–Review (the "prospect police" for new ventures) for Santos Ltd, moving this time to Adelaide, South Australia. Yet again, Barry found people to learn from–especially Lloyd Taylor, Peter Goode, and Michael Frost, and very supportive colleagues–especially Rhodri Johns, Julian Evanochko, Carl Greenstreet, Stuart Jones, Greg Marcus, Rob Heath, and Andy Pietsch.

From 1998–2000, Barry was Santos' representative on APPEA's Exploration Committee. In 1998–2000, Barry was responsible for implementing Santos' acreage management strategies associated with the expiry of petroleum exploration licenses 5 & 6 in the Cooper Basin. This included negotiations with the state government for 74 production licenses covering more than 2000 sq km in early 1999 and then bidding for some 'just relinquished' areas still deemed highly prospective later in 1999 and 2000.

In 2001, he returned to Santos' Corporate Group as Chief Geologist for all of the company's activities.

Barry believes it is important to always act constructively. With hindsight, it is likely that his demeanor during negotiations with the South Australian government for production licenses was a factor in him being hired, in January 2002, as the director of the petroleum and geothermal group of the South Australian government Department of Primary Industries and Resources. In that role, Barry has responsibility for investment attraction and regulation of private sector investment in the upstream petroleum and geothermal sectors in South Australia.

Barry also has leadership roles in geothermal as Australia's Executive Committee Member for the International Energy Agency's geothermal research cluster (under the Geothermal Implementing Agreement) and the Chair of the Australian Geothermal Energy Group, the national geothermal sector cluster.

Barry cites the importance of trust, robust technical scrutiny, respect for opinions, and humor to underpin relationships through a career. His mantra is build trust, reduce uncertainty, and have fun (this often involves telling a joke of the day). The application of this philosophy was published by Barry with his SA Government

management team in the *APPEA Journal* in 2007 ("Virtuous life-cycle for E&P").

Clinton Foster

DOUGLAS C. PETERS
Distinguished Service Award

Citation—To Douglas C. Peters, in recognition of his distinguished and long-term service to AAPG and its Divisions and his unflagging enthusiasm for the geological and planetary sciences.

Douglas Cameron Peters was born in Pittsburgh on June 19, 1955, the son of Donald C. and Twila B. Peters. He grew up in Wexford, Pennsylvania, about 18 miles north of Pittsburgh. He graduated from the University of Pittsburgh with a Bachelor of Science in earth and planetary sciences with a geology option, attending the Miami University of Ohio field camp in Dubois, Wyoming.

In August 1977, after graduating from Pitt, Doug moved to Golden, Colorado, to pursue further education at the Colorado School of Mines. Doug was used to small towns near major cities so the move from Wexford to Golden wasn't too hard, but going from a 28,000 person university at Pitt's main campus to a 2,800 person college was quite a change.

At Colorado School of Mines he began working on his Master of Science in geology while simultaneously taking classes in mining engineering. Doug had some mining engineering classmates totally confused since his educational plans required him to simultaneously take courses at different levels. He was successful in juggling graduate work in geology and mining engineering courses, and upon graduating with his Master of Science in geology with an emphasis in remote sensing in 1981, he loaded his office contents on a large four-wheel cart and moved it across the street to a new graduate student office in the mining building. Doug completed his Master of Science in mining engineering with an emphasis in rock mechanics in 1983, just in time for the profound slowdown in hiring in both the petroleum and mining industries that started that year. Doug's perseverance paid off when he secured a position as a research engineer at the U.S. Bureau of Mines Denver Research Center.

During his tenure at the Denver Research Center from 1984 until the Bureau closed its doors in 1996 Doug served as principal investigator for projects on both applied mining and geological research focusing on image processing and GIS applications. In 1996, Doug started Peters Geosciences serving as a consultant on remote sensing and geographic information system (GIS) applications for the engineering, environmental, geological, and exploration communities. Recently he has also been involved in mineral development companies operating in the western United States and Afghanistan.

Professionally, Doug has been affiliated with many geological societies and is registered in five states in addition to having AIPG certification as a Professional Geologist. Doug became actively involved with AAPG in 1987 when he attended an EMD business meeting and learned as a result of a membership survey that EMD was beginning to discuss a publication on coal geology. The topic sparked Doug's interest and he volunteered to put the book together. Due to being burned on some recent publication efforts, the EMD officers didn't have great hopes for the successful completion of this project, but Doug persevered. An excellent publication titled *Geology in Coal Resource Utilization* was finally released at the end of 1991. This publication has sold adequately through the years since its publication. Recently, high energy prices have ushered in a new global round of coal exploration. This book is still cited and in demand.

In 1990 when the EMD Presidency was a two-year commitment where the vice president was elected and served as president the second year, Doug ran and won serving as vice president in 1990 and president in 1991. In some organizations serving as president is the terminal position, but Doug is one of those strong supporters of EMD and AAPG who continues to assist with division business to this day.

In the mid-1990s, CD-ROM publications were considered a

novelty and, by many, unlikely to succeed. Realizing that this new publication format had great promise and allowed great cost savings for color and interactive publication, EMD Leadership, including Doug as EMD Publications Chair, proposed a digital publication on CD-ROM, the *Atlas of Coal Geology*. Doug and other EMD leaders volunteered to help. The result, which was published in 1998, after much work and doubt by publications staff, was the first very successful AAPG CD publication. A second edition is currently being planned.

Doug has served EMD in many capacities through the years. In addition to serving as president and vice president, Doug has chaired or co-chaired seven EMD committees. In one case he has served on the nominations committee over 17 years. He has been the recipient of all major EMD Service awards including Distinguished Service and Honorary Membership. He has also been recognized by EMD with Certificates of Merit three separate times for his various services to the division.

Doug has also served in various capacities on AAPG Committees. These include Astrogeology (including being a co-founder of this committee), Publications, Twenty-First Century, Conventions, Annual Meeting Planning Committees, and the Committee on Committees. Doug also is serving as the chair of the DEG Geological Hazards Committee.

I, for one, am in awe of the many contributions of Doug Peters to both AAPG and the geological and planetary sciences and was very happy to learn that his many contributions are being recognized.

Gayle "Scott" McColloch

ROBERT S. GRAY
Grover E. Murray Memorial Distinguished Educator Award

Citation—To Robert S. Gray, for his unwavering dedication to his students and his passion for geology. He has mentored and inspired countless budding geologists, and instilled in them his love of the earth sciences.

It is rare that we get the opportunity to honor an educator from a community college, but I can think of no one more deserving than Dr. Robert S. Gray. In his 40 years of teaching, Bob has introduced hundreds of our geological professionals to geology, provided them with a firm foundation to build upon, and instilled in them his enduring love of geology. He genuinely cares about his students even as he pushes them to excel. I speak from experience on both sides of the fence–I have worked side-by-side with Bob for over 18 years, and he was my geology teacher and inspiration "way back when." In fact, of all the teachers I ever had, he remains the top.

Dr. Gray started his geology career as a student at Los Angeles Valley Community College, where he discovered his lifelong passion in his first introductory physical geology course. He went on to receive his B.S. in geological engineering from the University of Idaho, then moved to Arizona where he obtained an M.S. in 1959 in stratigraphy and petroleum geology at the University of Arizona.

For the next eight years Bob split his time between working professionally and doing field research toward the completion of his Ph.D. He completed his Ph.D. in 1965 in sedimentation, stratigraphy, invertebrate and vertebrate paleontology at the University of Arizona. During this time he worked for New Jersey Zinc Co. in the exploration of copper deposits in the Four Corners area, and as an exploration and research geologist for Pan American Petroleum Corporation, Denver, Colorado, where he was responsible for an exploration program in the Pennsylvanian Carbonates of Four Corners area.

In 1967, Bob accepted a teaching assignment at Santa Barbara City College (SBCC) in the Department of Earth and Planetary Sciences. Originally intending this to be a stepping stone to a four-year university, he soon discovered the joys that come with introducing new students to the wonderful world of geology, and is now in his fortieth year of teaching at SBCC as professor of geology.

Bob has taught thousands of students in geosciences from 1967–2007, many hundreds of whom went on to successful careers in geology. Some are tenured at various colleges and universities, some have successful careers in the petroleum/mining

industries or in environmental fields. All of them have been inspired by his caring, his mentorship, his strong expectations for excellence, and his exuberant enthusiasm for geology (especially in the field!)

Under his watch and through his contributions, the SBCC geology department has developed a geology program that is arguably the best in the California community college system. Through his hard work, field excursions, and the scientific grants he's written and received over the years, he has built up the department's collections of rocks, minerals, fossils, maps, and lab/field equipment to a level that rivals many four-year geology departments. His work and outreach over the years has also brought in an inordinate amount of scholarships to our students. Many of these scholarships are from former students of his that want to give something back to the next generation.

During his tenure at SBCC, he developed a Geoscience Tech program that provided students with immediate employment skills, as well as our current premier transfer program that provides our transfer students with both a rigorous and strongly field-oriented course of study. Our majors not only develop a genuine fondness for Bob, but also are exceptionally prepared to transfer to four-year schools and ultimately become successful in the field. Universities have regularly corresponded with us about the quality of our program and what Bob does, and they recruit our students because of it.

Bob has also made enormous contributions in the areas of consistent community outreach. Every year, he introduces young minds to his passion at virtually every elementary and middle school science fair in Santa Barbara or Goleta. He also gives talks to various community groups whenever asked on any one of a number of his many geologic areas of expertise (pygmy mammoths on the Channel Islands, volcanoes in Hawaii, etc.). He is an extraordinary ambassador for both SBCC and the geologic community as a whole.

In addition to his work at SBCC and in the community, Bob has continued his work as a Professional Geologist and consultant, providing field research and published reports for many environmental/paleontological surveys. He has also been an active member of AAPG since 1958. (This will be his fiftieth year!) Every month he takes 10–20 geology students down to the Coast Geological Society (CGS) meeting so that they can be exposed to and network with people working in our field. He is also a member of numerous other geological societies. In his spare time, he has been an active competitor with his wife in country western dancing competitions and won the Silver Division's World Championship in 1996 at Nashville!

