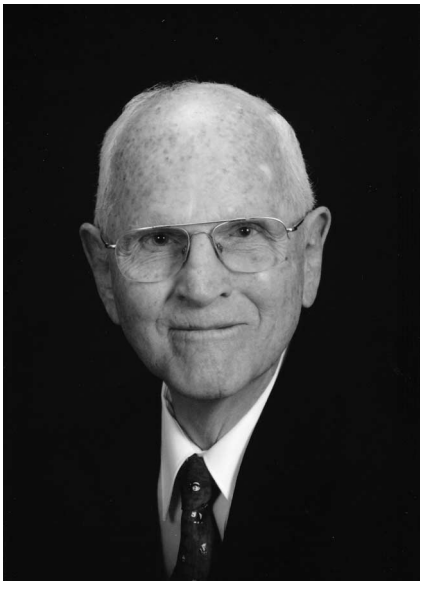
AAPG Honorees, 2011



JOHN W. SHELTON
Sidney Powers Memorial Award

Citation—To John W. Shelton, distinguished scientist, teacher and mentor, honoring a lifetime of innovative research, exploration leadership and collaborative achievement in all aspects of petroleum geosciences. His vision of a digital future for AAPG and his personal contributions to the education and careers of many students and professionals have helped ensure that AAPG will remain vital and dynamic throughout the 21st century, and beyond.

John W. Shelton is always quick to give others credit. If asked he would tell you that he won the Sidney Powers Medal as the result of collaborating with many colleagues. As with all achievement, there is some truth to this sentiment, however, John W. Shelton is the 2011 Sidney Powers Medalist because of a lifetime of geoscience achievements and personal contributions, culminating with AAPG's digital publication program.

John began his professional career with Shell Oil Company in 1953 and contributed to successful projects in operations, technical services, and research over a 10-year period with Shell. While at Shell, he lived in Billings, Montana; Denver, Colorado; and also in Houston, Texas. He worked on projects in the Rocky Mountains, in the Tertiary of the Gulf Coast, and began his research on sandstone depositional environments and reservoir properties.

John Shelton was an early developer of the concepts and application of sedimentary petrology and sedimentary depositional environments to petroleum exploration. He and his Shell Oil Company colleagues were the pioneers in the application of depositional environments to prospect definition. While at Shell he also developed concepts of growth faulting that were applied successfully in petroleum exploration.

In 1963, John joined the faculty at Oklahoma State University where he taught geology and conducted research and helped develop a master's degree program until 1980. His primary teaching assignments were structural geology, sedimentology, and petroleum geology. One of his greatest achievements is the legion of geology students that he taught, persistently encouraged, and ultimately inspired to successful careers in industry and academia. Most of these students would say that John was not their favorite professor while they were in school, but soon became their favorite once they had begun their careers. This is the effect that he has on people; somehow finding a way to make them better.

His colleagues and students are familiar with John Shelton's philosophy, which he often shared. Some of his favorite sayings are: "When times are bad, they are not as bad as they seem, and conversely when times are good, they are not as good as they seem" or "Don't hire anyone you wouldn't want to work for", and, one more example, "As one gets older, his hearing becomes worse but he hears noise more sensitively. When one gets older, his eyesight becomes worse but he sees unkempt sites more readily".

Less well known is the contribution that John Shelton made to petroleum geology during the period 1974–1988. During this period John was working with ERICO, a geological consulting company based in London and Tulsa, Oklahoma, founded by Paul McDaniel. ERICO combined talent from academia and the oil industry and pioneered the concept of multi-client studies that were underwritten by oil companies, government agencies and NOCs. This period was an extraordinarily productive time for John. During a 14-year period he took a lead role as both project director and contributor on over twenty major projects in the North Sea, North Africa, the Mediterranean region, Africa, and China.

In the North Sea he worked on major projects covering the

Devonian, Carboniferous, Permian, Jurassic, and Cretaceous, collaborating with such people as Stanley Westoll, Dick Selley, Tony Hallam, and Konrad Habicht. He, together with others, started a major regional North Sea mapping project and significantly initiated, with Bill Fredricks, a North Sea pressure mapping project, a service which is still in operation today.

In the Mediterranean region John was director for major petroleum geologic studies on Tertiary, Cretaceous, and Jurassic carbonates, collaborating this time with Mateu Esteban, Jim Wilson, Bill Ward, Mike Brady, and others. John also worked extensively in Libya and was responsible for a major study on the Sarir sandstone. During this time, John worked on other studies in the Triassic and Silurian. Also, he was director, with Leo Dainelli and Marco Pieri, on a groundbreaking study covering subthrust plays in the region, and towards the end, in conjunction with Ken Hsu and Kerry Kelts. There was also further collaboration with Ken Hsu and Charles Leung on exploration projects in China. After leaving ERICO, John continued working with Masera Limited Partners on major studies in Libya, Iraq, and Iran.

Under normal circumstances, John might have expected (after a suitable period of confidentiality) to be able to publish much of the material he worked on. However, such were the confidentiality conditions imposed on ERICO that none of the projects were ever published. Although ERICO has long since been sold and no longer carries out project work, the results of John's collaborations are still available in the libraries and archives of many oil companies.

He is author or co-author of over 50 publications, and nearly 30 other proprietary reports, all spanning more than 40 years of collaborations, among which was the timely and well-known *Oklahoma Geological Survey Bulletin 118*, *Models of Sand and Sandstone Deposits: A Methodology for Determining Sand Geometry and Trend*, still widely used today.

More recently, John Shelton had the vision to see the importance of digital publications to AAPG's future. He launched and nurtured AAPG's digital program to the benefit of AAPG members worldwide. How does one measure the importance of the contributions of an individual to a scientific organization? One way would be to consider the purposes of that organization. Disseminating useful scientific information is AAPG's primary purpose. Digital publications have accelerated that process and John Shelton was responsible for its beginning.

John's perseverance allowed-Datapages to survive several setbacks in the 1990s and his innovative fundraising brought industry money to pay for digitization and organization of all AAPG published articles, as well as those from SEPM and the GCAGS. With this external, no-strings-attached funding, AAPG and its affiliates all would have had to pay out the (more than) $1 million dollars spent in this effort. In all likelihood, the work never would have been done. These archival programs now pay royalties back to the publishers who, in turn, use the money for local projects and scholarships.

John's vision quickly settled onto Geographic Information Systems (GIS) and AAPG/Datapages has become the only geology publisher (to date) besides governmental entities to actually publish original scientific contributions in GIS formats so their rapid dissemination and use is ensured. GIS Study Projects are analogous to the ink-on-paper symposium volumes we all were trained on. The recent $9.4 million dollar gist from T. Boone Pickens for AAPG to publish along FIS themes is clear evidence that industry supports this concept. John Shelton directed the activities of the AAPG/Datapages GIS publishing program, and again, he launched it with a corporate capital campaign (exceeding $1 million dollars) that avoided using Association funds or cash flow.

Perhaps his crowning legacy is the website, Search and Discovery.com. What began in 1997 as an online research and demonstration project, Search and Discovery has become a leading geology and petroleum industry information website. It has always been open to the public. In 2010, it logged more than 1.5 million unique visitor sessions. In the future the number will continue growing. Until June 2008, there was no staff. John Shelton and two part-time webmasters generated all the online materials. Despite working full-time for over 10 years, John Shelton has never taken a salary for his work on Datapages or Search and Discovery. These have truly been a labor of love for the science.

John Shelton has also served AAPG in many other ways over the years since becoming a member in 1954. He served on several committees before his election as AAPG Editor from 1975 to 1979 (four years). He was AAPG Vice President from 1986 to 1989. He is a member of the AAPG Foundation Corporation and a member of the Trustee Associates of the AAPG Foundation. He was awarded

Honorary Membership in 1990. He has mentored and befriended many of AAPG's leaders.

John W. Shelton was born in 1928 in China Spring, Texas. He graduated from Baylor University with B.A. degree in mathematics in 1949. John continued his education at the University of Illinois, completing a M.S. degree in geology in 1951 and a Ph.D. in geology in 1953. John's most successful life collaboration and his prime supporter of 61 years is his wife Doris. They continue to live in Tulsa, OK.

John Shelton has given so much to AAPG in terms of leadership and time. Members like John Shelton exemplify the meaning of service to others and are what have made AAPG the strong, viable organization it is today. Awarding him the Sidney Powers Medal is truly overdue and richly deserved.

Much of the above material was borrowed from several sources, among them are Peter Wigley, Ronald Hart, and Paul McDaniel. The authors wish to acknowledge those authors and thank them.

Ted Beaumont
Jim McGhay

Response

I thank my citationists, Ted Beaumont and Jim McGhay, who thoughtfully nominated me, for their very kind and generous words. Special gratitude is to the others who expressed support to the Advisory Council, to its members, and to the Executive Committee. I am highly honored and yet humbled and overwhelmed to receive the Sidney Powers Memorial Award. This year it is best considered a group award, representing and recognizing the groups of outstanding individuals with whom I have been associated. In general, I have been the persistent expediter, rather than the originator of good ideas. Advantageous associations and incidents are instrumental to unusual opportunities, and I have been the recipient of a large quotient of each. My most important relationship, of course, has been, is, with Doris, my wife of 61 years, who has provided unwavering support yet needed timely advice. Undoubtedly, this award is related to my association with AAPG's digital publications. In these endeavors, I was guided by Peter Wigley, Steve Allen, Ron Hart, Rick Fritz, Ted Beaumont, and Mike Horn, especially, with the unqualified encouragement of Paul McDaniel, who later, along with Bob Weissmann, played a major role in obtaining the needed sponsorship. Upon recommendation of Fred Dix, Don O'Nesky, and Gary Howell, the AAPG Executive Committee in January, 1990, gave Masera permission to digitize its publications and manage those data in a digital library. The needed support from industry was received from Conoco, Marathon, Exxon, Texaco, Mobil, and Anadarko. Conversion of AAPG Publications was completed in 1996, and shortly thereafter we changed from CD-ROMs to the Internet as the main means of data distribution. *Journal of Petroleum Geology* and *Journal of Sedimentary Research* were added during the next two years, and GCAGS Transactions were added in 1999. By that time two other projects were begun; they became known as Search and Discovery, the online journal, and GIS-UDRIL, the spatial representation of published illustrations and databases. All three projects received added emphasis and focus when AAPG, under the leadership of President Ray Thomasson, acquired Datapages. Each project was characterized by extremely slow adoption and acceptance by the potential users. Persistence, one of the many worthy traits I observed in my parents, was really a key element in pursuing and developing these digital products and services.

Prior to 1990, my life was characterized by a long series of special opportunities resulting from fortunate associations and unusual incidents. Doris and I arrived at the University of Illinois in 1949 as newlyweds to begin graduate work, and her support was essential for my survival. Little did I know earlier that taking a geology course at Baylor, recommended by my sister, Virginia, would eventually lead to my applying for a fellowship at U of I and that Stewart Folk, one of my instructors, had worked at the Illinois Survey on the campus there. In fact, little geology did I know, but the patience of Harold Wanless, direction of George White, benevolence of Donald Henderson, demands of Bernhard Kummel, and distinguished presence of Ralph Grim, along with the friendship of students Andy Sestak, Bob Zirkle, Dick Voris, Jack Threet, and Bob Brockhouse, especially, were very important as I continued in the program. Little did I expect to receive the Shell Fellowship in 1952 and then to be offered a position with Shell upon receiving my degree a year later.

After the Shell training program, I was assigned to the Denver office, where I made lasting friendships with Bob Weissmann and

Will Green, and where a very special opportunity came, when James E. Wilson arranged for me to work on sandstones under Bob Nanz at the Shell lab, with Barney Wilson, Ken Hsu, and Steve Stevenson and in association with Hugh Bernard, Blair Parrott, and Fred Major. In that 1956–1957 assignment, I learned more than during any other comparable period in my career. I was subsequently assigned to study the Mesozoic in Montana and the Dakotas. I greatly benefited from working alongside Kaspar Arbenz, Jim Clement, Hans Widmer, and Mo Rones. In 1960, Wilson and Nanz arranged for me to be transferred to Houston to study growth faults. It was a great time for learning, from the likes of Pete Roux, Fred Stricklin, and especially Rufus LeBlanc, who demonstrated his remarkable ability to compile and synthesize.

In 1963, I joined the faculty at Oklahoma State University, where we slowly built an informal research group consisting of faculty members Gary Stewart, Zuhair Al-Shaieb, Tommy Thompson, and Nowell Donovan and our students. Now, many of these former students have distinguished careers, and it is with great pride in them that I view their accomplishments.

I consulted for Conoco Research on a part-time basis in the mid-1960s, due largely to my previous association with Mo Rones. I worked on sandstones, Recent clastics, Frio of South Louisiana, and African basins, for Max Pitcher, Art Beall, and Walt Zabriskie.

As map compiler for the Geothermal Survey of North America in 1971–1973, I was introduced for the first time to a very large numerical database. Mike Horn, with Dick Lassley, arranged for those data to be converted to digital format for preliminary computer mapping, leading to preparation of the final, smaller-scale maps.

While at OSU, in the late 1960s, I met Paul McDaniel, an alumnus who visited the Department as part of the Marathon recruiting team. That casual meeting eventually led to a major career shift. By chance, I visited briefly with Paul at the 1974 AAPG Annual Convention, and beginning that Summer I worked part-time on research projects for Paul's young company ERICO. The projects were largely stratigraphic in scope in the North Sea and Mediterranean regions. Among numerous consultants, Konrad Habicht, Tom Kilenyi, and Martha Lou Broussard were fixtures with the small core staff that included Peter Wigley, Jerry Williams, Steve Allen, and Merlyn Law.

In 1980 I joined ERICO, which had opened a Tulsa office for domestic reports. I worked with Mateu Esteban, whose involvement in studies of the Mediterranean region was invaluable. With Peter Wigley's conception and direction, ERICO began digitizing UK North Sea well logs in 1983. Earlier and separately, a North Sea stratigraphic digital database had been compiled, and primitive digitized logs of some wells were part of a study of Sarir Sandstone in the Sirte basin. Additional bonuses while working at ERICO were the associations with Ed Purdy, James Lee Wilson, Bill Ward, Ken Hsu, Larry Meckel, and Leonardo Dainelli, among others.

After the sale of ERICO, Paul McDaniel formed Masera, and domestic studies continued under Rick Fritz's direction. International studies were conducted, beginning in the late 1980s, including the petroleum geology of Libya, Iraq, and Iran, each with basic digital databases. Don Rusk, Willis Tyrrell, Charles Leung, Mauro Beltrandi, and Andy Ontko were instrumental in preparation of the outstanding Libyan report. It was a real pleasure to be associated with Martin Ziegler during the Iraq and Iran studies. Several times in the 1990s, I worked on a few studies, such as fault sealing by clay smear and fluvial reservoirs, for a Petronas research group headed by former student Khalid Ngah.