In his career, Dr. Gray has received a number of other honors and awards, including the Pacific Section AAPG Distinguished Educator Award in 1998, the John J. Wooley Outstanding Undergraduate College Educator Award from the Coast Geological Society in 2003, a Lifetime membership for the Santa Barbara Gem and Mineral Society (with Thomas Dibblee and Helmut Ehrenspeck), the SBCC Outstanding Instructor Award in 1982, and SBCC's Faculty Excellence Award in 2003. The Grover E. Murray Distinguished Educator award from the AAPG is the ultimate recognition of his lifetime dedicated to putting his students first, preparing them for a future in geology and instilling in them his passion for geology. The fact that he can take students that most often aren't initially geology majors, and simultaneously excite them, inspire them, challenge them, and move them in the right direction towards becoming strong, prepared, and passionate geologists is the true measure of a great educator.

For many, many years, Bob has been the kind of dedicated teacher that most of us would like to be but few of us achieve as completely or as consistently as he has. He is an extraordinary mentor to his students-leading them, challenging them, teaching them by example, and touching their lives in countless positive ways. He is a role model to his colleagues, and a wonderful example for any educator to follow. Bob Gray is an inspiration to those who know him, and totally deserving of this award.

Janet L. Schultz

Response

Thank you, AAPG, for selecting me for the 2008 Grover E. Murray Memorial Distinguished Educator Award. I'm deeply humbled by the recognition of this prestigious award. It's awe-inspiring to see the list of previous winners. It reads like a Who's Who in the field of geology. Also please know how thrilled I am. My geological career has been filled with successes, joys, friends, colleagues, and some great memories. To be recognized and honored by one's peers is a great gift.

Thank you to my wife, Marcia, for her unwavering support of me over the years Additionally, thank you to Dr. John A. Minch for setting the wheels in motion for my nomination. Thanks also to Ms. Jan Schultz, my geology colleague at SBCC, for her flattering and exaggerated biographer's notes about me. I also want to thank the educational system of our great country for giving me this chance to succeed. I was raised in an orphanage in Altadena, California. When I reached college age, my financial position did not allow me to go to UCLA or any other university in Los Angeles. Instead, I began my college education at LA Valley Community College while also working to support myself.

I have been a member of the AAPG since I was a geology student in 1958. If you had asked me then if I would become a geology instructor, I would have said "no way ". My focus was to become a geologist in industry. The road to my career in Geology began with my desire to be an athletic coach at LA Valley College. I joined the track team in the spring. One day in practice, our track coach called us into a huddle and explained he was "short" of students for his physical geology class, so he enrolled all of us in his class. The track coach was Dr. Jim Slosson; he went on to become the State Geologist of California. As for me, the rest is geological history. The class changed my life.

Many of my life's achievements have resulted from fortuitous circumstances–a melding of people and opportunities. And thus, at the age of 18 and with the goal of leaving Los Angeles, I went to Idaho to work in timber country. I decided to stay in Idaho and to attend the University of Idaho. I selected geology as a possible career. I didn't realize it at the time, but I was on the path to my life's profession. It has since been a passion that has driven me, excited me, engulfed me, and beguiled me.

During the summer of my senior year at University of Idaho, I was a geological assistant for the Bear Creek Mining Company on the Miner's Ridge copper prospect below Glacier Peak in the Washington Cascades. Years later, John McPhee wrote of this project. In his book, *Encounters' with the Archdruid*, he explained why this area became Glacier Peak Wilderness area and not a copper mine.

Later, I went to the University of Arizona to work on a Ph.D. It was there I met two of the finest geology professors who inspired me during my graduate work at the University of Arizona. Dr. John Lance and Dr. Spencer Titley embodied the best of instructors. They focused on dedication, excellence, patience, an unstinting generosity to involve their students and a great enthusiasm for geology. I was truly blessed to have these instructors as my mentors.

My geological focus was always to work in industry. I worked for mining companies and for the United States Geological Survey, prior to my Ph.D. After my Ph.D., I found my niche working as an operational research geologist for Pan American Petroleum out of Denver. Somehow I was "awarded" the title of the "algal carbonate expert" at the Denver office. However, the real carbonate experts in the Rocky Mountains were Don Toomey, Lloyd Pray, Harry Cook, Phil Choquette, and John Wray, amongst others. At a RMAG meeting in Denver, Harry Cook thought it would be good if three of us would collaborate on an algal carbonate paper. The three would be John Wray, Lloyd Pray, and Bob Gray. We did go on to write carbonate papers but not jointly.

Field work became my passion at Pan American and I scoured the Four Corners mapping algal carbonate rocks and other carbonates. I also spent many days mapping the Permian Kaibab Limestone from Sedona, Arizona to Green River, Utah. One of my greatest achievements in the field was to work and even map with the greatest field geologist ever, Thomas Dibblee Jr. I was extremely fortunate to know this giant of geology. My professional motto is borrowed from another giant in the field geology, F.J. Pettijohn: "There's nothing so sobering as an outcrop!!" Today, I live by this motto and instill it in my students.

However changes in my life led me to change my career course and I accepted an "interim" geology instructor's position at Santa Barbara City College. My goal was to stay two years and move onto a university position. As luck had it, I had a chance to help start the Marine Technology Program, build a new Life Science-Geology building, establish a geology majors program and create a two-year geosciences technology program at SBCC. And that's not all; after four decades and a roller-coaster ride we're still not finished.

But the beauty of our program is not the building, the scientific equipment or even our great field geology program. It's our geology majors. I have always thought that you need an infectious love for geology and a passion to teach by CARING. But in caring, you must demand excellence and be relentless in dogging your students to do better and excel to their utmost.

Good teaching requires a blend of native ability, effort, enthusiasm, humor, patience, integrity, rigor, and realism. If I demand these qualities of myself then I expect the same of my students. Many professors don't like a competitive spirit, but I'm a strong advocate of a competitive spirit—not to compete against your peers but to strive for excellence and the best in yourself. I want my students to do just that!

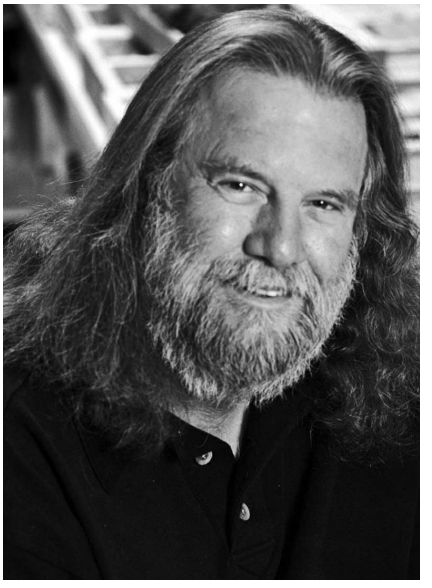
Some academics measure teaching proficiency by percentage of letter grades, by student polls, or by class sizes. What's missing in these measurements and most essential is the understanding that true teaching must be concerned with the whole student whose attitude, orientation, and performance is formed by a multitude of experiences.

Our geology program is built around a "team" effort to challenge the geology students to do their best and to set goals that can be nourished and sustained throughout their life.

Good geology students are not "born" nor are they "created" in secondary schools. Most geology students are "built" from their Freshman and Sophomore years of college. Our future new geologists will continue to come from the first two years of college education. My career goal, therefore, is not focused on research projects, or on publications of my work. It is to develop new geologists. My professional happiness is being surrounded by good students who want more of me and of the classes I teach. Having a geology majors program that molds students into top-notch geology transfer students is my goal and it keeps going and going and going.

You can't beat that for a lifetime!

Robert S. Gray



S. GEORGE PEMBERTON
Grover E. Murray Memorial Distinguished Educator Award

Citation—To S. George Pemberton, the finest of mentors, educators and friends, whose efforts have defined the careers of hundreds of geologists.

Anyone who knows George Pemberton treasures his mentorship, leadership and most importantly, his friendship. George is one of those rare people who can lead solely by example, and his many protégés have been inspired, by consequence, to much higher levels of personal achievement. The qualities George has brought to his research and training include creative problem identification and problem solving, excellence in conducting and communicating research, applying first-principle approaches to interpretation, and approaching each day and each problem with vigor and passion. George has instilled these qualities in his students at every level: Professor Pemberton is eminently deserving of this award.

George is a Fellow of the Academy of Science of the Royal Society of Canada. He has received recognition for his scientific efforts, including AAPG Distinguished Lecturer, several presentation awards, the R.C. Moore Medal, and the CSPG Medal of Merit. He was appointed to a Canada Research Chair in Petroleum Geology in 2002. But, anyone who knows George will understand that the Grover E. Murray Memorial Distinguished Educator Award will represent a benchmark achievement to George. He is, first and foremost, proud of his contributions to geological education.

We've often held to the notion that great educators are born, not made, and in George's case, that certainly holds true. His nearly patented combination of rigor, genteel behavior, gregarious kindness, and singularity of purpose, serves to make George a superb mentor. However, it would be remiss to overlook the other influences that have helped to make George the type of educator he is.

George graduated with an undergraduate degree from Queen's University in 1972. In the process of conducting an undergraduate thesis, George was drawn to studies in paleoecology. This led to his M.Sc. and Ph.D. research at McMaster University, where George studied and innovated within the fields of neoichnology and subsequently palichnology. George went to graduate school with many future leaders in the geosciences, including Robert Dalrymple, Rick Hiscott, Doug Cant, Fran Hein, Paul Smith, Russ Hall, Peter Ward, John Knight, Joe Lambiase, Fred Longstaffe, Dave Kobluk, and Ross Yeo. Being surrounded by such colleagues surely shaped the quality

and direction of George's teaching and research. While at McMaster University, George was strongly influenced by the knowledge and teachings of Roger Walker, Gerard Middleton, and George's supervisor, Michael Risk.

George completed his Ph.D. in 1979, and had already taken a position at the University of Georgia. There he worked with Dr. Robert Frey, the person who most influenced George's philosophy of science and education. In Bob, George found a man possessed of the same visions of geological research and mentoring fashion. George still talks of warm evenings sitting on the porch in Georgia, talking late into the night with his friend and mentor, Bob. The profound impact Bob Frey had on George's career and philosophy are still evident in George's teachings, and it is clear he is intent on benefiting his own protégés with that which he gained in Georgia.