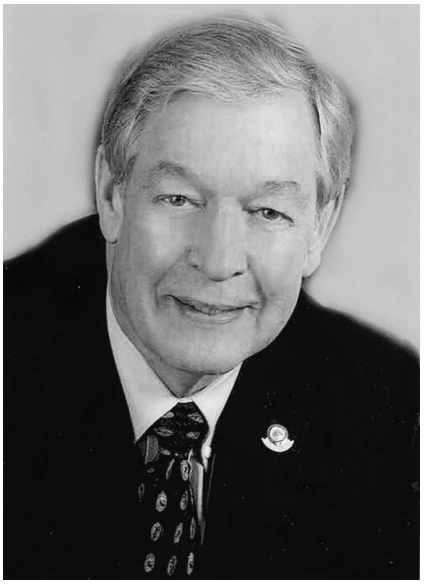
In 1986 Paul McDaniel and others of us formed Colourmap for the purpose of using digital methods to prepare hardcopy colored maps, with associated databases. Digitization of analog seismic sections followed, through the vision of Peter Wigley and Charles Hewlett. This service was the beginning of their Lynx Information Systems.

In September, 1989, Masera approached AAPG about digitizing its publications. At the beginning of 1990, Masera-AAPG, the precursor to Datapages, began to digitize selected publications. Only when we decided to digitize the entire holdings as one project, with the encouragement especially of Dave Jenkins of Conoco, could we realistically visualize a significant digital library. GCAGS Transactions would not have been included without the support of Ed Picou and John Amoruso. Advocates within outside publishing entities have been essential in making additions to the library. A key feature has been that the publisher incurs no expense yet receives royalty. Search and Discovery was on life-support for a considerable time, after Ted Beaumont,

Ron Hart, and I decided to launch an online journal, with Larry Gerken and me acquiring material and adapting it for posting. With the support of many speakers and poster presenters and the vital administrative support headed by Mary Kay Grosvald, Search and Discovery has become a viable instrument for disseminating valuable information. GIS-UDRIL, with the yeoman work of Jingyao Gong, Mike Horn, Andy Ontko, Sandra PaskVan, Valerie Lindsey, and guidance of Peter Wigley, is poised for real growth and utility.

Today components of a comprehensive library and associated data, some markedly enhanced, are at the fingertips of the users for rapid search and retrieval. Yet this surely is only the beginning. I am especially honored to have been a part of it to this point and to have worked with the people noted above and many others as well. They all share in this award, which is a most memorable event for me.

John W. Shelton



DANIEL L. SMITH
Michel T. Halbouty Outstanding Leadership Award

Citation—To Daniel L. Smith, whose remarkable leadership skills were critical to the recent rapid evolution of the Association. As Chair of HOD and President, and chair of many committees and boards, Dan led AAPG to substantial progress. Dan, a visionary, answered the call for change and in doing so brought much credit upon himself.

Dan was born in Houston, and grew up during the poor economic times of the Depression. His father Virgil worked as an accountant for Superior Oil Co. and his mother provided a comfortable home for Dan and his older sister and younger brother.

While attending Lamar High School a close friend and avid collector of minerals caused Dan to become interested in Earth Science. At that time Dan was also active in scouting, in which he persisted to reach the rank of Eagle Scout. Geology and scouting—an interest and a dedication—together, these foreshadow and portend Dan's later accomplishments.

From Lamar High School, Dan moved on to the University of Texas, from which he graduated in 1958 with a BS in Geology. Early employment was with Amoco (Pan American Petroleum) followed by self-employment and work with various independent companies. Currently, he is executive vice president of exploration for Sandalwood Oil and Gas, Inc. developing exploration prospects in the Gulf Coast. In addition, he manages his own independent LLC company, Dan Smith Interests. Most of his career has involved seismically assisted drilling programs focused on Tertiary objectives in Texas and Louisiana. This work has resulted in the discovery of over 30 fields or major extensions, and lead to Dan's ownership interests in over 300 wells, of which many are still producing.

Aside from Dan's successful professional career, and an "accomplished" personal life (Dan and his wife Laura are the parents of three daughters and a son, and grandparents of six grandchildren), Dan has been prolifically active in professional organizations. Outside of AAPG, Dan has been active in the Houston Geological Society (president 1987–1988); GCAGS; SIPES (secretary 1992–1993, president of Foundation 1993); and several other AAPG affiliated and associated societies. In addition, he recently completed his term as first president of The University of Texas Jackson School of Geoscience Alumni Association.

Inside AAPG, Dan's list of endeavors and accomplishments is even more impressive. He has logged over 20 years of continuous activity for the Association, and has served in over 20 jobs, many as chair of committees as well as

serving in the highest offices of AAPG.

To be more specific, in the House of Delegates (HoD) Dan has chaired the Constitution and Bylaws Committee (1993–1995 and 1996–1997), the Nominations and Elections Committee (1992–1993 and 1995–1996) and the Operating Committee (1999–2000). Some of the most critical work was chairing the International Regions Amendment Resolution Committee (1998–1999) after he served as Chair of the House (1997–1998). He has of course, also served as President (2002–2003)—more on that below.

Currently, Dan is a Trustee Associate of the AAPG Foundation, chair of the GEO-DC Board of Governors, and AAPG's representative to American Geological Institute's Society Council. Dan has been previously honored with AAPG's Distinguished Service Award in 1997, Distinguished Member of the House in 2000, AAPG Certificate of Merit in 2002, Honorary Member of the House in 2005, and Honorary Member in 2007.

That's an impressive list. But the AAPG Michel T. Halbouty Outstanding Leadership award is given to only one member per year. "Outstanding leadership" is "demonstrated" by "extraordinary service given to the petroleum geosciences and the Association" and is AAPG's second highest honor. So allow me to move beyond the lists and tell you how I personally have experienced Dan's leadership.

To start it is useful to outline changes in AAPG's internal governance from 1986 to 2010...

In 1986, the Executive Committee (EC) consisted of seven members including an Editor who was not elected and often was reappointed for a second two-year term. Today, the EC is made up of eight members (VP Regions was added in 2007), and the Editor is elected for one three-year term.

The House of Delegates, AAPG's most consistently democratic governance body in 1986 consisted of three officers elected on the floor of the annual meeting: Chair, Vice Chair and Recording Secretary. Today, the leadership still consists of three officers elected in the same fashion: Chair, Chair-Elect and Secretary/Editor.

The 1986 Advisory Council consisted of 13 members: three past presidents, one member appointed by the EC, one member from each of the six Sections plus one member from each of the three Divisions. Note that the EC had a dominant relationship to the AC: the EC effectively had four representatives on the AC; the Chair was the most immediate Past President; and the Chairs of the Honors and Awards Nominating Committee (H&A) and Officer Candidate Nominating Committee (OCNC) were the other two past presidents.

Today in contrast, the EC no longer has effective control of the AC: there is no EC appointed member on the AC, and the chairs of H&A and OCN committees are elected by the AC itself. Additionally, all the Regions have representatives on the AC. All AC members may vote as long as they maintain at least 750 members in their respective Divisions, Sections or Regions.

In summary, in 1986 only one of AAPG's governance bodies (the HoD) was fully elected. Today, all three are.

This move to a more democratic form of representation was a major and complex change, accomplished by several key players working in a variety of roles. Dan was one of those key players providing major and considerable contributions. One can point in particular to Dan's work in the Constitution and Bylaws Committee, but as a long time participant in this process, I saw something subtler—change simply seemed to happen more quickly and smoothly with Dan involved.

On issues outside of AAPG governance, Dan has also demonstrated the ability to facilitate difficult transitions. In moving forward the multifaceted issue of international representation in HoD, Dan's leadership was critical. On other reforms, initiated in the House, his perseverance in the face of numerous obstacles was testimony to his intellectual focus and effective diplomacy.

Facilitating change is usually difficult even when change is clearly desirable, but it is daunting when the rationale for beneficial change is either complicated or impacts the status quo of long standing entities. Dan's success in achieving contested improvements is a credit not only to his vision but also to his sense of fairness and persuasiveness.

Applying his background in the House and earlier service on the Executive Committee, Dan's term as President was characterized by much progress for the Association. He focused on providing and demonstrating value to Association membership. Initiatives to increase membership, to expand the digital programs (Datapages), to develop a strong public outreach, to improve and energize student relations, to make ethics a better appreciated element of membership, to help Association leaders be better public

speakers, to emphasize inter-society cooperation, to revamp the Education component and to increase international development were successfully deployed.

In whole, I can say that Dan's leadership has been so exemplary, that the benefits have not been restricted to the issues with which he dealt. Dan's example of how to formulate, explain, convince, and rally support for necessary change led others to emulate him. Simply put, whatever job he has taken on, both for those around and those following him, Dan Smith has raised the bar!

And for that basic spirit of leadership, the same shown as an Eagle Scout, with the same interest in geology inspired by a friend so long ago, the Association owes much to Daniel Lester Smith. We thank him with this award. Are not we all and the Association itself enhanced by his outstanding leadership and work on our behalf?

Patrick J. F. Gratton

Response

I am highly honored and humbled to receive this great recognition from AAPG. My leadership activity and contributions are based entirely on my love of the profession and the recognition of the importance of professional societies. In addition, geology and AAPG involvement are my hobbies. I thank the Advisory Council and Executive Committee for bestowing this prestigious recognition on me. I especially thank Pat Graton, my long time friend and colleague, for serving as my citationist and biographer, a task that he has performed several times.

My first attempt at this response was to name and thank the hundreds, maybe thousands, of people who have made a difference in my career and life, beginning with my childhood family who shaped my values, to my present family, and all of those colleagues and friends past and present. After reaching a document two times longer than what was requested, I became overwhelmed and dropped that attempt. I guess I have had too many important influential people in my life—how fortunate.

I was recently asked what it has meant to be a member of AAPG, and what has the Association offered that has benefited my career and development. I have given this some thought. The bottom line—I attribute my 52 years as an exploration geologist directly to my involvement in professional societies, especially AAPG. Here are some thoughts.

At the top of the list is professionalism. I can never emphasize enough the importance of ethics, networking and establishing relationships. Petroleum exploration is very much dependent on the massive exchange of information among peers, a rather unusual phenomenon compared to other professions. For me, continuous education and business opportunities have come mainly from association with other professionals.

AAPG has offered me so much value that I will forever desire to give back to the association in whatever ways may come in my direction. One only needs to glance at the Membership Value Pyramid to see the importance of AAPG and the many products and services available that become almost overwhelming. There are too many to list here, but they offer opportunities for all geoscientists everywhere. How could any geologist not see the value in AAPG and the value of service to the association?

I will not use this space to detail my career. Pat Graton has already done this. I have changed directions five times so far, and it's all been fun and exciting. I am very fortunate to have a career where one gets rewarded financially for what one would otherwise do for free.

How did I come to be a geoscientist? It all started in high school with a good friend who collected mineral specimens and cut gemstones as a hobby. I was fascinated. Also, I loved the outdoors and took every opportunity to indulge. While attending orientation upon entering college, I was exposed to a jam session where the geology professors described the opportunities. One in particular spoke of his wild and exciting experiences doing mineral exploration in the Amazon Jungle of Brazil, and all the near misses with wild animals, etc. I was hooked. Well, I haven't made it to the Amazon but every single experience has been exciting, including the dry holes.

Here is an anecdotal story regarding AAPG's importance to my career. The scene is the late 80s and my world seems to be collapsing. The oil and gas business has been declining for seven years, and it is evident that the company in which I am a partner will not survive. I have three children in college and a fourth primed to enter soon. I try not to panic. What to do…

New technology, 3-D seismic, had been working successfully in reducing exploration risk offshore Gulf of Mexico. My expertise was

onshore where I had a large inventory of prospects based on 2-D seismic, but there was no money for drilling. Where did I learn about 3-D seismic? I learned from personal conversation with peers on the floor of an annual AAPG convention and from attending AAPG technical papers on the subject.

I put together a business plan to find a company willing to risk using this new technology onshore Gulf of Mexico Basin. It worked, even though the vast majority didn't believe that it could be done economically onshore. I was able to stay in business as an explorationist and get my children through college. Again, I learned a valuable lesson. In the face of adversity, there is always opportunity, thanks to AAPG.

My career as a geologist has not always come up roses. Probably my biggest disappointments were identifying and generating two large prospects, which I was unable to lease and drill.

The first was the south half of a large onshore dome where the land was owned in fee by a major company. After trying to negotiate a farm out for at least five years, the fee owner decided to drill the prospect, resulting in the discovery of approximately one trillion cubic feet of gas.

The second was the west flank of an onshore salt dome that was unleased when first checked. One month later, I sent land people to obtain leases, only to learn that another company beat me to the punch by two weeks. That field ended up with 30 wells finding 8 reservoirs containing approximately 200 million barrels of oil.

On the other side of the spectrum, I began working the geology of a salt dome in my early career that has continued to the present. Many times I was shut out of opportunities to drill. I practiced the one ingredient that is absolutely necessary to a successful explorationist—persistence. I never gave up and finally was instrumental in developing a nice oil and gas field.

One of my passions is participating in AAPG's Visiting Geologists Program and making presentations to university students and faculty. I explain to them that the oil and gas exploration business has always been cyclical, with downswings and upswings, but this is typical of most businesses. We are very high-tech and don't work for nasty companies that make obscene profits. A career in geoscience offers the unusual opportunity of a lifetime in a very satisfying professional career. Volunteering in local and national professional societies, where most contacts are made, is a big plus.

Leadership in AAPG is about vision, showing the way and preparing the organization for change. And, by the way, these ingredients are also necessary for success in exploration and business.

Dan L. Smith

ROBERT L. COUNTRYMAN
Honorary Member Award

Citation—To Robert L. Countryman, a skilled and consummate geologist who has given to AAPG, the San Joaquin Geological Society and the Pacific Section the same dedication and work ethic as to his propitious commitment to the profession of petroleum geology.

The guidelines for consideration of candidates for AAPG's Honorary Member Award include distinguished service to petroleum geology and to the Association. Relative to the profession of geology, the contributions may include a combination of discovery thinking, application, and exploration leadership. And any related service to the petroleum industry may have brought favorable reflection on both geology and the Association.
Robert L. Countryman has met all these guidelines through his long-time dedication and propitious service to AAPG and the profession of petroleum geology and is truly most deserving of this Award.

So let's start at the beginning—Bob was born in Sioux City, Iowa and at the age of 10 his family moved to Los Angeles. He graduated from Venice High School (near the beach) in 1967 and then entered California State University, Northridge (CSUN). His original academic studies were in electronic engineering based on an early high school career (part-time and lucrative) of repairing television sets. In his third year he heard the word geology and after receiving the highest grade in his first class, he took a second class in geology followed by the CSUN field trip to Death Valley. Bob knew then he was 'hooked' on the subject and he graduated with a B.S. degree in geology in 1973. His good friend, Don Clarke, remembers meeting Bob at CSUN in 1970 and said "he drove a VW bug, wore a pith helmet in the field, and earned his money by repairing televisions. A serious student, Bob established close relationships with his professors and was president of the Geology Club."

Employment in the 'oil patch' was difficult to obtain during this time and Bob went to work for Tenneco Oil Co. in their Industrial Minerals Branch exploring for and developing borate deposits in Death Valley, California. He returned to academia in 1974 and earned his M.S. degree in 1977 in geology at the University of California at Los Angeles (UCLA).

One of Bob's roommates in graduate school was Ken Peters. He told me "Bob, me, and another student shared a three-bedroom apartment in Santa Monica for several months and that he did not get to know Bob very well during that time because Bob was *always* busy." He also noted "that Bob is a very dedicated geologist and he truly enjoys helping others. One of the reasons Bob has been so successful and has contributed so much to AAPG is that he is constantly busy—conversing with colleagues, planning a meeting or quickly moving to the next poster session—he is a role model for all of us who want to contribute to AAPG and our fellow geologists."

Following graduation from UCLA and rather than taking the usual month or two in Europe, Bob accepted a position as a research geophysicist for UCLA to gather data and maintain the University's micro-gravimeters at the Amundsen Scott Station near the South Pole in Antarctica.

Bob returned to the sunnier and warmer climate of southern California in 1979 and found his niche in the "oil patch" as an exploration and production geologist for Gulf Oil in Bakersfield. In 1984 Chevron was fortunate to acquire Bob's geologic talent and expertise through the Gulf Oil merger. His time at Chevron was marked by a number of increasingly important positions with Chevron Overseas Petroleum in Venezuela and Chevron USA in Bakersfield, California. In 1999 Bob left Chevron for a successful consulting effort involving geology and well-site work in the San Joaquin Valley. In 2001 he accepted a position with Occidental Oil of Elk Hills and in 2009 retired from Oxy and is currently a consultant in Bakersfield.

Bob joined AAPG in 1973 and first began to participate in AAPG related activities through his time and service with the San Joaquin Geological Society (SJGS). He progressed through the offices of vice president, president-elect and was president in 1985. Although his efforts have now moved on to a more active role in the Pacific Section and national AAPG matters, he remains an active member of the SJGS.

Within the Pacific Section, Bob has displayed strong initiative and dedication in a number of important tasks. During the years from 1990–1995, he was secretary, vice-president, president-elect and president. His work also included membership chair, 1996–2002; directory committee chair, 1996–2000; Section representative to the AAPG Advisory Council, 1997–2000 and currently Secretary and Trustee for the Pacific Section's Foundation. In 2000 he was given the Pacific Section's highest award, Honorary Life Membership.

For AAPG on the national level, Bob has again given time and exemplary effort through committee appointments and as member on several ad-hoc committees. Perhaps his strongest contribution to AAPG is reflected by his activity in the HOD. He has been a delegate in HOD representing the Pacific Section and the SJGS since 1991 and has served on a number of HOD committees, including Membership, Resolutions, Credentials and Nominations. Bob was vice chair of HOD in 1996–1997. During all of his many tasks for HOD, his quiet, steady and effective manner was ever present which led to successfully addressing many concerns.

Bob was AAPG Secretary from 2003–2005 and recently became a member of the Ethics (2010) and Group Insurance (2009) committees. He is a member of the DPA and a Council member 2009–2012. He received the Association's Certificate of Merit in 1995, 1999, and 2003 and received the Distinguished Service Award in 2001. He became a Trustee

Associate Member of the AAPG Foundation in 2005.

Over the past 35 years Bob has been affiliated with a number of regulatory bodies and is a California Professional Geologist # 4868 and a Certified Petroleum Geologist, AAPG # 5786.

In conclusion and of special note is Bob's work in Venezuela. As part of the COPI/PDVSA Task Force, Bob not only earned recognition for his technical contribution in their studies but, most importantly, met his lovely wife Luz.

I have known Bob Countryman for over 25 years and our association has involved AAPG, on both national and Pacific Section levels, and for a short time our respective employer, Chevron, following the Gulf merger in 1984. I was humbled and honored when Bob asked me to be his citationist and it has been a special privilege to research and submit this citation in recognition of Robert Loren Countryman receiving the Association's prestigious Honorary Member Award.

Robert G. Lindblom

Response

When I received the call from President Rensink to inform me that I was elected to Honorary Membership, it came as a bit of a surprise, and to be quite honest, a feeling of "I really don't know if I've done enough to deserve this award". How could AAPG be thanking me for what I've done for them, when it really should be the other way around? After a bit of thinking about the matter, I believe that this award really provides me an opportunity for me to thank those who have helped, supported and, in a myriad of other ways, to have influenced me both professionally and personally over the years.

First of all, I must thank all my professors at California State University, Northridge and at UCLA for providing me with an exceptional grounding in the fundamentals of geology. I started CSUN as an engineering major and so I owe particular thanks to Dr. Rick Miller, the first geology professor I encountered. Rick taught my Geology 101 course and invited me to a between semester trip of geology students to Death Valley. Little did I know at that time that the trip would open a new world for me as well as saving me from a lifetime as an engineer. I changed my major and soon Dr. Gene Fritsche was drilling stratigraphic and structural fundamentals into my head. Dr. Alan Gutstadt introduced me to E-logs and recruited me as an AAPG student member. I still recall looking at my first E-log and wondering why anyone would spend time looking at these squiggles when a whole world of real rocks lay before them. I would soon learn why. UCLA's Dr. Ted Reed and Dr. Don Carlisle continued to advance my geologic education and I owe them a world of thanks for that. I also owe thanks and appreciation to all my fellow students who graduated with me from those two universities. So many of them have continued as colleagues and we've taken turns helping each other as we've advanced through our professional careers.

I was fortunate to graduate with my master's in 1977 when the oil industry was gearing up and hiring in response to the oil shock of 1973. I quickly found myself working for Gulf Oil in Bakersfield expecting to live there for about 3–5 years before being transferred elsewhere. More than 30 years later, I'm still here and wouldn't want to be any place else as it was here I learned the meaning of "putting down one's roots". Working at Gulf was like getting a second master's as Bob Evans, Whit Stucker, Paul Day, Bob Nesbit, John Randall, and so many others educated and mentored me in the fundamentals of petroleum geology. Bob Nesbit was the first to recruit me into working on a PSAAPG convention in the early 1980's and, through that, into the San Joaquin Geological Society.

When Gulf was purchased by Chevron in the mid 1980s, there was a lot of uncertainty in the Gulf ranks. I recall going to a SJGS ExCom meeting and encountering Bob Lindblom for the first time. His hearty greeting and effusive "Welcome to Chevron" allowed me to think maybe this will work out OK after all. Bob remains a valued mentor and friend. I thank him for his years of friendship as well as agreeing to pen my citation.

I soon found myself working on a Venezuelan project (while still based in Bakersfield) that is one of the highlights of my professional life. There I met lifelong friend Luis Rodriquez who introduced me to my wife Luz. So the transition from Gulf to Chevron did indeed work out a bit more than OK. I was fortunate that the management at Gulf, Chevron, and later Occidental, were always encouraging and supportive of my involvement with AAPG. I owe so many thanks to all of them.

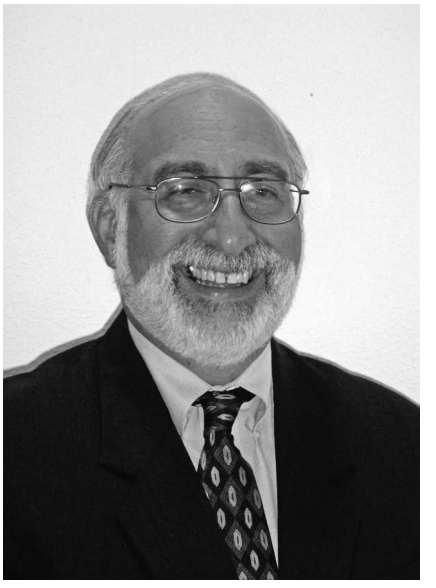
Like most people, my involvement with AAPG began initially with my local and regional societies as well as attending a few National meetings. At one of these National meetings, I found myself

sitting in the audience at an HOD meeting. I cannot recall the topic being debated but I was amazed to watch the delegates rather heatedly argue their points. This looked like fun and I soon found myself elected as a delegate from the SJGS. There I became involved with so many people who care deeply about AAPG and who reflect the vitality and diversity of this organization. They don't always agree with each other but they all want AAPG to be the best possible society and fervently work to best serve the needs of its members.

Once involved in the HOD, I became involved in numerous committees and subsequently was elected to national office. One of the truisms of life is that if you want to be involved in great things, you need to associate with great people. I can truly say that I have associated with many great people through my involvement with AAPG. I owe thanks and appreciation to all of them. They are indeed great, both as individuals and to work with. Through them, I've been fortunate to have been able to work on many AAPG projects and issues. They've pushed and challenged me hard to rise to their level. I hope I may have occasionally achieved that.

So, I offer my thanks to the above individuals and companies for all they've done for me over the years and all they've meant to me. I also thank the current leadership of AAPG for extending Honorary Membership to me and for giving me the opportunity to thank everyone. To paraphrase the famous philosopher Jerry Garcia, "What a long and great trip it has been".

Robert L. Countryman



BARRY J. KATZ
Honorary Member Award

Citation—To Barry Katz for his enduring devotion to the scientific mission of AAPG and his extraordinary service to the AAPG Bulletin.

Honorary membership is bestowed upon persons who have distinguished themselves by their service and devotion to the science and profession of petroleum geology and the Association, and Barry Katz is certainly deserving of this recognition.

Barry Katz hails from Brooklyn, New York, where he earned a B.S. degree in geology cum laude from Brooklyn College and the Robert Perlmutter Award for Environmental Geology. He then earned his Ph.D. in marine geology and geophysics at the Rosenstiel School of Marine and Atmospheric Sciences at the University of Miami, along with the F. G. Walton Smith Prize for Outstanding Dissertation in Marine Geosciences.

Following graduation, Barry joined Texaco in its Bellaire Research Laboratories in 1979. He continued with Texaco through its merger with Chevron, where he continues to pursue global application of geochemistry to petroleum exploration and development. As senior research consultant and Chevron Fellow, he also takes an active role in mentoring newly minted geochemists and other technical professionals as part of a corporate mentoring program.

Barry's professional endeavors have led to many refereed publications, including books, book chapters, and papers, many of which have been published by AAPG. He has convened numerous research conferences. He is in high demand as an invited speaker. This industriousness is part of why Barry is recognized as Honorary Member of AAPG.

While Barry's publication record is exceptional and commendable, his less visible service to the Association represents a generosity, work ethic, and commitment that are truly extraordinary. Barry has served as associate editor of the *AAPG Bulletin* on and off for nearly 20 years, during which time he has performed an astonishing number of manuscript reviews with unparalleled consistency, depth, and rigor. He has served ably on the Publications Committee for almost as many years.

I know firsthand that Barry seldom goes anywhere without at least one manuscript to review, red pen at the ready. His professional duties have required extensive travel, and it is clear that Barry seizes these many hours on airplanes and in airports to complete many reviews. I have never known Barry to miss a deadline.

Barry's contributions to AAPG go far beyond reviewing and publications, however. He received

the Distinguished Service Award in 2004 for service to AAPG. In 2001, he received a Certificate of Merit for his work as Chairman of the Research Committee, on which he has served for many years. During his initial tenure on the Research Committee, Barry surveyed the status of more than 500 university geosciences departments from around the world; annual results were published in the *Explorer*. Barry previously received a Certificate of Merit in 2000 for his service as technical program chair for the AAPG International Conference in Bali, Indonesia. His record of AAPG service is lengthy and reflects a consistent dedication to the Association and petroleum geoscience.

Barry's professional contributions are not limited to AAPG. He has served on committees of the American Geological Institute, the Continental Drilling Program, the Geochemical Society, the Ocean Drilling Program, and the Society for Sedimentary Geology, and he is active in numerous other associations. Since 2000, Barry has served as the chairman of the Environmental Protection and Safety Panel of the Integrated Ocean Drilling Program. Barry currently serves on two editorial boards and as editor of the Houston Geological Society *Bulletin* and as peer reviewer for more than 10 other journals. Some of us wonder whether Barry gets something more than the 24-hour days that the rest of us experience.

It appears that Barry has one deficit: he is unable to say no when asked to contribute his scientific knowledge and insights. While this might cause sleep deficits or other time-management challenges for Barry, it has meant that the Association always benefits from his dedicated service as reviewer, as session chair or judge, as author, as committee chairman or member, and a host of other roles. I can attest that Barry helps out no matter how many other commitments he is trying to fulfill.

At a time when many of Barry's peers consider retirement, Barry remains passionate about his career, his professional endeavors, and doing his best for science. He supervises graduate students and joined the graduate faculty of the University of Oklahoma as Adjunct Professor in 2010. His appointments to AAPG committees will occupy him at least through 2012, and I suspect he'll be asked to serve additional terms. It is my hope that AAPG will continue to be the beneficiary of Barry's willingness to serve and unwillingness to say no.

Barry Katz's professionalism and dedication set a great example for AAPG and for science in general. It is fitting that Barry is awarded honorary membership in the Association to which he has contributed so strongly for so many years, and I am pleased to congratulate him on this well-deserved recognition.

Gretchen M. Gillis

Response

I was surprised, grateful, and honored to hear the news that I was receiving one of AAPG's 2011 Honorary Member awards. As I look over the list of past recipients, I find myself in the company of many giants and legends, some of whom I have worked with, others I only know through their accomplishments or publications.

My citation prepared by Gretchen Gillis, ties me to AAPG's scientific mission and to the *Bulletin*. These are the areas that I hope to be remembered for and will serve as my legacy. I became an AAPG member in 1975 soon after entering graduate school. I became truly active three years after entering the industry, when I joined the Research Committee. A few years later I was invited to serve as an associate editor of the *Bulletin* and have served the Association in that role for more years than I would like to admit.

Each year as an associate editor we are asked why we serve. Although my responses have varied somewhat over time they suggest that I serve principally for two reasons. The first is to give something back to a science and profession that has been so generous to me, by helping assure the quality of science that makes its way into the literature. The second is to keep me current in the science and see the direction that it is headed. These are the same reasons that I have also acted as a reviewer for about a dozen other journals over the years and serve on several editorial boards. I can't even imagine how many manuscripts that I have reviewed over these many years.

I have enjoyed most of the manuscripts that I have read and I hope that the authors have benefited from my comments and suggestions, even those that never made it into a publication. With the increasing globalization of our industry, I have found myself spending much of my time taking on the challenge of manuscripts from authors with English as a second language. Although many of these manuscripts are time consuming, they often offer some new perspectives and insights into geology from parts of the world where access has been limited.

Spending the extra time I believe helps both the authors and the Association by getting this material out to the membership.