George returned to Canada in 1981, and started work with the Alberta Geological Survey, where he worked with Grant Mossop. Then, in 1984, George came to the University of Alberta, where he has worked since. George's impact at the University of Alberta has been enormous. He has graduated 54 M.Sc. and 7 Ph.D. students - and many more are on the way! George also has mentored 6 Post-Doctoral Fellows. The number of undergraduate students and industry trainees George has influenced is nearly inestimable.

George has taught a range of courses at the University of Alberta, such as ichnology, sedimentology, stratigraphy, basin analysis, and historical geology. In all of his teachings, the history of the science is the fundamental building block of advanced education. "On the shoulders of giants!" he repeatedly reminds his students. George is also the first to remind students of Abbie Hoffman's favorite quotation "Sacred cows make the best hamburger—Mark Twain". The message is clear when both statements are synthesized: "Know your science, trust your science, but don't be a fool and ignore new ideas". Those who learn from George must learn this first.

A very important part of George's teaching has been application of the geosciences to industry. George is able to do this because of his efforts in providing the hydrocarbon industry with technology and science through training and consulting. George has acted in both functions for many companies, including ExxonMobil, Shell, BP, Encana, Saudi Aramco, PetroCanada, and NorskHydro. George has enjoyed the collegiality of many industry-focused geoscientists, including John Van Wagoner, Andy Pulham, Keith Shanley, Henry Posamentier, John Dolson, and Lee Krystinik. George's teachings have benefited greatly from the application of his work by the hydrocarbon industry, and so have his students. George's anecdotes of his partnerships with industry are legendary, and his ability to mesmerize students with these stories—about the thrill of applying science to practical problems—is surely unequaled.

George has shown himself to be a soft-rock polymath. He enthusiastically combines his skills as a stratigrapher, sedimentologist, or ichnologist in all of his research. Never one to gather wool, George has led the field in applying ichnology to subsurface studies, understanding the ichnology of brackish-water settings, integrating ichnology and sequence stratigraphy, and now investigations of biogenically affected permeability in reservoir studies. His students are also trained thusly. So many times we have listened to George encourage his graduate students to see as many rocks as possible, to explore their new ideas, and to work hard today for harvests tomorrow. Look, think, and then do.

As former graduate students of George's, and now his colleagues, we are honored to be a part of his great legacy. We continue to look with curiosity, think critically, and do with fervor, the way George taught us. Without his unparalleled example, we would not be the researchers and industry practitioners that we are. We would not see the world or science in the same way. After all, we stand on the shoulders of a giant.

Murray Gingras
James MacEachern

NIKOLAI V. LOPATIN
Special Award

Citation—To Nikolai Lopatin, scientist, author and teacher; recognizing his lifelong contribution to petroleum geochemistry and establishing some of the most important principles of petroleum maturation and migration.

It is with great pleasure that I have been asked to write a citation for Nikolai Lopatin for a Special Award from AAPG in 2008. This humble but extraordinarily influential geologist has led an equally extraordinary life that deserves some discussion.

Nikolai was born in 1938 on the eve of the Second World War in Stalingrad, Russia. His father, Victor Lopatin, was an engineer at a tractor factory while his mother worked as a bookkeeper. Nikolai's young life was filled with difficulties few of us born after this conflict can even begin to fathom. He credits the loving care of his parents who also taught him the values of a strong work ethic and congenial temperaments for shaping his approach to life. These values have guided him through many difficult times and brought him to where he is now as a father, husband and internationally recognized scientist.

His most vivid young childhood memory comes from being nearly drowned with his family in August 1942 when a steamer they were on, filled with women and children, was sunk by a German bomber. Following the devastating Battle of Stalingrad, he received his first life lessons in overcoming obstacles by living with five families in a common room in the completely destroyed and razed city. He began school studying in a basement room with children from first grade to fourth level high school mixed together. His teachers, other family members and friends provided much loving and caring support during this difficult time and as he has said "gave me my assignment for my entire life."

In post-war Russia, living conditions gradually improved and by 11, Nikolai had received the level of "first category" in chess, played football and other sports. For two years, he attended the military aircraft school and graduated secondary school with high honors. He was determined to enter the Russian Air Force High School, but was rejected because of eye problems. In complete despair, he entered the Northern Caucasian Mining Institute, completing his M.S. degree in 1961. He immediately joined the Volgograd Scientific Oil Production Institute and specialized in geophysics log imaging of carbonate reservoirs of the Lower Carboniferous and Upper Devonian in the Volga-Urals petroleum province. For a year during this time, he took a short diversion to serve in the army at its rocket division in Tomsk, West Siberia.

In 1965, he entered the prestigious Moscow State University (MSU), receiving his Ph.D. in 1968. Following graduation, he worked closely with Nikolai Vassoevich, another famous Russian scientist and teacher who was instrumental as an early mentor.

By 1972, Nikolai was invited to the Institute of Geophysics and Geochemistry in Moscow as the chief of surface geochemistry. Here he directed many exploration activities in both West and East Siberia. During this time, he formulated his ideas on time and temperature in petroleum generation using the Arrhenius equation, which is now the basis for most computer modeling of petroleum generation and migration. Following the recognition of this important contribution, he worked,for a decade, starting in 1982, in the Institute of the Russian Academy of Science as a leader of the petroleum geology and geochemistry team. Here he was exposed to many western contacts and projects, interacting with scientists from IFP, Total, Professor Welte Institute in Ulich, American oil companies such as Exxon, Conoco, Shell, and Mobil, as well as Petrobras, Ecopetrol, Pemes, CNPS, INPC and others.

I had the pleasure, along with former AAPG President Pete Rose and European Region President John Brooks, of first meeting Nikolai in Moscow in the fall of 2005 during Pete's presidential tour. We worked hard to assemble some of the most influential Russian geoscientists to talk with Pete and Nikolai Lopatin's name immediately jumped to the top of the most-wanted list.

As a relatively young graduate student in 1980,

I read Douglas Waple's now famous *AAPG Bulletin* article (v. 64, no. 6, p. 916–926) "Time and temperature in petroleum formation: application of Lopatin's method to petroleum exploration." I think it would be fair to say it is an understatement to characterize this paper as simply "important" to petroleum exploration. The principles Nikolai uncovered in his early research have underpinned most petroleum systems modeling since that time.

What might be more remarkable is how this work, despite being finished in a country which at that time was so isolated from many western research institutes, was so quickly and permanently adapted internationally and expanded upon by countless other researchers.

Along with many other influential Russians, he joined AAPG in 1998 following Perestroika when communication and interaction with western companies and research institutes began to grow dramatically. He is a corresponding member of the Russian Academy of Science, and also belongs to EAGE, JCCP, Latin-American Association of Organic Geochemistry, and the National Geographic Society.

Nikolai's publication history is extraordinary, with 357 articles and 4 full monographs in Russian, including recent work on unconventional oil resources in the Jurassic Bazhenov of West Siberia in the Journal of Petroleum Geology. He continues as a technical leader in geochemistry and continues to publish state of the art papers dealing with petroleum systems, evolution of the biosphere and fossil fuels, unconventional oil accumulations and reservoir geochemistry of oils within proven oil fields as a tool for understanding compartmentalization and production.

In 2006, Nikolai was elected to the AAPG House of Delegates to the European Region, again reflecting his international reputation. As a delegate, Nikolai initiated what is now a combined SEG/AAPG/EAGO/ROSNEDRO International Conference and Exhibition held in Tyumen, West Siberia in December 2007. This was AAPG's second conference in Russia since the St. Petersburg meeting in 2001.

Russian geoscientists have a long and proud history of discovering hydrocarbons which is equal in years to that of any western company or institute, stretching back to the late 1840s (around the time of the famous 1859 Drake Oil discovery). Through that long period, many influential researchers here have added greatly to our understanding of the process of petroleum generation and migration, but few are as well known or appreciated as Dr. Lopatin.

Despite his international acclaim, Nikolai remains a quiet, modest man who has a tendency to underplay his contribution. And so, it is my great pleasure to be able to cite the rationale for this special award to a man who would otherwise be content to just continue to contribute to his science, family, students and colleagues in his unassuming manner.

John Dolson

Response

When AAPG President Willard Green informed me that I was selected to receive the 2008 AAPG Special Award, I was simply astounded. This award means a great deal to me and also honors many other Russian petroleum geologists, my Russian scientific school and especially my wonderful teacher, Prof. Nikolai Vassoevich.

From AAPG I want to particularly thank Dr. Peter R. Rose (AAPG president in 2005) for his advice, kindness and gift of his well-known book on risk analysis. I also need to thank Dr. John Hunt, whose has influenced me professionally in meetings and with his exceptional book *Petroleum Geochemistry and Geology* (1995), which I take with me on all of my geological trips. I am also very grateful to John Dolson for his invaluable support. Lastly, I wish to express my deep gratitude to Dr. Douglas Waples for his famous 1980 AAPG publication of "Time and temperature in petroleum formation: application of Lopatin's method to petroleum exploration".

I must take this opportunity to also thank the countless geoscientists who over the years have contributed to the *AAPG Bulletin*, memoirs and treatises on exploration which have been such an important resource for all petroleum geologists.

My professional development at the beginning in 1965, when I entered Moscow State University as a post graduate student and received my Ph.D. in petroleum geology and geochemistry three years later. I studied under Prof. Nikolai Vassoevich, a famous Russian scientist and excellent field geologist. He was one of the first to map deep water deposits in the Caucuses, flysch connection, and as and geochemist published the first ideas about the main zones of petroleum generation.

This period was interesting and scientifically exciting for me, and as a young specialist, I worked 20 hours per day and felt strongly my work was valuable and heading

in the right direction. In 1971, I was able to publish some articles about basin modeling studies, which include subsidence and thermal-history reconstruction, chemical kinetics of coalification and hydrocarbon generation processes as a time-temperature index (TTI) (N. V. Lopatin, 1971 "Temperature and geological time as a factors in coalification", *Izv. Academy Nauk USSR*, no. 3, p. 95–106). Douglas Waples made some outstanding improvement in his *AAPG Bulletin* (Vol. 64, no. 6, p. 916–926). In 1985 Jay Leonard (Platte River Associates) and Doug Waples, prepared well-know 1D Basin Model program and paper ("Lopatin from here to maturity"), which was one of the first computer models to determine thermal maturity and generation of sedimentary basin.