In addition to my role as a reviewer and associate editor I have been active in the organization of several international meetings and conferences for AAPG including the International Conference and Exhibition in Bali and Hedberg Research Conferences on such topics as lacustrine basin exploration, the margins of the South Atlantic, petroleum systems in rapidly subsiding basins, and heavy oil in deepwater settings. These conferences have also offered me an opportunity to bring new science to our membership both in the United States and overseas including such places as Azerbaijan, Brazil, China, Indonesia, and Mexico.

Over the course of these years, many of the authors and individuals that I have worked with and met at the various meetings and conferences have enabled me to build a strong network. For this too, I am grateful and have AAPG to thank.

There is one person that I must thank, my wife, Terry. She has sacrificed more than can be imagined. All through the years she has been there supporting me. Without her support much of what I have been able to accomplish would never have occurred.

I would like to conclude by stating that with the receipt of this award I do not see my time as a volunteer coming to an end. At the time of writing my response, I had just accepted an invitation to serve an additional two years as associate editor for the AAPG *Bulletin*.

I thank all of you, the membership of AAPG, for the opportunity to serve.

Barry J. Katz

R. RANDY RAY
Honorary Member Award

Citation—To Robert Randolph Ray –A dedicated volunteer and geoscience leader for his tireless efforts to advance integrated geoscience knowledge and training and for exemplary service to AAPG and the geoscience community.

R. Randy Ray (R3 to his friends) is one of the unique geoscientists who has degrees in geology and practices as a consulting geophysicist. He has been a self-employed consultant since 1981 and has worked on projects around the world. He is a passionate geoscientist who uses seismic to reveal geologic insights of the subsurface.

One of Randy's proudest professional accomplishments was founding the annual Rocky Mountain Association of Geologists (RMAG)-Denver Geophysical Society (DGS) 3-D Seismic Symposium 17 years ago. This is the most popular and successful (scientific and financial) event both organizations have run together. It is a perennial review of the advancing technology and geologic interpretation of seismic data. Randy received the RMAG President's Award in 1997 in special recognition of this successful event.

Randy served as editor on the RMAG-DGS seismic atlas in 1985; RMAG High-Definition Seismic guidebook in 1995, the AAPG *Explorer* Geophysical Corner 2000–2004 and currently serves as the AAPG Search & Discovery editor for Geophysical Corner online website. In addition, he has authored many papers integrating geology and geophysics in AAPG, RMAG, and the Wyoming Geological Association.

Professional society service comes easy to Randy and is impressive and lengthy. He has served on the AAPG Advisory Council and several AAPG committees, including the Publications, Geophysical Integration, Global Oversight Committee and Petroleum Treatise. Randy was vice-chairman of the 2001 AAPG Annual Convention and General Chairman of the 2009 AAPG Convention in Denver. He has served for over 15 years as a member of the House of Delegates. In addition, he has served as president of both the RMAG (1999) and DGS (2006). Randy has received distinguished service awards from RMAG and AAPG. He is an honorary member of both RMAG and DGS. Randy chaired the first joint AAPG Rocky Mountain Section meeting with the Colorado Oil & Gas Association in

2004. This biennial event has continued as a popular meeting where geologists and geophysicists join with industry executives to assess the current state of the petroleum industry in the Rockies.

In addition to his professional society work, he volunteers to teach seismic interpretation to students at the Colorado School of Mines. He stresses that an integrated approach to exploration and development is a key for future oil finders. He makes a special point in showing students how to recognize all the geologic information within a 3-D seismic volume that surrounds individual well control points.

Born in Wewoka, Oklahoma in 1951, he graduated from high school in Calgary, Alberta, Canada in 1970. Randy is second-generation petroleum industry; his father was a petroleum engineer working in Dallas, Calgary, and later in Midland where he was an independent operating a small oilfield in SE New Mexico. While in college, Randy had summer jobs as a roustabout in Jal, New Mexico working on old wells. It was hot and dirty work, but Randy liked the smell of oil around pumping wells! This experience provided the turning point for his interest in petroleum geology and ultimately lead to a degree in geology.

He received his bachelor's degree in geology with honors from the University of Texas in 1974 and his M.S. degree in geology from the Colorado School of Mines in 1983. Working as a student with Dr. Robert J. Weimer at CSM, he prepared a thesis that correlated outcropping sandstones to subsurface seismic clinoform facies in Paleocene age, Lake Waltman of the Wind River Basin. His thesis work was published in AAPG Memoir 32, *The Deliberate Search for the Subtle Trap* edited by Michel Halbouty.

His career started in 1974 when he went to work for Cities Service Oil Company. At Cities he was one of a group of geologists that went through an intense nine-month geophysical training program at their Tulsa research lab. It was like geophysical graduate school for Randy and at completion he was assigned to the Alaska/California Frontier Exploration team in Denver. In 1981, he founded R3 Exploration Company, both a consulting company and prospect generating company. He rarely misses an opportunity to discuss the prospects he has developed in the Rockies and Alaska.

Randy currently works NW Colorado-Sand Wash Basin and SW Wyoming-Eastern Green River Basin looking for Cretaceous tight gas plays and most recently shallow oil plays. He is also consulting part-time on the Denver Basin Niobrara plays. He has worked U.S. Onshore and Offshore California and Alaska, then onshore South Louisiana, and lots of Rockies and Mid-continent Kansas and Oklahoma-Texas Panhandle. In the past he also worked Offshore China, Ireland, and onshore and offshore Latin America-Costa Rica. He has also consulted on several sub-volcanic plays in Washington, Colorado, and Costa Rica.

Randy likes to get on the rocks and rarely misses a field trip run in the Denver area. He is an avid outdoorsman and enjoys hiking, fishing, and oil painting. Behind every great man is a great family and Randy enjoys strong support and assistance to run his business from his loving wife of over 36 years, Kathy, and the good humor and camaraderie of two sons, Brandon and Austin.

Stephen A. Sonnenberg

Response

I am honored and humbled to receive this Honorary Member award from AAPG and I thank my fellow geologists and the Advisory Council and Executive Committee for this recognition. When I "reflect" on my career, as geophysicists often do, I realize the unique perspective that working as a geologist interpreting seismic data has provided me. I also see the fingerprint of AAPG at the beginning of my career, as well as now, and I am grateful to have met and worked with many outstanding individuals that make our professional society a powerful and beneficial force in the world.

The importance of mentorship in my career has been paramount. I have always considered membership in AAPG as the signature of professionalism and I joined as a University of Texas student in 1974.
Dr. Samuel P. Ellison was my petroleum geology professor at UT where as a teacher and AAPG President, he stood as an outstanding example of professional integrity.

As a young professional working at Cities Service Oil Company, I worked closely with my team leader and mentor Phil Howell. As a 25-year veteran in oil exploration, he quickly taught me the practical aspects of integrating geology and geophysics to develop prospects in offshore Alaska and California. When the big 1981 oil price collapse began, he helped to pull me out of the sheltered major company environment and into the world of consulting. It was

fortunate because working as a consultant allowed me to stay in Denver and to be involved in the local societies.

Even though I was recognized as a seismic consultant, I still wanted to be involved with geology and to stay close to the rocks. My original interest had been in stratigraphy and one of the most exciting events in my career was to attend the 1976 AAPG Seismic Stratigraphy class in Monterey, California where Peter Vail revealed his ideas of interpreting seismic sequences. It was a seminal event for me because it brought together my geologic training in depositional systems from the University of Texas with my early seismic interpretation work on the job. It inspired me to complete a M.S. geology degree at the Colorado School of Mines, which integrated seismic clinoform sequences with outcrop work. Dr. Robert J. Weimer was my graduate thesis advisor and his knowledge of Rockies stratigraphy and leadership in AAPG was and remains as a model of professionalism.

My local geological society volunteering began when I was invited to contribute a paper to the 1985 RMAG Geophysical Atlas being compiled by Robbie Gries. It was a real eye-opener for me to see how Robbie organized and cajoled authors into contributing to the publication, and before I knew it I was editing other papers in the volume. This experience, along with service on other Rocky Mountain Association of Geologists and Denver Geophysical Society committees, gave me the idea to launch a joint society 3-D Seismic Symposium in the spring of 1995. I teamed up with my good friend and respected Denver geophysicist, Bill Pearson, to co-chair the event. The first symposium had over 500 geologists and geophysicists attending and has continued for over 17 years as a popular and successful meeting in Denver.

I expanded my AAPG involvement when I became part of the AAPG Geophysical Integration committee under the leadership of Dr. M. Ray Thomasson. Ray had a vision of the importance of geophysics to petroleum geology and he is a master organizer. He directed a huge committee that created multiple AAPG and SEG joint publications as well as starting the monthly Geophysical Corner in the AAPG *Explorer* magazine. Before I realized it, I had volunteered to follow Ray as the editor of the monthly column for the period from 2000 to 2004. I have been involved in integrated geology and geophysics publications and symposiums ever since, including most recently helping with the Search and Discovery online publication of the Geophysical Corner articles.

I have enjoyed the camaraderie of fellow geologists while working on many AAPG committees including the Advisory Council, House of Delegates and the Rocky Mountain Section events. I was general chair for the 2009 Denver ACE meeting. It was a true privilege and pinnacle event for me. As the leader you really must call on everyone you know for help. This naturally included many RMAG and AAPG volunteers who made the event a success. It also means working closely with AAPG staff in Tulsa, which has been one of the wonderful benefits of this involvement and I always enjoy their support and dedication. I thank my fellow geologists for sharing ideas, inspiration and always answering the call for help and support on many events.

My sincerest thanks go to my longtime friend and fellow classmate at CSM, Dr. Steve Sonnenberg. He has been influential in keeping me involved in AAPG and I sincerely appreciate his gracious citation for this award.

I would never have been able to volunteer on these many activities without the support of my wife and partner for 36 years, Kathy. She is the secret assistant who keeps me on track both in my consulting business and ever expanding volunteer work. With her love and support and that of my sons, Brandon and Austin, I have enjoyed being part of the AAPG.

I thank you very much for this award.

R. Randy Ray

CHARLES A. STERNBACH
Honorary Member Award

Citation—To Charles A. Sternbach, an innovative and galvanizing leader, originator of engaging and enduring programs celebrating geologists and their discoveries, and

an outstanding geoscientist who brings honor to our profession.

Charles has amassed an amazing list of earth science contributions within the past three decades. He has been a tremendous influence on shaping the Houston Geological Society and the AAPG, as well as motivating geoscientists to step forward toward volunteer leadership. Charles's skill of designing symposiums, forums, and technical exhibits to fulfill the needs of the membership are visionary and many remain popular annual events that have withstood the test of time.

AAPG recognizes Charles with honorary membership primarily for his creative leadership at AAPG annual conventions, committee service including formation of the 100th Anniversary committee, instituting "Discovery Thinking Forums" at annual conventions, editing and co-editing publications, and serving in various leadership roles that created environments where creative people and ideas could flourish.

Charles was born and raised in Queens, New York, the son of Gerald and Judy. His father was employed at a neighborhood post office for over 30 years and as a teenager Charles earned extra money collecting and selling stamps to investors—perhaps a harbinger to his future career in prospect generation and marketing.

Charles received a B.A. in geology at Columbia University in New York City in 1980. Sternbach had discovered an interest in geology from professor John E. Sanders and his field trips to Central Park and the Palisades on the Hudson River and he became hooked. Charles had the fortune of befriending future Sidney Powers Medal recipient Dr. Gerald Friedman while editing a general geology textbook and followed Friedman to Rensselaer Polytechnic University in Troy, NY. Charles's interest in carbonates flourished under the tutelage of this legendary instructor. Sternbach received a Ph.D. in geology from Rensselaer in 1984. When Friedman received the Sidney Powers Award from the AAPG many years later, he chose Charles to write his citation.

It was at RPI where Charles met, and married, fellow geology graduate student Linda Sternbach. They both have spent considerable time serving the HGS and the AAPG over the past 25 years.

Charles began his career in 1984 with Shell Oil Co. in Houston, Texas. With a focus on carbonate exploration, he interpreted the early 3-D surveys of giant fields in the Permian Basin, explored the Lodgepole-Mississippian reef play in the Williston Basin, and played a key role in the successful Prairie du Chien exploration program in the Michigan Basin. In 1997 Charles ventured into the independent world, accepting a position as exploration manager with Jordan Oil and Gas and establishing a Houston office for the California-based company. Led by the legendary explorer Tom Jordan, Charles enjoyed the pursuit of global and U.S. exploration opportunities including Europe, Texas Gulf Coast, Rocky Mountains basins, Michigan Basin. and midcontinent U.S. In 2004, Charles formed his own oil and gas exploration company under the banner Star Creek Energy to explore North American basins, in particular shallow oil and reef prospects. He also formed First Place Energy with Norm Rowlinson (2003) to pursue frontier plays.

During the 1990s Charles began to assume leadership roles within the Houston Geological Society and it became apparent that he was not content with the status quo. Charles served as president of the Houston Geological Society in 1999–2000 that saw unprecedented membership growth of the HGS to 4800 members. Dr. Sternbach originated and helped organize blockbuster event entitled "Legends Night" in 2001. So successful was this event that it was repeated by subsequent HGS leaders with different speakers in 2003, 2006, 2008, and 2011. During the 2003 panel, which Charles organized and moderated, Michel T. Halbouty and Marvin Davis were among speakers that captivated all. His wisdom in video recording the "Legends Night" events provides a valuable documentation into petroleum exploration history.

Charles passion for the heritage theme continued to grow. He planned a GCAGS field trip to Beaumont (along with Steve Hill) called "Spindletop Day: the 100th Anniversary Field Trip" in 2001 that drew the media and descendents of the discovery from all across the nation. Sternbach further contributed through publications as co-editor of *The Heritage of the Petroleum Geologist* DPA special publication (2003), and lead editor of *Discoverer's of the 20th Century* AAPG special publication (2004).

For the last decade 2001–2011, Charles has served in 10 important leadership roles for AAPG including general vice chairman of the 2002 Houston Annual Convention, general chairman of the 2006 Houston Annual Convention (8223 attendees, highest in 20 years), three terms as a member of the House of Delegates, and candidate for vice president sections (2009–2010).

Charles was the originator of two very important initiatives, the AAPG 100th Anniversary Committee and chairman (2004–2010) and the Discovery Thinking Forums for AAPG annual meetings (2008–2011 and beyond). The Discovery Thinking Forums have become Monday afternoon sensations as invited speakers share their thoughts and events leading up to major discoveries. Past explorer speakers include Herbert Hunt, Clayton Williams, Dan Smith, John Amoruso, Bob Gunn, Marlan Downey and many others.

Dr. Sternbach is the recipient of the AAPG Distinguished Service Award (2005), AAPG Certificates of Merit (2004–2006), DPA Certificate of Merit (2005, 2009), GCAGS Distinguished Service Award (2003), HGS President's Award and HGS Distinguished Service Award, and the HGS Lifetime Achievement Award.

Creative, innovative, visionary, passion for geology, compassion for his fellow man, and a true love of his association with geoscientists around the world are a few words to describe a special individual and a good friend.

The motto at his alma mater Rensselaer Polytechnic Institute reads "Why not change the world?" Your peers in the industry that have been fortunate to know you would answer "you have".

Steve D. Levine

Response

I would like to thank fellow AAPG members for bestowing this great honor, AAPG leaders for their support and approval, Steve Levine for his citation, HGS for nominating me, and geoscientists everywhere for inspiring me.

My life has been somewhat geocentric. I have three degrees in geology. My spouse has two degrees in geology and our first date was a field trip. Almost all of my friends are geoscientists. It is no small wonder that AAPG and HGS, full of geologists, would play a large role in my life. I guess I never found a subject or group that I liked better than geology or geologists.

AAPG provided me opportunities to connect with great geologists past and present. Early on, my father advised me to associate with people smarter than myself. Fortunately, AAPG is full of smart geologists. Their collective thinking, our heritage, lives in our scientific literature. I am deeply grateful for the chance to learn from and associate with such talented people from whom I have benefited immeasurably.

In 1997, Jim Gibbs organized a "Legends in Wildcatting" program for the Dallas annual convention; the speakers: Tom Jordan, Roy Huffington, Bernard Duval, Mike Halbouty, John Masters. I sat in the front row. The personal stories about exploration were the most interesting I'd ever heard. I realized later that AAPG does a great job with technical publications and meetings. But, I wanted more programs like that one! I wanted to hear how exploration got done, how challenges were overcome, how success came about. So, since that day I've organized legends and wildcatter panels at local meetings and instituted "Discovery Thinking forums" at annual meetings. Mostly, I wanted to learn from the history makers. What resulted was a series of life changing friendships.

Michel T. Halbouty became a friend and mentor. For about 10 years, we worked together on various projects for the society. I always had the feeling when I shook Mike's hand, that I was shaking the hand of geologists back to the dawn of time. Pratt, DeGolyer, and wildcatters like Glenn McCarthy and Dad Joiner, Halbouty knew them all. Halbouty proudly proclaimed that he explored where others feared to tread! Mike galvanized my already optimistic tendencies.

James Lee Wilson inspired me, too, with his encyclopedic mind and passion for geology. We discussed carbonate rocks and reefs many times in the field or core lab. Thus it is a great privilege to serve as a co-editor with James Derby, Rick Fritz, Bill Morgan, and Susan Longacre (and several dozen authors) to produce an AAPG Memoir in Jim's honor. (*The Great American Carbonate Bank* volume is expected out in 2011).

I would like to thank HGS volunteers for inspiring me close to home. Every year HGS past presidents, each the hub of geologic activity in their year going back for up to 50 years, gather for a lunch. I am always inspired by the span of that gathering. So too the long-lived traditions of AAPG, which provide a sense of belonging to something far greater than just our current group or time.

Annual meetings are a great AAPG tradition, and I have been privileged to participate organizing several. In 2002 I was co-general vice chair, serving with Jeff Lund and Deborah Sacrey. In 2006, I was general chair. Each time it was a high honor to work with a group of about 30+ organizers, plus outstanding speakers, volunteers, and HQ staff.

I believe convention themes are analogous to astronaut mission

patches; each convention should have a theme relevant to the people, time, place, and topics of the conference. Dedicated volunteers made our 2006 theme "Perfecting the Search- Delivering on Promises" come alive. Bob Merrill (technical program chair) focused sessions to improve our science while maintaining business responsibility. Moments I'll never forget: leading a group of AAPG geologists on a field trip with moonwalker Jack Schmitt to Space Center Houston and attending a core workshop of pay zones from giant fields around the globe. A large room full of the most productive reservoirs in the world is an olfactory nirvana!

Though many AAPG activities focus on a near term horizon, the 100th Anniversary committee looks a bit beyond to 2017. I was honored to found and chair this ad hoc committee (2004–2010) and to serve with a dozen committee members. It was a case of seeing an opportunity to get a good start on something time critical. We set the location for the 2017 convention in Houston, allowing appropriate planning for intervening convention locations. We also began video interviews for "100 who made a difference" (Weimer and Dolly). We instituted Discovery Thinking Forums at Annual Meetings to showcase people involved in significant discoveries describing critical thought processes. So far, 18 speakers on video are available to all AAPG members on Search and Discovery. The library of speakers grows each year!

If I might share a word to those of you who are active in AAPG, stay active. To those who are beginning on a volunteer path continue and grow. When I first started as a geologist for Shell Oil (in 1984), I received a standard issue of 1,000 business cards. After a year, I had 999 left (I gave one to my mother). Then, I got active in AAPG and HGS. Not only did I exchange cards at meetings, but I got to know the other person. I made many network contacts while working together on volunteer projects that were both educational and fun. Soon, I had to order more cards. When I had more cards from outside companies than from colleagues inside my own company, I realized that I had become outwardly focused. A personal and professional transformation occurred, all thanks to AAPG and local society involvement.

I would like to thank my wife Linda for her continued support. We are indeed fortunate to share a lifelong interest in geology and geoscientists. Thank you also to AAPG for this humbling recognition.

Charles A. Sternbach

STEVEN L. VEAL
Honorary Member Award

Citation—To Steven L. Veal, for promoting petroleum geology and the benefits of AAPG membership throughout the world, as exemplified by his leadership of the Imperial Barrel Award competition.

Steve Veal, a successful petroleum geologist, has been an active AAPG member since 1986. His many activities and services in AAPG would have undoubtedly warranted recognition as an Honorary Member sometime in the future. In the parlance of sports, he was hitting lots of singles, completing short passes, and setting up for goals. However, in 2006 he began what has become the equivalent of a grand slam home run; a long, winning touchdown pass; the winning goal—all for the benefit of students, professionals and AAPG on a worldwide scale. Steve initiated, organized and implemented with assistance from committee members the Imperial Barrel Award (IBA) competition within AAPG. The IBA program has almost instantly become one of AAPG's most successful activities.

Some successful performances in sports or business are sometimes dismissed as "luck." But luck also occurs "when preparation meets opportunity." Steve is well prepared to take advantage of opportunities, based on his experience as an independent petroleum geologist. He works as both a consultant and as president of DCX Resources, a company begun by his father in Denver. At DCX, Steve generates and sells interests in prospects all over the world.

Concurrently, he built his AAPG resume on several committees, and has been elected AAPG treasurer (1996–1998), president of Division of Environmental Geosciences (1999–2000), and AAPG vice president (2005–2006). Upon completion of his term as vice president, Steve worked part-time for AAPG to establish the first international office in London. Thanks to Steve's effective work, AAPG has been able to refine and expand its model for international offices, but Steve's London office was the first. Also in London, Steve organized AAPG's first international prospect expo, APPEX, in 2003, and he continued to chair the event through 2007. The event and model continues, thanks to Steve's original efforts.

Steve has two important characteristics that increase his effectiveness in both his business and AAPG. First, he is an idea generator. His creative instincts are frequently firing, and he is not afraid to share those ideas. He likes to float "trial balloons." Probably due to experience in sales, he is not easily discouraged if an idea is not immediately accepted. He is ready with a new idea or looks for a new audience. Second, Steve is a "connector." As AAPG president-elect, I had limited international exposure, but at every AAPG meeting, Steve diligently introduced me to his international contacts. He has an effective mental Rolodex that always seems to have suggestions for connecting people to each other or to a task. Both of these characteristics were essential for Steve to found the IBA competition in AAPG.

While in London in an office on the campus of Imperial College, Steve observed an annual event for students preparing to graduate. Imperial College held a competition with teams of geologists, geophysicists, and engineers. The teams studied real-life data sets and orally presented their findings and recommendations for future petroleum potential within the area of their data set. Steve was so impressed with the process, he conceived of the concept to offer a similar competition through AAPG. This is about the time most idea generators try to turn over the concept to someone who will really implement the idea. Instead, Steve used his AAPG and industry connections to quickly organize and advertize the IBA competition. The first competition occurred at the annual AAPG meeting in 2007. Eight teams from both the US and international regions competed, and industry professionals judged the presentations. The logistics of that first IBA competition were daunting. Steve assembled a committee to advertise to prospective schools, raise funds for travel, find and distribute data sets, set competition rules and recruit judges. Through this process, Steve became not only an idea generator and connector but also an effective leader.

The benefits of IBA competition are far-reaching.

- AAPG enjoys its appropriate place as the bridge between academia and industry worldwide.
- Industry has an opportunity to help educate upcoming geologists and review the work of some of the best and brightest. For some students, IBA competition is their first exposure to the petroleum industry.
- Academia receives the equivalent of a capstone course, in which students can coordinate a variety of skills needed to be successful professionals. Students and faculty are energized by the opportunity to work real world examples, and connect to industry for future employment or projects.

Of all the new programs, publications or services that can be offered by a professional association, like AAPG, it is hard to imagine one more impactful than the IBA competition initiated by Steve Veal. His creative ideas, connections, determination, and leadership have benefited AAPG and petroleum geologists worldwide. Honorary Membership is a fitting honor to recognize Steve for hitting a game winning, grand slam home run.

Lee Billingsley

Response

It is a truly humbling and unique experience to have the president of the AAPG contact you to say you have achieved honorary membership and I would like to use this response as a forum to thank him, the AAPG leadership, and the multitude of members and colleagues that have worked with me over the years on a variety of AAPG programs and initiatives. That is a very long list and

my apologies to anyone I do not specifically mention as omission is only due to lack of space, not lack of appreciation or gratitude.

My first and paramount thought is of my late father, Harry Kaufman Veal. Both my father and mother, Faye Veal, greatly impacted my path in life but my involvement in the AAPG, on all levels and at all times has been to due to my father's direct influence. His support and advice in my early years in this industry remains at the core of my involvement. Ours is a family shop, reflecting four generations in the industry and acknowledging a great deal of bias on my part, I have come to realize that my father was one of the best at what he did, a successful independent oil and gas professional who discovered resources while conducting business in the best possible manner. A sincere friend to many and at the heart of the matter, a creative character of brilliant mind. I have him to thank for my career.

My very first project for the AAPG is to me reflective of the nature of the organization. In 1992, Robbie Gries had asked me to be involved in the 1994 annual convention and took time to introduce me to an acquaintance that shook my hand and thanked me for volunteering. For what was not exactly discussed or mentioned. That person was Bruno Hansen and I had "volunteered" to run the DEG program at the convention. At the time I had no idea what the job entailed nor was I a member of the DEG, but that meeting led to my enthusiastic support of the division and ultimately to my privilege of being its president. My sincere thanks to all those past and current members of the DEG leadership who have worked so hard to improve, diversify, and grow DEG programs.

I have had the privilege of serving on three Executive Committees, a number of times within the HOD, the AC, and on a variety of committees and programs. My participation would not have been so rewarding without meeting and working with the members involved, so I thank them all for their efforts and hard work. I must mention Eddie David, Bob Cowdrey, and Peter Rose for teaching management by example, Ed Dolly for getting me involved in matters, Dick Bishop, Pat Gratton, and John Hogg for many lessons learned and enjoyed in the HOD and elsewhere in the organization.

Europe has been a special place for me over my AAPG and professional career. I first became intrigued with the continent when in high school my father brought me along to help him work in the Alps, truly a unique experience. My first AAPG Europe project was working to help organize the 1997 AAPG international convention in Birmingham, England. This was followed by a variety of conferences in such places as Barcelona, Paris, Prague, and a number of educational programs, culminating in my appointment to the part-time post of director of the AAPG office in London from 2006 to 2009. In this role and as a member, I have been working on AAPG programs in Europe to improve our relationships with other societies, diversify AAPG membership, and improve the educational offerings to the members and I have enjoyed every moment of that effort. I must extend my great appreciation to all our European members who have worked so hard over years to improve the Region but I especially want to thank David Jenkins, Richard Hardman, John Brooks, Istvan Berczi, Vlasta Dvorakova, Francois Roure, Walter Grun, David Roberts, David Cook, Sigrunn Johanssen, Andrew Hurst, and Edmund Nickless for their efforts, advice, and friendship. These folks reflect the prototypical AAPG members in Europe and we simply could not have achieved the diversity or quality of projects without their full support.

Two specific programs have been the majority of my focus in Europe.

APPEX was a challenge given to me by Rick Fritz in 2001 to find a way to begin a prospect exhibition and trade show in Europe, aligned with international opportunities. I had the great luck to have Mike Lakin, Joe Staffurth, Terry Jackson, Charles Speh, and many others mentioned above, become involved in this still growing program and its success is a testament to their dedication.

I also have been associated with the Imperial Barrel Award coming to the AAPG and I need to give the full measure of credit where it is due. Dr. Howard Johnson had invited me to judge the event, which has been held for the past 35 years at Imperial College. After participating and being thoroughly impressed with that event, we sat in his office and discussed the idea of taking it to a global level with the AAPG. I think we worked out the basics in about an hour. I want to thank Howard, Dr. Chris Jackson, and all those involved at Imperial College for allowing us to export their superb educational program.

Thank you to Lee Billingsley for agreeing to be my citationist and the friendship and support over the years.

Finally, I wish to thank my family, my wife Josephine, daughter

Adrianna, and son Elijah, for their unwavering support for all things related to the AAPG. It is the nature of the beast that any volunteer hours that are contributed come in part or in full measure at the expense of the family and there is no exception in my case. Their love and support has been the keystone for my past, present, and future efforts in this organization.

Steven L. Veal

DOUGLAS K. STRICKLAND
Outstanding Explorer Award

Citation—To Douglas K. Strickland, the legend, for his vision and courage that led him to places and discoveries no one even dared to dream, for his brilliance and passionate dedication to his profession, for his generous spirit and camaraderie with his colleagues, for a life and career that is unparalleled.

Douglas Strickland arrived in this world in South Africa to missionary parents. He was born a twin with his brother Dudley and, by twenty minutes, the youngest of four boys. At the time of his birth, South Africa was embroiled in apartheid and deep societal divisions plagued the nation that caused much unrest in citizens' everyday lives. Because of this, at a very young age Douglas sought solace in the nearby South African coal fields and the famous Kimberley diamond mine and quickly discovered his keen interest in rocks and mineralogy. He soon could be found exploring South Africa's caves and various geologic settings and, by middle school age, had amassed quite a rock collection. By the time he reached the age of 12, Douglas could easily respond to entry-level undergraduate geologic examination questions. It was quite clear to everyone associated with Douglas that his intellectual ability far exceeded his young years.

When Douglas was 13, his family relocated back to the United States and eventually settled in the Colorado Springs, Colorado area where his father founded and was president of a college. During his teenage years in the U.S., Douglas continued to excel at his academic pursuits and eventually skipped one and one-half years of high school to graduate when he was 16 years old. It was also during his teenage years that Douglas discovered his love of dirt bike racing and spent all of his free time traveling the country to race at various events. By the time he was 18, Douglas raced dirt bikes professionally and often earned his living at various racing events. Douglas's love of dirt bike racing never wavered and he continues to ride today on a track he built for himself on his farm near Piedmont, Oklahoma.