I continued studies of the geological evolution of source rocks over time and the impact on distribution of the world's oil, gas and shale oil deposits. This research was published In English in the *International Geological Review* in 1980 ("Evolution of the biosphere and fossil fuels", v. 22, no. 10, p. 1117–1131). For 11 years I worked in the Vernadsky Geochemistry Institute of the Russian Academy of Science as the chief of the petroleum geology and geochemistry team. I had a chance then to interact with many western companies, notably Exxon Exploration, Exxon Production Research Centre, Exxon Ventures, Total, JFP, Prof. D. Welte Institute in Ulikh, Conoco, Shell, Mobil, Petrobras, Ecopetrol, PEMEX, CNPC (China), and JNPC. I remain deeply involved in understanding the petroleum geology and geochemistry of supergiant hydrocarbon accumulations.

In 1993, I returned to the VNIIGeosystems Institute as a chief of the Petroleum Geology and Geochemistry Laboratory and have worked in 37 exploratory projects in the West and East Siberia, Timan-Pechora, Barents Sea and other Arctic sedimentary basins. For five years we also had a joint project with Petrobras Company studying the potential of the Parnaiba Basin.

A current focus of my research activities is integration of 2D basin modeling and play evaluation in Russian sedimentary Basins. I am still actively studying the South Barents Sea, Yenisei, and Khatanga trough and Lena-Tunguska petroliferous province.

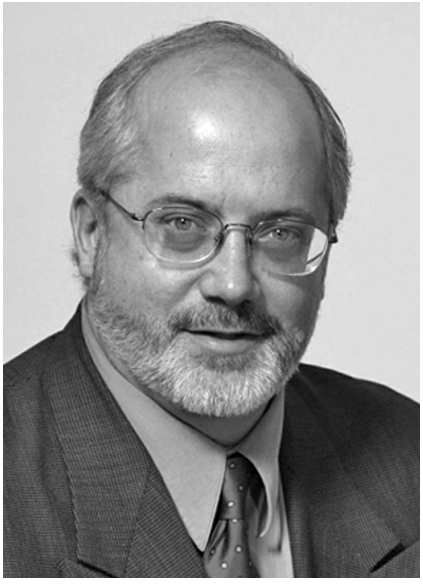
Recently I began working on the study of unconventional oil accumulations in black shale formations: a self-sourced reservoir system (*Journal of Petroleum Geology*, v. 26 no. 2, p. 225–244), and also in using 'oil fingerprinting' to determine compartmentalization in existing fields (Geoinformatica, 2007, no. 3, p. 1–27).

My relationship to AAPG has always been very important for me as a wonderful way to learn new information and meet so many new colleagues and friends.

I am particularly thankful for the patience and help of my wife, Lyudmila. She is professor of music at the Moscow conservatory. My daughter is a professor of medicine, and my grandson, Vladislav, is a student at Moscow State University where he will soon become a Chinese language expert and philologist.

Lastly, I want to thank all my friends and colleagues from the Geosystems Institute for their support. I am very grateful to the AAPG Executive Committee for recommending and approving this Special Award.

Nikolai Lopatin



STEVEN L. VEAL
Special Award

Citation—To Steven L. Veal, an enthusiastic, tireless and innovative contributor to the AAPG over the past two decades, including service in HoD, DEG, Conventions and the Executive Committee.

Our awardee stayed close to his Colorado Rocky Mountain home in the early part of his career, graduating from Metropolitan State College in Denver with a B.S. in 1986, following degrees in science and general studies. He then joined the company that his father had founded, DCX Resources in Denver as a geologist, rising swiftly from exploration manager to become chief executive officer in 1990. His industry experience covers not only geological, geophysical, and geochemical work, but also other technical aspects

including remote sensing and well operations, as well as land, legal, and business activities.

Steve's early domestic successes included the development of the Moore-Johnson field in Colorado and the Southwest Stockholm field in Colorado and Kansas. Through his leadership, DCX managed to cut costs, improve profitability and later took on consulting to broaden the scope of his company's activities. In 1994, Steve first took his company overseas with ventures in Europe and international projects. One innovation that he introduced was the concept and application of "partner exploration teams"; where secondees from working interest partners were involved in peer team reviews of prospectivity, drilling and development. Steve's consultation services have been utilized by exploration companies in Europe as well as throughout the United States

He has demonstrated a very varied publication list as author and co-author on geological topics such as "De re metallica: Mining and geology in the sixteenth century", "Petroleum potential of the basin and range province", "Potential of structural interpretation using space shuttle hand-held photography", "Stockholm Southwest field", "Hydrocarbon production from low contrast, low resistivity, Pennsylvanian age reservoirs of the Las Animas arch region in southeastern Colorado" and "Morrow sandstones of southwest Colorado and adjacent areas."

Steve has shown incredible commitment in his service to the AAPG and its Division of Environmental Geosciences (DEG) after joining as a student in 1986. Worthy of his humility was his statement when standing for vice president in 2004, that he considers it a privilege to contribute to the society. As for committee participation: he has served on the Astrogeology committee from 1988–1999; HoD 1991–2006 in various roles including Delegate and Nominations and Elections; he served the DEG in various roles from 1992 to 2005, including Advisory Board, Awards, Protocol, Marketing, Computer Applications, Advisory Board, president-elect, Annual Meeting, International Program, Nominations and Ad Hoc Programs; AAPG Conventions 1992–1995 and 2001–2004; Group Insurance 1996–1998; Budget Review 1997–2000; Mentoring 1999–2000; Advisory Council 1999–2000; International Coordination 2003–2004; Tactical Operations 2004–2006; Student Focus 2005–2006; International Conventions and Exhibits 2005–2006; Grants in Aid 2005–2006; Regions 2005–2006; Audit Review 2005–2006; and the Imperial Barrel Award 2007–2008. Steve has also served as Treasurer of the American Geological Institute, 2003–2004.

In addition to these serving committee positions, Steve was an officer of the AAPG, being treasurer 1996-1998, where he reformatted the structure of the Finance committee to ensure continuity of knowledge of the systems for succeeding treasurers. He was elected as AAPG vice president 2005–2006, as well as serving as DEG president 1999–2000. In 2003, he co-chaired the short course section of the International Conference in Barcelona, as well as assisting in the organization of the Birmingham and St. Petersburg AAPG conferences. He has been involved in organizing the APPEX prospect fair in London since its beginning through this year.

In recognition of his service to the DEG, he was awarded their Certificate of Merit in 1998, 2000 and 2001, as well as Honorary Membership in 2001, and the President's Award in 2003. Steve received the AAPG Distinguished Service Award in 2003 and was awarded the AAPG Certificate of Merit in 2004. In addition, he was a recipient of the A.I. Leversen Award as co-author of the best paper for the Mid-continent region in 1991.

Steve moved with his family from Colorado to London in 2006, not only to further his career in international consulting, but he is now director of the European AAPG office situated in Imperial College. He is actively involved in developing AAPG European activities and it was at his instigation that the Imperial Barrel exploration competition for students was inaugurated at the 2007 Long Beach Annual AAPG Convention. For his continued dedication and creativity to the AAPG, there is no doubt that Steve Veal deserves this AAPG Special Award.

Stuart Harker

Response

It has been my great honor to volunteer, serve, and on occasion, work for the AAPG in a variety of roles and functions over the past 20 years. My family history brought me into the profession, with four generations participating in some part of the industry.

My great-grandfather built dereks in the Oklahoma City field and my grandfather ran a service

truck business out of Healdton, Oklahoma. However, it was father, Harry K. Veal, that taught me that petroleum geology was more than the vital skills of drawing maps and examining outcrops. He told me that we are in fact charged with a great responsibility that few other occupations can claim within human society, finding the energy that allows the world to function in modern times. There may be other sources of energy in the future that replace hydrocarbons and that's fine, but at this moment, we are it.

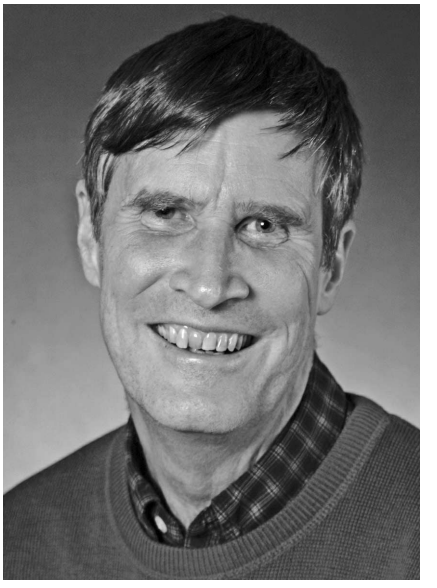
I became a geologist because, in many ways, it was the profession that I should do and at one time in my life, it became the thing I wanted to do. Joining the AAPG was and still is part of the education experience that is critical to the success of someone working in this industry. As a trade association, it continues to fulfill its role as a benefit to my business, my personal skills, and I constantly invite students and geoscientists worldwide to join the organization.

I've enjoyed working on every committee, project, and program that has come my way within the AAPG. My first role within the organization was in fact, as with most of these things, accidental. I had asked Robbie Gries if I could help with the AAPG Annual Convention that was held in Denver in 1988. She said I could and introduced me to a gentleman who thanked me profusely for volunteering and excepting what he called a great challenge. He then walked away without saying what exactly I had volunteered for. That person was the late Bruno Hansen, and I found out later that I had been confirmed to run the DEG program for the convention. The fact that at the time I wasn't a DEG member didn't seem to be a problem but I quickly joined and enjoyed every minute of that effort. I need to thank the DEG en massw for many years of wonderful projects, and I think it is important that each of our members belong to and work within a division at some time during their career. Divisions and the AAPG committees focus on critical projects, duties, and questions, truly demonstrating the amazing capabilities within our volunteer membership.

A few years ago I was asked to take on the challenge of opening the first AAPG office outside of the U.S., in the European Region. This appealed to me as opportunities in new exploration projects in Europe developed, my family was willing to uproot and move at fairly short notice, and the AAPG leadership fully supported this important development. The AAPG European Office is open, staffed, and fully functioning, and I want to thank those members in Europe that have contributed their time and efforts in support of the establishment and growth of the office.