After completing high school, Douglas immediately began collegiate endeavors at the University of Southern Colorado. Recalling his love of everything geology, Douglas quickly earned his Bachelor of Science in geology and graduated at the age of 19. It was also at the age of 19 that Douglas married his first love, Barbara Horner, and the two moved to Madison, Wisconsin where Douglas, true to his work ethic and brilliance, immediately began pursuing his master's degree in geology at the University of Wisconsin, Madison. It was also while completing his master's degree that Douglas began extensive work in Nevada and Utah as part of his academic endeavors. While involved in his study of Nevada and Utah, which often found him and his best childhood friend spending summers trekking much of both states, that the petroleum industry caught Douglas's fascination. It wasn't hard for the industry to recognize Douglas's great potential and soon Douglas was offered employment at various companies. However, always dedicated to academic excellence and now equally dedicated to the study of structural geology, Douglas instead chose to enter the University of Kansas doctoral program and fully complete his education.

While a doctoral candidate at the University of Kansas, Douglas unsurprisingly continued to excel at his various academic research projects. Due to the superiority of his work, several companies, including Chevron U.S.A., began to support his endeavors and it was soon apparent that Douglas's talent as one of the most promising structural geologists could not go underutilized any longer. It was then that Douglas made the decision to enter the industry and he and his wife moved their young family to Denver in order for Douglas to begin work as a

structural geologist and, in particular, as a thrust-belt specialist for Chevron U.S.A. Chevron's Denver headquarters were located downtown with employee parking underneath the company's building. Being the explorer he is now famous for, Douglas drove a Volkswagen Bus that also doubled as a camper for his many projects in the frontier. Of course, when one needs a tire changed in the frontier, they must do it themselves and so, naturally, Douglas had a spare tied to the roof of his bus. Unfortunately for Douglas, when he drove his bus into employee parking on his first day of work, his spare tire collided with the roof of the garage and he was stuck. Douglas was forced to climb to the roof of his bus and cut down the tire as a collection of cars lined the street, all eyes on Douglas waiting for him to finish. This was Douglas's first introduction to corporate life and, for months afterward, he was known at Chevron as the guy who blocked traffic with his tire and bright yellow Volkswagen bus.

While at Chevron, Douglas spent extensive time focusing on the overthrust belt and, not surprisingly, quickly came to be known as an expert of the region whose ideas were not only large but classic wildcatter concepts. It was during this time that Douglas truly began a professional career characterized by a love of the frontier, its wild beauty, and its potential for massive discoveries. After several years at Chevron, Douglas accepted the position as Exploration Manager for the W.R. Grace Company and, true to his wildcatter spirit, began to explore for large, company making prospects in the frontier. Needless to say, Douglas excelled and was soon promoted to Vice President of Exploration. It was during his time with W.R. Grace that Douglas convinced his superiors to participate in a 25,000-foot well at Madden Deep in the Wyoming Overthrust Belt. The now famous well came into production at 80 million cubic feet per day and remains one of Douglas's proudest professional achievements. Continuing on his now well-known path as an oil finder, under Douglas's tutelage, W.R. Grace enjoyed eight new gas discoveries in the Prairie du Chien of Michigan, success in the Red Fork of Oklahoma distal play, a sizeable discovery in the Williston Basin of North Dakota, a large heavy oil discovery in the Santa Maria Basin of California, and numerous other successes throughout the USA. By the time Douglas left W.R. Grace to become an independent in 1992, his reputation as one of the nation's premier wildcatters was truly solidified.

Following his independent spirit, Douglas founded a small independent exploration company, Manitou Resources, in 1992 and spent the next several years prospecting all over the American West. While head of Manitou, Douglas had five new discoveries and realized his enjoyment of the independent oilman way of life. It was also while at Manitou Resources that Douglas returned to a wild concept he had first thought of while still a graduate student traversing the high deserts of Utah. Understanding the great potential of Central Utah, Douglas had spent the last 20 years creating a prospect with such colossal potential that some thought was simply impossible in an area where only dry holes had been drilled. Staying true to his vision and courage, Douglas re-ignited energy into the prospect and set out to see it drilled.

Through a series of fortunate events, Douglas presented this gigantic prospect to Sid Jansma, Jr. of Wolverine Gas and Oil Corporation. Sid readily saw the potential of the prospect and the two set out together on an endurance race that included presentations to 65 oil companies, numerous private investors, and two NAPE Expos. To aid in their efforts, Keith Johnson provided outstanding geophysical work and, thanks to their superior geologic work and sheer determination to see the prospect fulfilled, the prospect was sold to a series of industry and private parties. Finally, on Christmas Eve 2004, Douglas hit pay dirt that is now a 100 million barrel oil province. The wild concept Douglas had created was now one of the nation's greatest oil discoveries and Douglas's wildcatter spirit again ruled the day. Since his discovery, Douglas has naturally been honored for such a momentous achievement by several organizations including the 2005 Explorer of the Year Award by the Rocky Mountain Association of Petroleum Geologists and the University of Kansas' highest award, the Hayworth Award.

After assisting Wolverine with the development of the discovery, Douglas decided it was again time to return to his independent roots. In 2008, Douglas founded Jayden Consulting, LLC. to continue prospecting and industry consulting. In addition, in 2009, Douglas co-founded Red Rock Resources, LLC. for the purpose of exploring for and developing large prospects in the American West. Today, Douglas is busier than ever developing and selling Red Rock's prospects, some of the biggest he's ever worked on.

Throughout all of his professional success, Douglas stays true to his limitless vision and humble nature. He continually strives to be kind to all those he works with and is an oilman who enjoys treating people equally no matter where he finds himself. He remains deeply grateful for the love and support of his family and his children are the absolute delight of his life. It can truly be said that the great Douglas Strickland will always be found working the frontier, where none have ventured before, to find those reserves none thought possible. To Douglas Strickland, the legendary American wildcatter. Thank you for showing us the boundless possibilities.

Jennifer R. DeHaan

Response

There are few instances throughout my now 30 plus years as an exploration geologist that stand out as being proud moments I vividly remember. Being awarded with this great honor of the Outstanding Explorer Award ranks high among them and I will remain thankful and humbled from the experience for the remainder of my wildcatting days. I am enormously grateful to the Association for such a great award and want to extend my deepest thank you to all those who spoke on my behalf in anticipation of this award.

A large part of this award is due to my work and discovery in Central Utah. All my life, I have been enchanted by the beauty and untamed terrain of the American West and I count myself lucky to have spent the majority of my career prospecting there. In my younger days, I would often set out from Delta, Utah and disappear into the state's wilderness and remain enchanted by the state's geology long after I returned from my camping trips. In 1977, while traveling north from southern Nevada, I happened to look out my truck window and notice what looked to me to be a massive structure. My wildcatting nature getting the best of me, I took a moment to pull alongside the road and reached for a pencil and paper and created a quick sketch of what I believed to be a massive petroleum trap. Just returning from southern Nevada, where the red Navajo Sandstone is quite visible, I remember scratching my head and pondering to myself that, if a trap was there and a true structure existed, it would likely be one of the largest finds in the United State's history. I returned to my office and began my 20-year work from constructing the initial prospect package to the drill bit hitting the Utah earth. I was off on the path to sell the Central Utah Overthrust Prospect.

Along my sales trek, Keith Johnson joined me to provide world-class geophysical help and, together, we heard every single reason why the prospect wouldn't work. Unfortunately for us, all were true. However, I never lost sight of the fact that, despite all the reasons why the prospect would not work, there were equally compelling reasons why it would work. These compelling reasons in addition to my geologic study and labor on the prospect were often what kept my spirits afloat and gave me additional courage as I passed from company to company, regularly showing the prospect twice a week in different parts of the country. In 1999, I was fortunate enough to begin a working relationship with Sid Jasma, Jr. of Wolverine Gas and Oil Corporation, who also saw the potential of the prospect and was brave enough to support my work. We set out together and showed the prospect to 65 companies and participated as exhibitors at two NAPE Expos. Finally, we had success and sold the prospect to a variety of industry professionals and private investors, beginning with the famous C.C. "Charlie" Winn. On Christmas Eve 2004, in the middle of the blistering Utah high desert winter, we hit pay dirt. I will never forget how the mud log trailer illuminated bright green and the stunned looks all around, the biggest on my face. Remembering all the way back to that summer day in 1977 alongside the road, I had come a long way with the help and support of my colleagues and family. I remain just as grateful today as I was the moment my prospect was proven.

Today, the Covenant and Providence fields are in a 100 million barrel province in an area the USGS had deemed without any petroleum potential and was 200 miles from the nearest production. Aside from the additional energy security the region provides and additional revenue for the nation, my greatest hope is that the discovery will stand to serve as a reminder of the power of the wildcatter spirit. There was a time in history when Pennsylvania, Texas, Oklahoma, and California were petroleum frontiers just as Central Utah before Covenant. Indeed, there existed a time on this earth when every area where the great fields are now located were just barren dirt. But, through the ingenuity of the prospectors, their courage, and their vision, the domestic oil and gas business prospered and the barren dirt turned into legendary fields. These same principles remain true for the modern day wildcatters. Good

geologic work, determination, and foresight enable the industry to progress into the frontier. I sincerely hope this driving spirit that once characterized the entire industry remains, and even grows, amongst the professionals.

So many people have freely given me their support throughout my prospecting career. My mentors, Sid. Jansma, Jr., Sam Cerny, and Frank Royce are the men responsible for fostering and supporting my wildcatting spirit. Without them, I am certain my geologic brain would have gone largely undeveloped and underused. To all of my colleagues, thank you for your camaraderie and ready conversation about all things geology. You greatly enrich my professional life. To my family, you have been steadfast and unwavering, even during the toughest of sales times, and I am eternally grateful to you and for your love. Aside from all of my professional achievements, my children are my greatest source of pride and I take daily enjoyment in their own successes. My oldest, Angela, is currently a professor of nursing as well as an OBGYN nurse. She recently blessed me with my first grandchild. My son, Jason, is also involved in the oil and gas business. My other son, Colin, is currently completing his undergraduate studies at the University of Oklahoma where he is involved in various activities. My youngest son, Paul, is eight years old and currently winning all the army battles we conduct on my living room floor.

Again and forever, my deepest thanks to AAPG for bestowing on me such a prestigious award. Here's to the next big domestic find for our great nation.

Douglas K. Strickland

OLE JACOB MARTINSEN
Robert R. Berg Outstanding Research Award

Citation—To Ole J. Martinsen for his astute application of sedimentologic principles to stratigraphic problems and his enthusiastic efforts to advance the science in the global geologic community.

The seeds of geo-inquiry were planted in a young Ole J. Martinsen as he traveled his native Norway and wondered why the terrain had certain shapes and why streams meander. That inquisitiveness has continued throughout Ole's education and professional career and has been the driving force behind his numerous accomplishments.

Ole was born near Bergen, Norway, one of five children who were introduced to the marvels of the Norwegian landscape by his parents who were teachers. His formal education was obtained at the University of Bergen where he received the Bachelor of Science, Master of Science, and Doctor of Science degrees. At this stage of his career he focused on syndepositional deformation in Ireland and the interaction among eustacy, tectonics, and sedimentation in northern England. It was during his doctoral work at Bergen that I met Ole and began to work on plans for him to come to the United States and conduct postdoctoral work at the University of Wyoming. He arrived at the university in 1990 where he was appointed visiting assistant professor. It was in Wyoming that we developed a close working relationship that included Randi Martinsen, the petroleum geologist at the university. The three of us collaborated on work on units in the Cretaceous Mesa Verde group, many of which are outcrop analogs of reservoir rocks in adjacent Laramide basins and elsewhere around the globe. The tectonic setting of Wyoming includes both thin-skinned and basement involved uplifts and it provided an excellent natural laboratory to examine the complex sedimentary responses to both tectonics and eustacy, at that time an emerging topic of great interest.

Following his time in Wyoming, Ole embarked on what would be an extremely successful career in the petroleum industry, first with Norsk Hydro and, after the merger, with Statoil. He began industry work as a geologist at the Norsk Hydro Research Center where he worked on both research projects and technical services. In 1997 he became a project leader, head geologist, and geological advisor at the Research Center and was involved in work on the Norwegian shelf and several international projects. In 2003 he was appointed manager of geology/head geologist at Hydro Oil and Energy Research Center. From 2007–2010 he was vice president, head of exploration

research at Statoil and is now senior geological advisor for the company.

Since going to work for Norsk Hydro and subsequently Statoil, Ole has been extremely active in the global geologic community. He has taken on numerous editorial responsibilities, including a volume on "Sedimentary Environments in Offshore Norway," the *Norwegian Journal of Geology* thematic issue on "Deep-Water Sedimentary Systems of Arctic and North Atlantic margins," SEPM Special Publication on "External Control on Deep-Water Sedimentary Systems" and he has served as associate editor of *Sedimentology*. He organized field trips and workshops for the AAPG annual convention, Salt Lake City, the Slopes Conference, Liverpool, and the AAPG international conference, Paris. He has submitted almost 100 abstracts and published over 60 peer reviewed papers on topics including deep-water sedimentary processes, systems and external controls; Carboniferous sedimentary systems and external controls; slope instabilities; digital and virtual outcrop studies and earth systems models of source to sink for exploration. Ole is currently working on several publications including the character and genesis of mass-transport complexes, the Campanian of the Rock Springs uplift, Wyoming and high-resolution sequence stratigraphy in a modern forced regressive setting.

Ole has been invited to give lectures and be involved in debates at universities and conferences throughout Norway, elsewhere in Europe, the United States, and South America and he has won several awards for his research presentations, including best paper-honorable mention award, *Journal of Sedimentary Research* (1996) for his paper "Sequences, systems tracts and shoreline trajectories: a systematic description of variable depositional dip scenarios," and best oral presentation at the NPF Conference for his talk "Onshore-Offshore Relationships on the North Atlantic Margin." In 2006 he shared the Hydro all company innovation award for his work on "Virtual Geological Reality." In 2009 Ole was honored by being appointed the AAPG Roy M. Huffington International Distinguished Lecturer to the Asia-Pacific Region and presented talks in Beijing, Tokyo, Brunei, Jakarta, Melbourne, Wellington, Brisbane, Sydney, Canberra, Adelaide, and Perth.

Ole's ability to make these major scientific contributions while holding positions of great responsibility in industry is unusual and impressive and reflects his continued inquisitiveness and drive to advance the science.

Jim Steidtmann

Response

Receiving the Robert R. Berg Outstanding Research Award from the AAPG is unreal. Although I guess that all scientists hope that their work is recognized by peers, I never thought my work would qualify for this type of award. It is extremely meaningful not just because it is for outstanding research, but also because it is from peers in industry and from industry's premier technical association.

It was emotional to receive notification in Kilkee, Co. Clare, Ireland in early September. This is where my career started 25 years back, as a young M.Sc. student. The Carboniferous rocks of the Shannon area, have not just inspired me and gave me a starting point, but literally thousands of other geologists have visited the area over the last 30 years and learnt about analogues to reservoirs globally.

I grew up in Fana, close to Bergen, Norway as the youngest of five children. My parents, still healthy today in their late 80s, were both teachers. My mother claims that it was her interest in natural geography that stirred my interest in geology. It definitely did not work on my one sister and three brothers, including my twin brother, whose careers span being a minister in the Norwegian church, teaching, political science, and law. The interest was not spawned by collecting rocks but by an interest for the outdoors, for landscapes and geography. Slopes and topography always drew my interest, but my first clear experience of geological interest was in the mountains in southern Norway with my sister and we stopped by a meandering river and I remember wondering why it would have its bends. So I had to be a sedimentologist. I could never understand why my twin brother studied law reading books with no pictures in them.

My professional career has been influenced by a few fortunate defining moments and people. My early career as a M.Sc. and Ph.D. student at the University of Bergen was under the supervision of John D. Collinson and Brian K. Holdsworth. John, a student of the Harold Reading "school" of facies-based sedimentology at Oxford University, brought this thinking with him to Bergen. In 1985, I was looking for a M.Sc. project and had the Millstone Grit (common term for the Upper Carboniferous sandstones of late Mississippian and

early Pennsylvianian age of the British Isles) on my mind for unknown reasons. As it turned out, John Collinson, newly arrived in Bergen as a professor, was offering projects in western Ireland on the Carboniferous succession there, and that decision has influenced my career ever since. It was either pure luck or fate. I owe a lot of my career to the opportunities given by John Collinson on the Carboniferous succession of western Ireland and northern England. Through this I met geologists such as Harold Reading and Trevor Elliott in the hay-days of facies sedimentology.

In 1985, a couple from the University of Wyoming visited Bergen on a sabbatical, Jim Steidtmann and Randi Martinsen. I followed with interest the lectures on tectonics and sedimentation, and I was grasped by the Wyoming fold and thrust belt and its foreland. I just could not let the image leave my head. It would materialize five years down the road.

1990 was a defining year. Upon finishing my Ph.D., I looked for a post-doc project and Wyoming was the premier choice. I contacted Jim Steidtmann and with the help of another key person, Ron Steel, newly appointed professor at the University of Bergen, off I went to Wyoming to work on the Mesaverde Group. The next three years were extremely defining, splitting time between Wyoming and Bergen in the hay days of sequence stratigraphy. Jim's work on tectonics and sedimentation taught me ground rules and the importance of considering various controls on sedimentation that have influenced my thinking ever since. In 1990 I also met with Henry Posamentier, a true and close friend and only the fact that we have pursued hectic careers in competing companies have prevented us from more common work. Other great friends I met that year include Lee Krystinik, Dale Leckie, and not least, Roger Walker and Andy Pulham who later became co-workers.

In 1993 I became tempted by later close colleagues in Norsk Hydro to look to industry research. Quickly, I was in major exploration projects and saw that the technical challenges to understanding the subsurface exceeded my wildest expectations. The potential of applying key theories to find and produce oil and gas were very intriguing. I was lucky to participate in the exploration teams that found and appraised the large fields Gjøa, Grane and Ormen Lange on the Norwegian Continental Shelf. I participated in global exploration projects such as in the Gulf of Mexico and the South Atlantic and this taught me key lessons on application of research. I particularly thank Tom Dreyer, Leif Lømo, William Helland-Hansen, John Gjelberg, Alf Ryseth, Gunn Mangerud, Kjell Sunde, and Terje Enoksen (deceased) for this period. I would like to thank my current manager at Statoil, Morten Loktu, for continuous opportunities and my current exploration research group for a thought-provoking environment. I am now in the process of learning from young fabulous geologists and the two super Ph.D. and later post-docs I have helped guide, Tor Sømme and Ian Kane are thanked.

My heart is in research for energy exploration, and I have enjoyed working across many fields of sedimentary geology from virtual outcrops, fluvial, deltaic, shelf and slope environments to the deepest abyss. Thus, my recent passion is source-to-sink, a unifying field integrating previously disparate fields of geology and a powerful tool for prediction of basin fill.

I have been deeply privileged in meeting people globally who have defined my career. Nevertheless, having become a father at a mature age, there is more to life than geology. Thus, my most important expression of thanks go to my wife Siri and our girls Helene (8) and Hanne (4) for putting up with a travelling geologist who is not always there for the Monday swim class or the Thursday gymnastics class.

Ole Jacob Martinsen

DEBORAH E. AJAKAIYE
Distinguished Service Award

Citation—For her substantial contributions to the development and growth of tertiary geoscience education across Africa and leadership roles and impact in AAPG for the Africa region.

A pre-eminent physicist and geophysicist, Dr. Deborah Enilo Ajakaiye, is well

known in Nigeria, Africa and around the world. She was born in Nigeria, where she earned her first degree with honors in physics from the University College, Ibadan and University of London, England. She earned a master's degree in applied geophysics from the University of Birmingham, England and a Ph.D. from Ahmadu Bello University, Zaria, Nigeria, where she lectured for several years and served as professor and head of Department of Physics and dean of the Faculty of Natural Sciences. Over the years, she has led ground breaking research work in more than 20 countries and contributed significantly to knowledge and development in the fields of applied geophysics, seismic, gravity and magnetic data acquisition and interpretation.

Dr. Ajakaiye has authored and co-authored 7 books and monographs, and written over 60 publications in international journals. In 2002, she co-published the seminal work *Structural Styles on Reflection Profiles from the Niger Delta*. She served on the Editorial Advisory Board of several international journals such as *Natural Hazards and Journal of African Earth Scientists*. She has presented over 140 major reports on Earth Science related topics, supervised or co-supervised 48 graduate students at University of Manitoba, Canada, University of Jos, Nigeria and Ahmadu Bello University, Nigeria. For over 20 years, she served as external examiner for graduate examinations in physics and geophysics for universities across Nigeria, as well as Sudan, Uganda, and Sierra Leone.

Dr. Ajakaiye has been very active with AAPG. As AAPG Africa region president-elect (2004–2005) and president (2005–2007), she stimulated the interest and participation of younger geoscientists across African countries in the activities of AAPG, while increasing student membership and chapters in the region. She also led the formulation of the business model for the region. Her other responsibilities within AAPG have included: member, Advisory Council; vice chair, International Regions; member, Advisory Council; member, Publication Pipeline Subcommittee; and Professional Women in Earth Sciences.

Aside from AAPG, she has also been an active member of other associations, including SEG, GSA, AGU, GSH, HGS, EAGE, AGERA, AGID, Geological Society of Africa, Geological Society of London, England, Institute of Physics, Nigerian Association of Petroleum Explorationists (NAPE), and Nigerian Mining and Geosciences Society (NMGS).

Dr. Ajakaiye is associated with many 'firsts' in her professional life, among which are: first female professor of physics in Nigeria and first female dean of the Faculty of Science perhaps in black Africa. She was the first female fellow of the Nigerian Academy of Science. Notably, she is the first black African to be awarded a lifelong Honorary Fellowship of the Geological Society of London, England, for her singular research work on the origin and evolution of the Younger Granites of Northern Nigeria. She was the first president of the Association of Geoscientists for International Development and the first female president of AAPG Africa Region.

Dr. Ajakaiye has been honored as a Fellow of many institutions, including: Geological Society of London, England; International Association of Geodesy; Institute of Physics, London; Association of Exploration Geophysicists, India; Geological Society of Africa; Nigerian Academy of Science; and Nigerian Mining and Geosciences Society. She was also awarded an honorary Doctor of Science by Bendel State University, Nigeria, and in 2007, she earned the NAPE highest Earth Scientists award ("Aret Adams Award"), for her individual significant contributions to the practice of petroleum exploration in Nigeria.

Apart from her accomplished career in academia, she is also highly acclaimed in industry. She has provided technical consultancy services to a range of oil and gas companies, from smaller exploration companies to larger companies such as Amoco, Mobil, and Chevron. Her work with these firms spans the USA, Latin America, Europe, Middle East, and Africa. She has also assisted governments in several capacities. Most notably, earlier in her career, she led work in the area of groundwater exploitation and the management of natural and environmental hazards in Nigeria.

In 2008, Dr. Ajakaiye received the National merit award of Officer of the Order of the Niger (OON) from the Federal Government of Nigeria and in 2010 she was honored as one of the Top 50 women of Distinction in Nigeria.

Dr. Ajakaiye is also active in the community. She is the founder and president of Christian Care for Widows, Widowers and the Aged (CCWA), which caters for over 4,000 widows and orphans across Nigeria, Ghana and Kenya.

Dr. Ajakaiye is a distinctive leader, role model, and mentor to many geoscientists and young Africans. She ascribes her "modest

contributions" in her lifetime to God's grace and glory.

Kunle Adesida

HERMAN DARMAN
Distinguished Service Award

Citation—To Herman Darman in recognition of his passionate, energetic, and exceptional effort in promoting geology to wider communities through AAPG and local societies wherever he resides.

Herman's passion in all sorts of publication started early in his career, indeed it was way back during his undergraduate study (1985–1991) at Institute of Technology Bandung (ITB), Indonesia. Together with a couple of fellow students, Herman reactivated a student newsletters called *Suara Gea* and he tried to distribute them not only to the present students but also to the graduates. Most of the alumni felt the benefit of being kept in the loop and it quite often resulted in some voluntary donation to support the student activities.

Once he graduated in 1991, Herman spent his first three years as a field geologist in East Kalimantan for Lasmo. Having collected enough savings, he decided to pursue his studies. Herman managed to broaden his horizon and obtained a master's degree in petroleum geology in 1995 from Aberdeen University and enabled him to straight away join one of the majors, Shell, in Jakarta. Being an exploration geologist overlooking several opportunities across Indonesia, he saw an opportunity to promote sedimentology under the umbrella of IAGI (Indonesian Association of Geologist). Together with his former ITB lecturer, Herman formed a commission of sedimentology called FOSI. FOSI's main activity was its periodical, *Berita Sedimentologi*, the first Indonesian geological bulletin published in English where Herman served as both the editor and the general secretary of FOSI for a number of years. Herman also organized FOSI's regional seminar in 1999 on tectonic and sedimentation of Indonesia commemorating 50 years of the significant publication by R.W. van Bemmelen, *The Geology of Indonesia*. He was also involved in FOSI's second regional seminar, Deep-water Sedimentation of Southeast Asia, anticipating a boom in deepwater explorations in the region following the discovery of significant gas reserves in offshore Mahakam.

Herman's leadership was rapidly recognized not only within IAGI but also by Indonesian Petroleum Association (IPA), which then brought him to be heavily involved in AAPG. He started with being a member of AAPG's Research Committee in 1996. In 2000, Herman was transferred to Brunei Shell Petroleum (BSP) but this did not stop his involvement in AAPG, IAGI, and FOSI. He joined the Education Committee at the beginning of 2001 and later was involved in being a Visiting Geologist and House of Delegates. It peaked in 2005 when he was elected as the region president of AAPG Asia Pacific. With this power, Herman managed to almost double the number of AAPG members within the region, recruited his former lecturers, including Prof. R.P. Koesoemadinata, and several colleagues to be AAPG Visiting Geologists, and helped form several student chapters within the region. This showed his passion to disseminate information since geology was still considered exclusive in most of the countries in Southeast Asia. In addition he has strengthened the motivation of the young generation studying geology through the Student Chapter activities.

In 2007, Shell relocated Herman to its Netherland's office. The different time zone merely disallowed him to be involved in Asia Pacific and therefore he shifted his extra energy in Europe. He has been an alternate to the House of Delegates for the European region and continues motivating the European young generation through the Visiting Geologist program. Herman visited Delft University of Technology and the University of Amsterdam a couple times and helped establish AAPG student chapters there. He also promoted AAPG in Utrecht, Université de Paris, and Katholieke Universiteit Leuven (Belgium). The Visiting Geologist program later has also been extended to cover Eastern Europe (Ukraine, Romania, and Azerbaijan), adopting the model Herman learned from the Asia

Pacific region. Herman has also been involved in managing the Distinguished Lecturers program for the European Region since 2009.

As in the local societies, Herman also contributed to the Dutch Petroleum Geology Circle (PGK) where he served as the vice chairman (2008–2009) and later on as the chairman (2009–2010). This is a rare achievement for his country of origin, Indonesia—being recognized through his leadership and dedication in a foreign soil.

Herman has also been selected as SEPM global ambassador with the objective of promoting scientific information on sedimentology and stratigraphy in the Netherlands and Indonesia.

Herman is a creative and energetic geologist and I have been fortunate to be associated with him throughout most of our careers. Herman's undying enthusiasm and continuous service to AAPG and various local societies have been fantastic and therefore his blood, sweat, and tears deserve the 2011 AAPG Distinguished Service Award.

F. Hasan Sidi

RICK L. ERICKSEN
Distinguished Service Award

Citation—To Rick L. Ericksen for exemplary service to AAPG, for significant contributions to the advancement of the science of petroleum exploration and development, and for exceptional efforts to ensure professionalism and ethics in the geosciences.

Rick Ericksen became acquainted with geology at the age of four when he was removing rocks from the fields of his grandfather's farm in northeast Illinois near the Illinois-Wisconsin state line. While driving a tractor, he found a fist-sized greenish colored rock that was extremely heavy and it, in fact, was a piece of copper that had been carried into the area during a previous episode of continental glaciation. That discovery piqued his curiosity and ultimately led him to pursue degrees in geology.

Rick received his B.S. degree in geology in 1973 and M.S. degree in geology in 1975 from Northern Illinois University. In 1975, he began his career in Lafayette, Louisiana. In Lafayette, he worked as a development geologist for Chevron and was assigned a new development platform with the overall project guidelines to propose and drill development wells to more fully develop a field in the OCS Vermillion area.

In 1976, he was hired by Skelly Oil Company as a development geologist. Soon after joining Skelly, he learned that Skelly and Getty were merging. Prior to his new assignment with Getty and during the year of waiting, Rick became involved with Skelly's work in the Black Warrior Basin of northeast Mississippi and northwest Alabama. When transferred to New Orleans, he became Getty's Black Warrior Basin geologist and continued work in that and other areas.

After being with Getty for a short time, Rick was contacted by his former Skelly supervisor, who asked him to come to Jackson, Mississippi to talk about potential employment with R. L. Burns Corporation. Rick liked what he saw, and he has remained in Jackson ever since. Shortly after starting his new job, R. L. Burns sold most of its undeveloped leasehold acreage purchased under leads that Rick had helped to develop in the Black Warrior Basin to Pruet Oil Company. In that transaction, Rick ended up continuing his work in the Black Warrior as an Area Geologist with Pruet Oil. During his tenure with Pruet, Rick drilled or oversaw the drilling of some 200 exploration and development wells in the Black Warrior resulting in several new field discoveries.

In 1991, he accepted a position with the Mississippi Office of Geology. While there he compiled and had published a production column of the producing reservoirs in the state, a compilation of RWs for the producing reservoirs, and received a grant from the DOE for

Naturally Occurring Radioactive Materials (NORM) contained in the produced waters of oil and gas wells. After the conclusion of the grant, research related to the disposal of NORM was completed. With additional work, a method was developed to inexpensively dispose of NORM and that process was patented in 2008.