I would like to thank Stuart Harker for his kind words and those who have helped me in my career and efforts within the AAPG these past many years. To thank them all would in fact fill this volume and extend beyond it and maybe that is best part of belonging to the AAPG, the multitude of friends that seem to come with the membership.

Steven L. Veal



ASHTON F. EMBRY III
Public Service Award

Citation—To Ashton Embry, Geologist, Scientist, Father, who uses his understanding of complex geological systems, in the field of medical science to further Multiple Sclerosis research

Ashton Embry was born shortly after World War II to a Canadian mother and an American father. Ashton spent his first few years growing up in Washington D.C. before moving to Canada, where he would grow up in Winnipeg, Manitoba, Canada. By the time Ashton was 12 he had decided that he would be a geologist and one of his prized possessions was a rock and mineral set that was purchased from the Geological Survey of Canada (GSC) for one dollar.

Ashton finally started to formally study geology at the University of Manitoba. As Ashton tells the story, he played basketball (for the road trips), joined a fraternity (for the parties), and went to class (for the much needed rest). His first geological job, after his second year, was spending four months in the

field mapping the Precambrian Shield and becoming familiar with black flies, deer flies, horse flies, bears and moose, which gave Ashton time to consider career prospects in petroleum geology. The next summer, Ashton worked with Shell Canada in Edmonton, Alberta, and, under the tutelage of a group of petroleum geologists including Peter Ziegler, he learned how to pick tops on well logs, draw cross sections and generate exploration prospects.

Ashton completed an M.Sc. at the University of Calgary on Devonian reefs in the Arctic and then worked for two years with Mobil Oil Canada in the Canadian Beaufort Sea as an exploration geologist. This was Ashton's first exposure to seismic sections and sequence stratigraphy, something he would work with for the rest of his career. In 1972, Ashton went back to the University of Calgary to obtain a Ph.D. focused on Devonian clastics of the Canadian Arctic Islands.

After completing his Ph.D. in 1975, Ashton joined BP Canada and continued to work northern Canada. Eventually the Geological Survey of Canada came calling with a position of arctic stratigrapher and Ashton joined GSC in 1977. For the past 30 years, Ashton has been a geological research scientist analyzing voluminous datasets and interpretations and speculations of Arctic Geology.

In 1995 one of Ashton's three sons, Matthew, received the devastating diagnosis of Multiple Sclerosis (MS). Having been a research scientist for his entire career, Ashton decided to plunge into the medical scientific literature about MS to determine the most likely factors which cause MS and to use this information to develop an effective therapy for his son. Ashton discovered that abundant scientific evidence indicates that various nutritional factors potentially play major roles in both the onset and progression of MS. Strangely, this information was not being made available to persons with MS by doctors or by established MS charities throughout the world.

On the basis of the scientific information, Ashton and his wife, Joan, a medical professional, started Matthew on a very restricted diet and various dietary supplements which include vitamin D and omega 3 fatty acids. Over the next few years, Matthew was reexamined and determined to be MS free and today he remains in excellent health with no MS symptoms on the diet designed by Ashton and Joan.

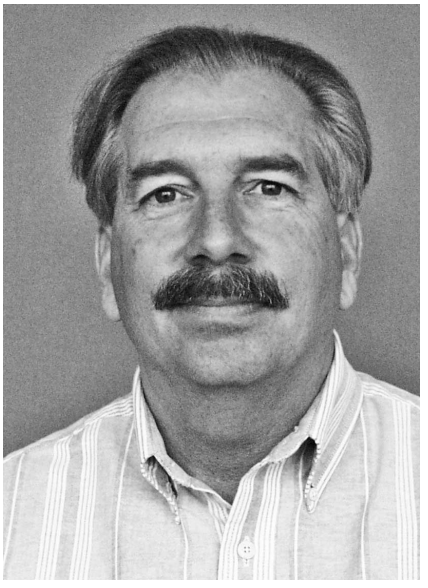
Through the next decade, Ashton continued his research into MS and started a charitable Foundation, DIRECT-MS (*DIet REsearch into the Cause and Treatment of Multiple Sclerosis*). Ashton is personally involved in promotion of diet and supplements to slow the progression of this disease and contributes articles to medical journals on this topic. DIRECT-MS (www.direct-ms.org) is currently funding medical trials which will test the effectiveness of diet and supplements for slowing the progression of MS.

Ashton sees MS as a large, multi-factorial problem similar to the geological ones he has always worked on (e.g., origin of the Arctic Ocean). His approach differs significantly from that of the medical research scientists in this field. In medical research there seems to be only a "100% sure interpretation" or else a "don't know" approach. Notably, many people today are having great success in halting or greatly slowing the progression of MS with nutritional strategies.

Along with his scientific and academic achievements, Ashton has a long history of contributions to both the AAPG and the Canadian Society of Petroleum Geologists. He has won AAPG's Distinguished Service Award, J.C. Sproule Award, and he twice chaired the Technical Program Committee for the successful AAPG Annual Meetings in Calgary in 1992 and 2005.

Today, Ashton continues to work at the GSC as a research geologist and he and his wife, Joan, have three grown and healthy sons. Ashton continues to work with DIRECT-MS and his interpretations on nutrition and MS are starting to gain acceptance in medical circles throughout the world.

John R. Hogg



DOUG RATCLIFF
Public Service Award

Citation—To Doug Ratcliff, for his unstinting dedication to the institutions of which he is a part, for his effective historical efforts in enabling public geologic research, and for his remarkable innovation and success in bringing science to minorities, especially through GeoFORCE Texas.

The Public Service Award of the Association recognizes individuals who have provided distinguished service in areas of public concern and affairs. Doug Ratcliff's professional career has largely been in the administration and facilitation of geologic research in the public sector, research available to all. He conceived of GeoFORCE Texas, a program aimed at increasing the number of minorities entering the geosciences workforce. Few areas of public service exceed that of bringing geoscience literacy to the workforce of tomorrow.

Doug Ratcliff is a native of Texas, where he has spent all of his life and professional career. He received a B.A. degree in political science in 1973 and a B.S. degree in geology in 1983, both from The University of Texas at Austin. In 1978, he earned an M.B.A. from St. Edward's University.

After a tour of duty with the U.S. Marine Corps, Doug began his career at the Bureau of Economic Geology in 1974, first as an administrative clerk in charge of the Bureau's Well Sample and Core Library. In short order he moved through the ranks to become associate director for administration, a position he held at the Bureau until 2003, except for a year-long stint as general manager of Hall Southwest Corporation in 1992–1993. In all his years as associate director his early days with the Bureau's Well Sample and Core Library were always with him, and his personal dedication to the preservation of cores and samples has led to the largest repository of core and samples in the nation, with Bureau-operated core research centers now in Austin, Midland, and Houston.

Shortly after the formation of the new Jackson School of Geosciences at the university, Doug transferred to the main campus in the role of associate director of the school and associate director of the Geology Foundation and later as assistant dean of the school. He had direct responsibility for financial and administrative activities of the foundation and the School with assets of $400 million. With his skill in office operation and keen perception of talent, he developed the administrative infrastructure of the school in grand style.

In 2004, Doug Ratcliff inspired a new outreach of the Jackson School designed to renew the long-term, historical association of the geosciences at UT Austin with the Latin American community. Out of his efforts came the Jackson School–sponsored Latin America Forum, which has established links with energy and environmental policy leaders of all the Latin American countries.

Currently, Doug Ratcliff is serving as director of the Jackson School's outreach program. A centerpiece of that program, which he inspired and advanced, is GeoFORCE Texas. It has been under way for three years with three successive academies of largely Hispanic high school students from South Texas. The program is a joint one with the Jackson School and a host of corporate sponsors. Of the 120 students involved in the academies to date, only three have dropped out of the program, a remarkable success rate. The senior group is now applying for university admission, and many are aiming for the geosciences—all thanks to Doug's inspiration and dedicated work. At the urging of the sponsors, GeoFORCE Texas is now expanding to the Houston Independent School District, a district made up chiefly of Hispanic and African-American students.

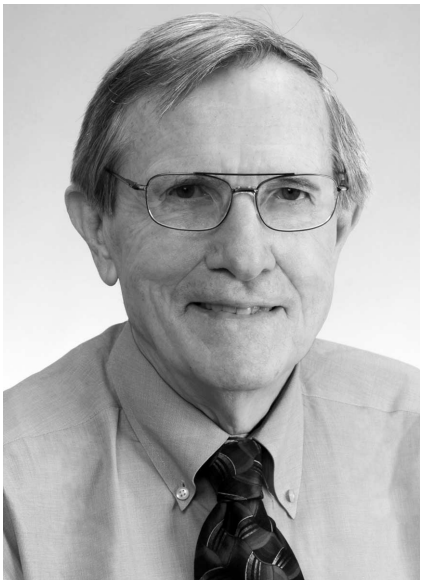
Doug Ratcliff has always been active in professional societies, with principal activity in his local society, the Austin Geological Society, of which he has served as elected president; with the Gulf Coast Association of Geological Societies; and with the American Association of Petroleum Geologists. With GCAGS, Doug has served as treasurer, as a member of the Finance Committee, as chairman of the Housing Committee and the Publication Committee, and as general chairman for the 2002

Annual Meeting in Austin. In AAPG he has served as a member of the Membership and the Tactical Operations Committees. He is a certified professional geologist in Texas and is the recipient of the Distinguished Service Award from GCAGS, the Joseph C. Walter Excellence Award from the Jackson School, and the Alumnus of the Year Award from the Bureau of Economic Geology.

I have had the honor of knowing and working with Doug Ratcliff for a third of a century, over which time he has been a great friend, a valued colleague, and a trusted counselor. Legions of people would say the same thing, for he is truly a dedicated prince of a fellow.

The public arena is better for the presence of Doug Ratcliff. In presenting the Public Service Award to a person of his caliber and commitment, we do a most fitting thing, and perhaps even more important, we credit our Association in doing so.

William L. Fisher



L. FRANK BROWN, JR.
Pioneer Award

Citation—L. Frank Brown, Jr., for his innovations in the fields of depositional systems, seismic and sequence stratigraphy and coastal management, and as an outstanding teacher and mentor to geoscientists globally.

This year's Pioneer Award recognizes Frank Brown for his contributions as an innovator in different aspects of stratigraphy, and as an important mentor and teacher. His most significant contributions have been in the development and adoption of depositional systems; in the analysis of modern depositional systems for coastal management; in pioneering work in seismic, and later, sequence stratigraphy; and, as a professor, teacher, and mentor to the broader industry. Frank made these contributions while working at the Bureau of Economic Geology (BEG) in Austin (1957–1960, 1966–1989, 1998–present), with a faculty appointment at University of Texas at Austin (1966–1989). He also taught at Baylor University (1960–1969) and worked as a full-time consultant from 1989 to 1998.

Beginning in 1966, Frank began to work with William Fisher and Joe McGowen in developing and adopting the concept of depositional systems. This work was done at a time where "classic" stratigraphic concepts were still being taught and used; in essence, the field of stratigraphy had changed little since the 1930s, largely due to the Depression and WWII. Because the classic ideas of stratigraphy had been entrenched in the literature, including the Code of Stratigraphic Nomenclature, Frank and his colleagues fought an uphill battle for many years with many "judicial stratigraphers," before the new concepts were accepted.

Many crucial concepts from Frank's work are now routinely taught and used in industry and academia, including the term he coined, "systems tracts." Although many key publications grew from this work, the key monograph was published in association with a research colloquium held in Austin in August 1969 on delta systems in petroleum exploration.

Frank also showed breadth in his field by working on modern depositional systems and environmental geology. From the late 1960s through the mid 1980s, he worked on the Texas Coastal zone and other areas to emphasize the impact of coastal processes and planning. He published on many aspects of this work with many different BEG researchers.

In 1975, Frank began working with Petrobras, state oil company of Brazil, applying the concepts of depositional systems to seismic reflection data. Frank Brown and Bill Fisher published a highly significant paper in AAPG

Memoir 26 in 1977, emphasizing the 2-D seismic stratigraphic signature of different depositional systems. Frank clearly articulated his ideas from a direct principle basis and logically extended the concepts of depositional systems into their 2-D seismic stratigraphic signature.

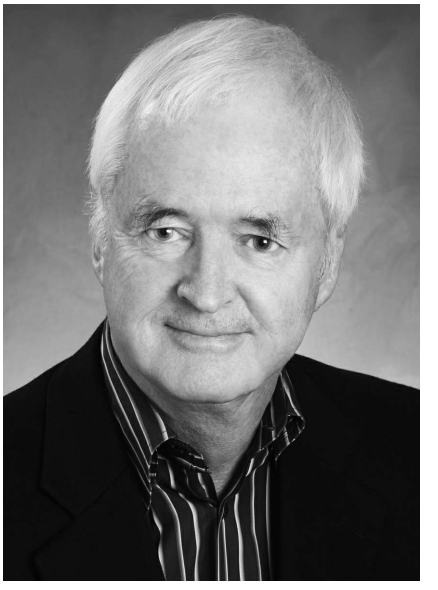
What has impressed me the most about Frank is his ability to stay open-minded, and his willingness to change his approaches to stratigraphic interpretation. In mid-career, he admitted that some of his earlier work was flawed and needed modification—I think that there is a message here for all of us. This change in approach happened when Frank worked closely with three groups of geoscientists from Soekor, then the state oil company of South Africa, in 1987–1989. They were doing regional exploration on three offshore basins, and eventually this work was published in the 1996 AAPG Studies in Geology No. 41. This atlas remains one of the best publications illustrating how to do regional sequence stratigraphy and basin analysis by integrating different data sets.

At an age when most have retired, Frank continues to work 60% time at the BEG. Most recently, Frank has reevaluated the Oligocene growth faults in South Texas and introduced new concepts in a mature area with significant implications for exploration and development geology, as well as analogs to many other Cenozoic margins of the world.

Lastly, and most importantly, Frank has always been on a mission to disseminate important stratigraphic concepts to companies–originally in depositional systems, later in seismic stratigraphy, and finally in sequence stratigraphy. He has been an excellent professor, teacher, and mentor for countless geoscientists. While at UT-Austin, Frank supervised and served on many student thesis committees. Frank served as an AAPG Distinguished Lecturer, both domestic (1972–1973) and international (1994–1995). Frank has also taught extensively in industry for the past four decades for many companies. He has taught short courses in more than 40 countries!

Many of the stratigraphic concepts now taken for granted and used daily by exploration and development geoscientists grew from Frank's career contributions. As a consequence, it is altogether fitting that Frank receive the 2008 AAPG Pioneer Award.

Paul Weimer



GRAHAM R. DAVIES
Wallace E. Pratt Memorial Award

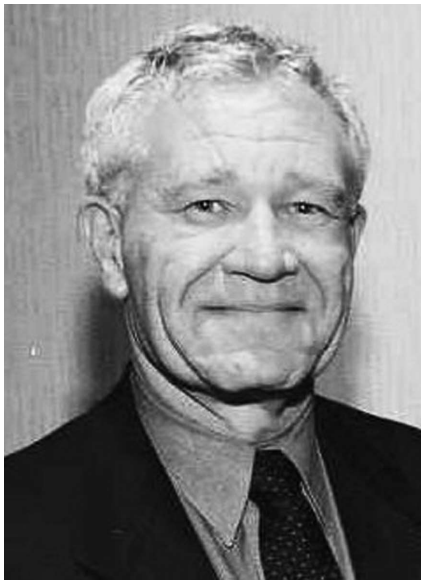
LANGHORNE B. SMITH JR.
Wallace E. Pratt Memorial Award

Structurally Controlled Hydrothermal Dolomite Reservoir Facies: An Overview is a comprehensive review of the processes and products of fault-controlled hydrothermal dolomitization and associated diagenesis and the reservoir characteristics of hydrothermal dolomite reservoirs. Hydrothermal dolomitization is interpreted to occur early in the burial history when the host rocks are buried to a depth of <1 km. High-temperature, high-pressure fluids flow up active, basement-rooted extensional, strike-slip and especially transtensional faults, meet overlying seals near the surface and flow laterally into porous and permeable limestones. There may be first a period of dissolution of the limestone followed by dolomitization. White saddle dolomite forms in fractures and vugs and the matrix is replaced by finer dolomite, but it all forms from the same hydrothermal fluids. Hydrothermal dolomite reservoirs

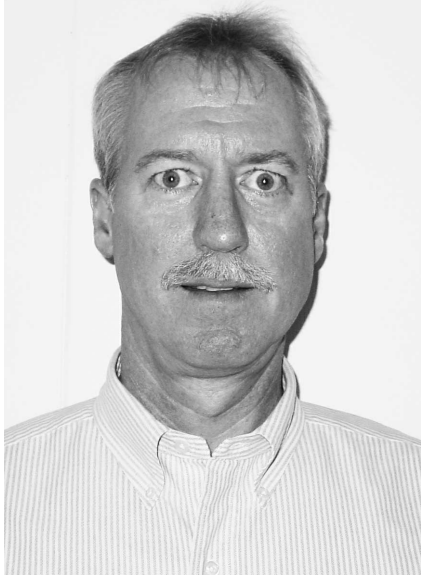
are commonly expressed on seismic data as sags that form primarily from transtensional fault movement and the development of negative flower structures. Hydrothermal dolomitization is also common around margin-bounding faults between carbonate platforms and shale basins, and around basement highs on rifted margins. Subsurface leaching of limestone occurs as a halo around many hydrothermal dolomite reservoirs, and many leached limestones that do not have associated dolomitization may also be of a fault-related hydrothermal origin. This type of diagenesis appears to be very common: unconventional hydrothermal dolomite and associated leached limestone reservoirs may represent one of the greatest remaining opportunities in mature basins around the world.

Graham Davies received his B.S. (honors) degree and his Ph.D. from the University of Western Australia. His doctoral thesis was on modern carbonates in Shark Bay, Western Australia and was published in AAPG Memoir 13. After a postdoctoral fellowship with James Lee Wilson at Rice University, he joined the Geological Survey of Canada (GSC) in Calgary. After seven years with the GSC, Graham co-founded and became principal owner of AGAT (Applied Geoscience and Technology) Consultants/Laboratories. Since 1983, he has operated through Graham Davies Geological Consultants (GDGC) Ltd. He has published about 80 articles on the geology of Australia and Canada and has authored or coauthored more than 650 consulting reports. Graham has received many awards and recognition for published papers and oral presentations from the AAPG, CSPG, SEPM and GSA including the 2002 Douglas Medal of the CSPG for his work on Arctic Paleozoic carbonates and evaporites and on the Triassic of western Canada. The Pratt Award paper has also received the 2007 CSPG Medal of Merit Award for the best paper on Canadian petroleum geology in 2006. Graham's principal current research interest is in hydrothermal dolomite and associated processes and products.

Langhorne Smith is a carbonate reservoir characterization specialist. He currently heads the Reservoir Characterization Group at the New York State Museum in Albany, New York where he has worked since 2000. He holds a B.S. degree from Temple University and a Ph.D. from Virginia Tech. He worked for Chevron as a development geologist for two years and then as a research scientist at the University of Miami before taking his job at the Museum. His research interests are in the characterization, sequence stratigraphy and hydrothermal alteration of carbonate reservoirs. He is married and has two children.



P. M. "MITCH" HARRIS
Robert H. Dott Sr. Memorial Award



L. J. "JIM" WEBER
Robert H. Dott Sr. Memorial Award

Giant Hydrocarbon Reservoirs of the World: From Rocks to Reservoir Characterization and Modeling, edited by P. M. "Mitch" Harris and L. J. "Jim" Weber, contains 12 chapters that assemble information on giant (>500 MOEB recoverable

reserves) hydrocarbon reservoirs that will be of value to a wide audience. Although far from exhaustive, this compilation includes a wide range of reservoirs when examined from any perspective, such as location, geology, and production history. Reservoirs described in this volume are located in the Middle East, Asia, West Africa, North America and South America. The authors explore historical and alternative approaches to reservoir description, characterization and management, as well as examining appropriate levels and timing of data gathering, technology applications, evaluation techniques and management practices in various stages in the life of individual development projects. Enhanced recovery of hydrocarbons requires a critical understanding of reservoir heterogeneity by both geoscientists and engineers. The giant fields discussed in this Memoir address issues important to reservoir description, characterization and management from both geologic and engineering perspectives.

Dr. Mitch Harris, a senior geology consultant with Chevron Energy Technology Company in San Ramon, California performs carbonate research, technical support projects, consulting and training for the various operating units of Chevron. His work during the last 30 years has centered on facies-related, stratigraphic and diagenetic problems that pertain to carbonate reservoirs and exploration plays in most carbonate basins worldwide. Mitch received his B.S. and M.S. degrees from West Virginia University and his Ph.D. from the University of Miami, Florida. He has published numerous papers, edited several books and is active in AAPG and SEPM. He has been a Distinguished Lecturer and International Distinguished Lecturer for AAPG, and was awarded Honorary Membership from SEPM. Mitch is also adjunct faculty at Rice University, the University of Miami, and the University of Southern California.

Dr. Jim Weber works for the ExxonMobil Exploration Company as a carbonate stratigraphy expert specializing in sequence/seismic stratigraphy and reservoir characterization. His current work assignment involves stratigraphy coordination and resource deployments across the various ExxonMobil companies. In recent assignments, Jim led an ExxonMobil effort to identify and develop new carbonate play concepts in carbonate basins around the world. He also worked with the National Oil Company of Abu Dhabi to develop integrated reservoir characterization schools in the UAE and Oman. Jim has been employed in the Oil Industry for more than 18 years, working for both heritage Exxon and Mobil in production, development, exploration and research organizations. Past work assignments include Southeast Asia, North and South America, the Middle East and the north Caspian region. Jim received a B.A. degree from DePauw University, his M.S. degree from the New Mexico Institute of Mining and Technology and his Ph.D. degree in geology from the University of Tennessee. He is active in various geological societies including SEPM and AAPG. He has published numerous various papers and abstracts ranging from the Cambro-Ordovician to the Holocene.

ALEJANDRO ESCALONA
J. C. "Cam" Sproule Memorial Award

The J. C. "Cam" Sproule Memorial Award, presented to the AAPG member 35 years old or younger at the time of submittal who authors the best paper published during the year by the association or any affiliated society, division or section, is awarded to *Alejandro Escalona for Petrophysical and Seismic Properties of Lower Eocene Clastic Rocks in the Central Maracaibo Basin*.

The paper was part of a special AAPG Bulletin issue about the geology of the Maracaibo supergiant basin in Venezuela co-edited by Paul Mann and Alejandro at the Institute for Geophysics, The University of Texas at Austin. The focus of the Bulletin special issue was to put together a series of integrated regional to reservoir-scale studies that were performed at The University of Texas at Austin during the last decade on the hydrocarbon-rich Maracaibo Basin. The main objective of Alejandro's paper was to provide an overview

of the distribution of Eocene reservoirs in the central Maracaibo Basin and to determine if robust correlations between seismic amplitudes and petrophysical properties can be established. In cases where no correlations were found, new techniques were used by building high-resolution cross sections (pseudo-seismic) in order to understand the reservoir distribution.

Alejandro is an associate professor in petroleum geosciences at the Department of Petroleum Engineering at the University of Stavanger in Norway. He was born in Caracas, Venezuela where he received his B.S. in geophysical engineering at the Universidad Central de Venezuela. In 2003, he received his Ph.D. in geosciences at The University of Texas at Austin, where he focused on the evolution of the Maracaibo Basin from regional to reservoir scale. His is currently opening a petroleum geosciences program at the University of Stavanger. His main research activities are focused on the interaction between tectonics and sedimentation at the regional scale.

CATHY L. FARMER
George C. Matson Award

The George C. Matson Memorial Award for the best paper presented during an AAPG oral technical session is presented to Cathy L. Farmer for *Structural and Sedimentological Evolution of the Ultra-Deep Gas Play Fairway—Gulf of Mexico Shelf, Texas and Louisiana*.

Cathy has been a geologist in the oil and gas business for almost 30 years, working mostly in international exploration with experience in Venezuela, Trinidad, Norway, West Africa and the Middle East. Currently she is senior exploration geologist for BP's Gulf of Mexico Group, where she is responsible for delivering prospects for BP's Deep Gas Exploration program. Prior to working the Gulf of Mexico, she was the chief geologist for BP's production and exploration business in Venezuela. In 2000, she was lead geologist responsible for BP Trinidad's multi-TCF Red Mango discovery.

Born in Nashville, Cathy's interest in geology began while hiking and collecting fossils in the hills of middle Tennessee. After receiving full academic scholarships at Colorado School of Mines, Cathy earned two degrees there studying under R. J. Weimer, J. D. Haun and T. L. Davis. Her Master's thesis, funded by the USGS, was published in 1982 jointly with R. J. Weimer and J. J. Emme as a CSM Quarterly titled Tectonic Influence on Sedimentation, Early Cretaceous, Powder River Basin, Wyoming and South Dakota. The quarterly is still referenced and used as course material at CSM.

Her winning paper deals with opening the ultra-deep gas play fairway for the Gulf of Mexico shelf, one of the most exciting exploration projects in Cathy's career as a petroleum geologist. In preparing the Deep Gas presentation, Cathy chose to emphasize the thorough approach BP uses for prospect evaluation as applied to two deep-gas prospects to demonstrate the interaction between salt tectonics and sedimentation and to illustrate the potential of the ultra-deep section. The technical contents of Cathy's slide presentation were drawn from work done by at least 20 other colleagues at BP on the deep-gas team, mega-regional team, and in the exploration and production technology group. Cathy thanks her co-authors and all of the extended team for allowing her to present their work and represent BP with her presentation.

Cathy currently resides in Texas where she is a member of the Houston Geological Society and a licensed professional geologist. She has been a member of AAPG since 1978.

JOSE I. GUZMAN
Jules Braunstein Memorial Award

SHENGYU WU
Jules Braunstein Memorial Award

ROD SLOAN
Jules Braunstein Memorial Award

SHAOQING SUN
Jules Braunstein Memorial Award

The Jules Braunstein Memorial Award for the best AAPG poster presentation is presented to Jose I. Guzman, Rod Sloan, Shengyu Wu and Shaoqing Sun for *A Comprehensive Classification of Seals Based on Worldwide Subsurface Analogs.*

The research that led to the poster presentation is part of a much larger empirical study on seals, based on analogs of nearly 1000 reservoirs from around the world. The authors decided to pursue this study as a reality check on seals because even though excellent research has been accomplished in the past few years, modern seal studies are mostly theoretical and very few involve calibration datasets. In the original study, the goal was the calibration of the properties of seals with the height of hydrocarbon columns, and in the process of doing so the authors found that a system or classification was needed to organize observations and to explain the differences encountered. Existing seal classifications were inadequate for purposes of the study, because they were focused either on mechanisms or on capillary properties. The authors developed a comprehensive classification based on the number, type, location and combination of sealing surfaces. The idea was inspired by Milton and Bertram's (1992) trap classification, where two main trap types were proposed: one-seal traps and poly-seal traps. After examining hundreds of analogs, the seals classification system had grown to three end-member categories (simple top, updip fault and lateral stratigraphic) and nine combinations, plus one category of miscellaneous or unconventional seals such as tar and hydrodynamic seals.

Once the authors documented each seal category with known hydrocarbon fields, they devised a simple but complete checklist of parameters to be considered while

risking each of the three seal end-members, and of the pre-drill information that would be required to qualify each parameter. A concrete workflow for risking seals was then proposed following the authors' classification. The power of this classification and risking procedure is that any geoscientist can quickly visualize the sealing surfaces that might be involved in the prospect and proceed to examine known analogs for additional assessment.

José I. Guzmán obtained a B.A. in geology from the University of Colorado at Boulder in 1980, a M.S. in geology from the Universidad Central de Venezuela in 1995 and a Ph.D. in geology from The University of Texas at Austin in 1999. During the first 12 years of his career he worked as a clastic reservoir geologist for Lagoven S.A. and a small O&G consulting firm in Venezuela. In 1992, he joined the staff of Intevep S.A., the R&D affiliate of PDVSA in Venezuela, where he participated in various sedimentological and stratigraphic studies of the Eastern Venezuela Basin. He also worked for two years as a research assistant at the Bureau of Economic Geology of The University of Texas at Austin. While at The University of Texas, he earned the Best Technical Presentation award for his dissertation work on the Miocene stratigraphy of northeastern Maracaibo Basin. Currently, he is a senior research geoscientist for C&C Reservoirs where he has helped advance the application of worldwide field analogs for exploration and production. José is an active member of AAPG, SEPM, and the Houston Geological Society and is author or co-author of more than 20 papers and abstracts.

Rod Sloan is geoscience manager at C&C Reservoirs, UK, where he is technical supervisor and coordinator of C&C's worldwide field case-history reports business. Sloan holds a Ph.D. in clastic sedimentology and volcanology from Bristol University and an M.S. in mineral exploration and mining from Leicester University. He began his career as a mineral explorationist with Billiton and, prior to joining C&C Reservoirs in 1997, his experience included mud logging (with Anadrill), sedimentology, petrography and regional sequence stratigraphic studies (GAPS), field development (BP secondment) and asset valuations and equity determinations (Scott Pickford Group). He is an active member of the Geological Society, London, AAPG, the Petroleum Exploration Society of Great Britain and the European Association of Geoscientists and Engineers. He has published more than 10 papers and abstracts.

Shengyu Wu obtained his Masters and Ph.D. degrees in geology and geophysics during 1987–1993 at Rice University. He worked at the Geophysical Research Institute of BGP International of CNPC in 1976–1987, where he served in many capacities including supervisor for data processing computing facilities and geophysical data analyst. He joined TOTAL's Houston subsidiary in 1993 and was involved in exploration and development projects onshore/offshore Louisiana and as team leader for Gulf of Mexico sub-salt exploration until early 1996, when he joined Anschutz Exploration. Shengyu re-joined TOTAL's Houston subsidiary in 1997 as frontier exploration manager for deepwater Gulf of Mexico exploration program and became vice president of Exploration in 1998. He was appointed as E&P representative of TOTAL in Beijing in 2000. In 2001, he founded GeoSynthesis International and served as senior exploration consultant for Anschutz Exploration and Ansbro. Shengyu joined C&C Reservoirs in 2003 as Director of Geosciences and head of the Americas office. He has published several papers and proceedings on the evolution of salt and shale dominated slope tectonics and on sequence stratigraphy. He is a Certified Petroleum Geoscientist of Texas and member of AAPG and SEG.

Qing Sun received his B.S. in 1985 in petroleum geology from Daqing Petroleum Institute, China, and his Ph.D. in 1990 in reservoir geology from Reading University. From 1990 to 1993, he was employed by Petroleum Information (ERICO) and MASERA, initially as a senior research geologist and later as a project manager where he was involved in several regional/global studies, including exploration approaches and strategies in paleokarst and dolomite reservoirs, global Jurassic source rocks, regional play evaluation of the Rharb Basin, northern Morocco and reservoir evaluation and play assessment of Mesozoic-Tertiary carbonates in the Middle East. In 1994, he worked for Chevron as a consultant, involved in the company's Giant Carbonate Fields Database Project. He has worked on Miocene carbonates in Southeast Asia, the Middle East and the Gulf of Suez, Jurassic carbonates in southern England and Paleozoic carbonates in China. In addition, he taught Carbonate Exploration and Production for the M.S. courses at the Geology Department of Imperial College, London. In 1994,

he founded C&C Reservoirs, where he currently holds the position of managing director. Shaoqing has more than 15 publications on carbonate sedimentology, sequence stratigraphy, diagenesis and reservoir quality and clastic depositional processes.

TYLER PRIEST
Geosciences In The Media Award

Dr. Tyler Priest is clinical professor and director of Global Studies at the C. T. Bauer College of Business, University of Houston. He is also a faculty affiliate of the Public History Program at the University of Houston, and a partner in History International, LLC, a consulting firm specializing in corporate and public history projects.

Dr. Priest received his B.A. in history from Carleton College, his Ph.D. in history from the University of Wisconsin-Madison, and has taught at Middlebury College in addition to the University of Houston.

He has served as chief historian on a Shell Oil corporate history project, chief historian on a Department of the Interior sponsored project to document the history of the offshore oil industry in the Gulf of Mexico and is currently chief historian on another Department of the Interior project to document the history of the offshore fabrication and shipbuilding industry along the Gulf Coast. He is also chief historian for the Association of International Petroleum Negotiators (AIPN) history project.

Dr. Priest is the author most recently of *The Offshore Imperative: Shell Oil's Search for Petroleum in Postwar America*, Texas A&M Press, 2007. His previous publications include *Global Gambits: Big Steel and the U.S. Quest for Manganese Ore*, Greenwood Press, 2003 and *Offshore Pioneers: Brown & Root and the History of Offshore Oil and Gas*, Gulf, 1997. He is currently working on two other book projects about the history of offshore oil: *Ever Deeper: The Technology and Strategy of Petroleum Exploration in the Gulf of Mexico* and *The Battles for the Tidelands: The History of Offshore Oil and Gas Leasing in the United States*.

MARTA S. WEEKS
L. Austin Weeks Memorial Medal

The L. Austin Weeks Memorial Medal is given in recognition for extraordinary philanthropy and service directed to advance the mission of the AAPG Foundation. The premier award honors the late L. Austin Weeks, whose philanthropic legacy set an exemplary standard. The award was established in 2008; it is the Foundation's highest award. The 2008 recipient is Marta S. Weeks.

Marta Sutton Weeks (Mrs. L. Austin Weeks) presently of Palmetto Bay, Florida, was born May 24, 1930, in Buenos Aires, Argentina. The second daughter of a geologist's family, she was reared on both the North and South American continents.

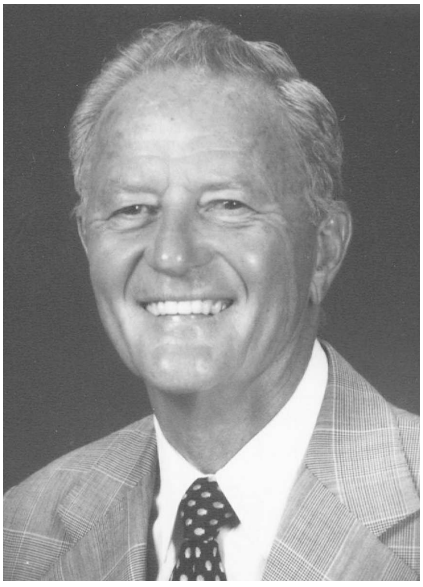
She received her early education in Holladay, Utah, and at the Bella Vista School in Maracaibo, Venezuela, later graduating from high school at St. Mary-of-the-Wasatch Academy in Salt Lake City, Utah, in 1947. She went on to Beloit College in

Wisconsin then to Stanford University in California where she received a B.A. in political science in 1951.

After her marriage to Austin Weeks, a geologist, in 1951, she lived in Utah, later moving to Colorado, California and Maryland before moving to Florida in 1967. She is the mother of three children, one of whom died in a helicopter accident at the age of 23.

Mrs. Weeks' job and business experience started at age thirteen when her father staked her 200 cans of popcorn and she supplied popcorn to the local oil camp populace in Maracaibo, Venezuela. During her summers in college, she worked for the legal department of the Mene Grande Oil Co. in Caracas, Venezuela, and also for the Centro-Venezolano Americano teaching English to foreigners. She also worked for Household Finance Corporation, McKelvey & McKelvey law firm and served as a director of Weeks Petroleum, Ltd. as well as the Weeks Air Museum. She served three years on the Board of Trustees of Beloit College and sixteen years as trustee of the University of Miami, where she currently presides as chairman of the Board. She is also a trustee associate of the AAPG Foundation, consultant to the Center for Sexuality and Religion, a member of the International Solar Energy Society, priest-at-large in the Diocese of southeast Florida and a dame in the Order of St. John of Jerusalem. Her memoir, Our Lord Was Baptized, You Know, was recently published. She has received honorary doctorates from the University of Utah and the Episcopal Theological Seminary of the Southwest.

Mrs. Weeks is a strong believer in education and supports various programs in the sciences and humanities. She loves to travel and says one of the most interesting places she's ever been to was Antarctica. Says Weeks, "It was absolutely fantastic."



JACK C. THREET
Chairman's Award

The Chairman's Award is given to recognize extraordinary contributions (either monetary or service) to the AAPG Foundation and also to call attention to the role and value of the Foundation. The 2008 recipient is Jack C. Threet.

Jack Threet's extraordinary professional career can be described in two segments; 36 years with Shell Oil, which overlaps and continues with 51 years of service to the AAPG and the AAPG Foundation.

Jack was born in the village of Dundas, Illinois in 1928. He attended a three-room schoolhouse until he was twelve, when his father moved the family to Champaign, home of the University of Illinois.

Jack enrolled at the University of Illinois, worked his way through school, and fell in love with geology and Katy (Catherine Hall). He took a summer job with Shell Oil, and found petroleum geology so interesting that he deferred finishing his M.S. degree, married Katy and became a junior stratigrapher with Shell in Tulsa in 1951.

His career with Shell Oil got off with a catapult start when a subsurface prospect he created became South Autwine Field in Oklahoma, notching an exploration success less than 24 months after joining Shell.

Jack's qualities of hard work, persistence, teamwork and mentoring skills caused him to rapidly rise in Shell Oil. His management skills were recognized early; he had three separate international assignments and was one of Shell's youngest leaders at every stage of his career.

He put his personal stamp of excellence on Shell's exploration program and led it during some of its greatest years, from 1979 to 1987.

Some of the breadth and depth of Jack's drive and initiative can be gathered by noting that he (1) has been a trustee associate of the AAPG Foundation since 1987 and served as trustee, then chairman, of the Foundation from 1994 to 2006, and recently volunteered, with Larry Funkhouser to chair a major fund-raising campaign for the Foundation; (2) was granted AAPG's Robert H. Dott Sr.

Memorial Award in 2003, and Distinguished Service Award in 2005; (3) continues to be involved in dozens of local, national and international charitable organizations including Rotary, YMCA, United Way, Habitat for Humanity and the Methodist Church, to name a few; (4) is a long-time member of the Advisory Committee of the Geology Department at the University of Illinois and, with his brother Richard, has endowed a Professorship in sedimentary geology at the University; (5) has been recognized every year since 1985 in Marquis' *Who's Who in America;* and (6) was inducted into Senior Golfers of America Hall of Fame in 2005.

Retired, yes: inactive, no!

We have been greatly enriched by the mentoring skills, leadership, personal generosity, and service of this remarkable man, and we are pleased to welcome him to the select circle of Honorary AAPG Members.

MARY FITTS
Teacher Of The Year Award

The Teacher of the Year Award, given for excellence in the teaching of natural resources in the earth sciences, K-12, is presented to Mary Fitts.

Mary Fitts teaches in the Douglas County School District at Sierra Middle School in Parker, Colorado. She and her husband, Bruce, have been married for twenty years, and have two children, Patrick, a high school senior, and Kylie, a freshman.

Mary was born in Alexandria, Louisiana, but with a father in the Air Force, she grew up in Alaska, Montana and finally Garland, Texas. She attended Rice University, where she double-majored in geology and behavioral science.

After working as a soils geologist, Mary became a teacher in 1982. Since then, she has been passionate about teaching Earth Science to her eighth-grade students. Kids are naturally curious about their world, and love to learn about "their Earth" in a variety of ways. Being a science teacher is a huge advantage; Mary can provide a wide variety of lab-based activities to promote learning and inquiry. Whether her students are trying to identify a mineral, determine how a convection current works, or proposing their own hypotheses about dinosaur behavior, they are learning from the inquiry process itself. As a result, she hopes that when students go on to high school, they leave her class with a solid appreciation of "their Earth" and its resources, its dynamic nature and the desire to safeguard it for the next generation.

Mary truly appreciates the wonderful opportunity to represent Earth Science teachers on behalf of the American Association of Petroleum Geologists, and she said, "It is with great honor that I accept the 2008 Teacher of the Year Award. I sincerely commend professional organizations like the AAPG that support educators in their efforts to teach about the value and preservation of our natural resources."