During this time, Rick became involved with issues related to the regulation of the geologic profession. In 1995, he was elected chair of the Mississippi Geologic Task Force whose charge was to determine if geologic licensure/registration would be beneficial to the State and profession. The Task Force concluded that geologic registration/licensure was needed, and Rick helped lead legislative efforts to implement geologic registration. Those efforts led to the successful passage of a registration law that became effective in Mississippi in 1997. Rick was selected by the governor to serve on the first board and was subsequently elected as that Board's first president and was later re-elected to serve a second term. After the end of his second term, he was offered the Board's position of executive director, and he has served in that capacity since 2000.

Rick joined AAPG in 1977. His involvement with the profession and AAPG has increased over the years. He has served as a delegate to the HoD for over 15 years for the Mississippi Geological Society and has served as MGS president. He has served on the HoD's Rules and Procedures Committee, the HoD/DPA Ad Hoc Committee on Ethics, the HoD's Future of Earth Scientists Committee, the AAPG's Advisory Council, and the AAPG's Ethics Committee, including chair of that committee. He received certification as a Petroleum Geologist in 1982 by DPA and became chair of DPA's State Registration and Licensing Committee in 1999 and continues today in that capacity. Rick was DPA vice president in 2003–2004 and president during 2008–2009. Rick was instrumental in the development of the first online continuing education course in ethics in 2008. He received DPA's Certificate of Merit Award for his efforts in getting members of the Division accepted as Qualified Reserve Evaluators in Canada and later he received the DPA Distinguished Service Award for his significant contributions.

Ernest A. Mancini

GRETCHEN M. GILLIS
Distinguished Service Award

Citation—For relentless dedication to AAPG publications as Elected Editor, shortening review cycles and improving perceptions of the *Bulletin* as the premier publication for petroleum geoscience.

Gretchen Gillis was born into a large and loving family that resided in New York and Connecticut. However, her father worked as an engineer for the petroleum industry, and the family got to travel, visiting exotic places such as Algeria and Indonesia. (The family still holds traveling reunions.) These travels sparked Gretchen's interest in the petroleum industry. Gretchen's mother was an English teacher and the source of her interest in words and syntax.

With a B.A. in geology from Bryn Mawr under her belt, Gretchen headed from the East Coast to the Gulf Coast, obtaining an M.A. from University of Texas at Austin. The taste of Shiner Bock and enchiladas agreed with her, so after graduation she took successive jobs as an exploration geologist for Maxus Exploration Company and then as a development geologist for Oryx Energy Company, improving the industry as well as the nation's wellbeing by finding oil and gas over the course of an eight-year layover in Dallas.

Our industry is as fluid and unpredictable as they come, so when merger mania approached Oryx in 1997, Gretchen migrated to Houston to take a marketing communication position with Schlumberger that combined her interest in geology with her writing and editing skills. She was instrumental in the origination and development of Schlumberger's *Oilfield Glossary* and wrote a substantial number of definitions herself. She went on to write more than 20 articles for the *Oilfield Review*, numerous articles for other Schlumberger publications and Web sites, and an award-winning book on the history of Schlumberger, *80 Years of Innovation*. During her tenure with Schlumberger she

advanced from editor to editorial manager, and eventually to advisory editor. She has concurrently published on geoscience careers in *Geotimes* and *The Professional Geologist*, and on other business topics at AAPG and GCAGS meetings.

Gretchen's communications work for Schlumberger has garnered several prestigious awards, including two Lantern Awards (2004, 2008) from the Houston Business Marketing Association and two Awards of Excellence (2001, 2002) from the Houston Society for Technical Communication.

Gretchen recently decided to move into a new position that brings her closer to petroleum geology and her roots in the exploration and production business.

Gretchen joined AAPG in 1990, and quickly became more than a dues-paying member in good standing. She has been an HoD alternate, both a member and the chair of the AAPG Publications Committee, chair of the Public Outreach Committee, and an associate editor for the *AAPG Bulletin*. Most recently she dedicated three years of servitude to being the AAPG elected editor (2007–2010), during which time she decreased the turn-around time between manuscript submission and acceptance from 88 to 72 days. This enhanced the appeal of the *AAPG Bulletin* to potential authors and, over the course of her editorship, was largely responsible for a significant increase in the yearly total of manuscript submissions.

As elected editor, Gretchen was passionate about the *AAPG Bulletin* and about maintaining not only a steady flow of manuscripts but also the quality and appropriate nature of the submissions. She used commendable initiative in combing the various AAPG meetings for talks that would make papers of interest and value to AAPG members. She formed a group of editorial volunteers that helps authors who are not native English speakers pound a paper's grammar and syntax into acceptable form, thus making the data and science in those papers available to AAPG members despite language difficulties.

The elected editor also serves on the AAPG Executive Committee. As an EC member, Gretchen was attentive to detail while maintaining a broad perspective on the organization. She was pleasantly vocal during meetings, contributing thoughtfully to all discussions, not just to publication issues. Always ready with a laugh, Gretchen also put steel into her discussions.

Gretchen continues to contribute to AAPG as an HoD delegate and as instructor for courses in scientific writing. She also volunteers her time to the AAPG PROWESS committee and she is co-chair for Short Course committee for the 2011 AAPG Annual Convention. Gretchen is an active volunteer at her daughter Hazel's school as guest speaker on geology. When not volunteering with AAPG and there are a few unaccounted-for minutes left in the day, she plays the viola with several semi-professional musical groups. AAPG appears to be winning out because Gretchen is not playing the viola much these days.

John Lorenz

GINA B. GODFREY
Distinguished Service Award

Citation—For providing key leadership and vision in guiding the growth of the International Pavilion into a recognized industry program and a valuable asset supporting AAPG's strategic goal of being a global geoscience organization.

Gina Godfrey has played a key leadership role in transforming the International Pavilion (aka "IP") into a distinct separate AAPG organization as an independent LLC, which now provides robust, 24/7 global services to its clients. International Pavilion is an effective venue at the AAPG ACE (Annual Convention and Exibition), AAPG ICE (International Conference and Exibition), APPEX London and Winter NAPE.

The IP was "born" in 1994 at AAPG's Annual Convention and Exibition. The Convention Committee in Denver that year expected this initiative would be a one-time event. The Denver event drew 37 exhibiting countries. The enthusiastic response from both exhibiting countries and attendees led AAPG to hold the IP again the

following year, and every year thereafter. Over 100 different countries have exhibited in the IP over that time.

In 1997 the IP expanded its participation in exhibitions by adding the AAPG International Conference and Exhibition to its schedule.

Also in 1997, the online version of the IP was launched under Gina's direction. The Online IP has evolved into a year-round source of information for the promotion of hydrocarbon potential and joint development opportunities by individual countries to the international oil and gas industry. Country technical presentations are archived and made available continuously.

In 2005 AAPG spun off the IP as a subsidiary company, International Pavilion LLC, with Gina as managing director. This new structure allowed IP to work more closely with governments and industry, respond quickly to market needs, and pursue new expansion opportunities. One such expansion was the 2007 partnership agreement with the American Association of Professional Landmen, whereby the IP began exhibiting and managing the international section of NAPE Expo, the premier industry property and prospect expo held every winter in Houston. At this unique event, the participating countries exhibit alongside oil and gas companies showcasing international deals, giving attendees a wide selection of international oil and gas opportunities. Prior to IP organizing the international participation, non-U.S. prospects were mingled in with U.S. prospects and were not differentiated or visible. Now IP is an attractive, effective, and highly visible presence on the giant exhibit floor at NAPE.

Also in 2007, the annual AAPG APPEX meeting in London was added as an IP venue. Gina played a leadership role in this growth and specifically was the driver in adding APPEX and NAPE.

The International Pavilion website, the outgrowth of "Online IP", now provides real-time Bid and License Round Announcements and its "IP Country Showcase" feature provides current information on activity, new discoveries, project and prospect status and data availability announcements. The website is a 24/7 resource and major value to IP sponsoring companies.

Many testamonials are documented in the AAPG literature (and elsewhere) speaking to the impact IP has had on the ability of NOC's and government agencies to communcate their information and news, and for oil companies to interact and network with country representatives. Many would say the Interational Pavilion, with its distinctive flag display and high quality, uniform booth format, is one of the highlights of the exhibit hall at venues in which it participates.

The traditional IP Receptions, held as social/networking events, are a major opportunity for NOC and government representatives (including many young representatives) to meet and interact with AAPG members, AAPG officials and IP sponsor company representatives. This event has had the personal touch of Gina for the last several years and is now a signature event for IP. AAPG President Scott Tinker and Mrs. Tinker and AAPG Executive Director Rick Fritz attended and were recognized at the IP Reception and dinner at the 2009 Denver ACE. This was an impressive endorsement to the attendees of AAPG's global outlook and IP's importance to AAPG leaders.

The origin and growth of International Pavilion since the Denver "experiment" in 1994 has been the combined victory of many dedicated AAPG members; however, it would be difficult to name anyone whose individual dedication and contributions of time, effort and resources compare with Gina's.

She has been the leader and guiding spirit in the growth of this major AAPG initiative to move towards the strategic goal of becoming "the" global and indispensable geoscience association.

Many dedicated AAPG members helped create IP, but Gina Godfrey "makes it work". Her contributions are long-term, significant and specific.

Gina has received two AAPG Certificates of Merit for her work; however, the magnitude of her commitment and dedication make her clearly deserving of the AAPG Distinguished Service Award.

Jeffrey W. Lund

SIGRUNN JOHNSEN
Distinguished Service Award

Citation—To Sigrunn Johnsen, Leader and dedicated professional, for her longstanding service to AAPG and House of Delegates, especially for her role in contributing to a sustainable and successful AAPG European Region.

Sigrunn's commitment to serve AAPG and her fellow members began when she worked for Amoco Oil Co in Stavanger, Norway, in the eighties. She became an active member in 1985 and since then her involvement with the organization has steadily increased from when she established the affiliated society NAPG (Norwegian Association of Petroleum Geologists) in the early nineties. She was president of the European Region from 2003 to 2005, secretary/editor in the House of Delegates (HOD) 2008/2009 and, presently, she is running as a candidate for the position of chair-elect in the HOD. In her opinion, the time spent contributing to AAPG activities is time well spent, as it gives her both personal and professional satisfaction.

Professionally, she has spent about the 15 first years as an explorationist in the North Sea working out of Stavanger and Oslo in Norway and London. The last 15 years she has worked in production and development departments out of Oslo and Hamburg, Germany. In recent years she was involved with reserves and resources reporting and actively involved herself in the discussions that took place with regard to the update of the SPE, AAPG, and WPC Guidelines to the reporting. She has been instrumental in making RWE Dea implement the rules of reserves reporting and adhere to the resource classifications as outlined in the guidelines. She is a member of UNECE Expert Group on Resource Classification (United Nation Economic Commission for Europe).

Integrity and perceptiveness are the main ingredients of Sigrunn's work and dealings, and coupled with a keen eye for what the objectives are, makes her an efficient and accomplished professional. Lately, she invest energy and time in mentoring young professionals and students, especially geologists, and more often than not, female geologists.

The award has recognized Sigrunn for her contribution to bringing professionals from diverse backgrounds to work harmoniously together. Great diversity in our working environments, as well as within AAPG, is a challenge of our times. Collecting, understanding, and make use of different ideas based on different backgrounds is part of Sigrunn's everyday life and one she takes seriously. It is both a challenge and a reward as she likes to work with people!

Sigrunn is Norwegian and has her master's degree in geology from the University of Oslo. She spent two summer seasons doing fieldwork at Svalbard (Spitsbergen) for her master's thesis on the sedimentology of the Triassic succession. Sigrunn is an outdoor person, and she enjoyed the time spent on Svalbard. She have been back there twice since; one on a weekend with friends, and one week skiing on glaciers and staying in a tent camp. On that occasion she learned to build an igloo that could easily accommodate 16 skiers! One of her main passions is traveling. She started early to travel to all parts of the world and still she spends all her free time searching for new adventures. She is an enthusiastic golfer and has played in many exotic places worldwide.

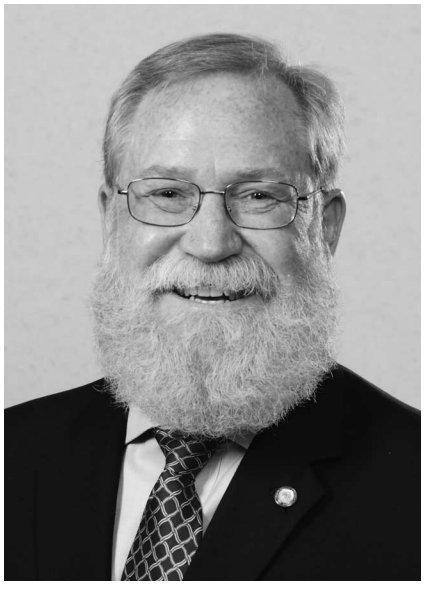
Her first job was with Amoco in Stavanger and in London, and later she worked with Deminex in Oslo. She now works with RWE Dea Norge in Oslo as senior staff geologist in the Production Department where she follows up fields that in which her company is a partner. Her company has a special focus on research and development (R&D), and as interaction between the oil companies and academia is one of her special interests she enjoys the role as her company's coordinator in R&D matters. She recently spent three years at RWE Dea's head office in Hamburg, Germany, from 2007 till 2010, where she worked in the Field Development Department with North Africa onshore, mainly Libya, where her company, as an operator, has had several discoveries in the Sirte Basin, which all are now in the development phase.

Sigrunn is a member of a local Norwegian association NGF (Norsk Geologisk Forening). As an AAPG member she has been a delegate to

the House of Delegates for several years; firstly representing Norway and presently representing the European Region. For her contribution and achievements she has received the Distinguished Member of the House Award and the House Recognition of Service Award.

This award is richly deserved and earned

John Brooks



WALTER C. RIESE
Distinguished Service Award

Citation—To Rusty Riese for his steadfast, compassionate, and thoughtful leadership, scientific generosity, and dedicated and enduring service to AAPG and his profession.

The Distinguished Service Award honors members who have distinguished themselves in singular and beneficial long-term service to AAPG, and Rusty Riese is certainly deserving of this recognition. While some would place the highest value on his service as AAPG curmudgeon and self-proclaimed Emperor of the Universe, others are more grateful for the breadth and depth of Rusty's scientific, professional, and leadership contributions.

Rusty joined AAPG in 1973, the same year he earned his B.S degree in geology from New Mexico Tech. He went on to earn M.S. and Ph.D. degrees in geology from the University of New Mexico. It was probably during those years that Rusty traded a thick Brooklyn accent for an enduring love of Hatch chili peppers.

Like most AAPG members, Rusty's career took him through a number of organizations and locations, beginning with oil and gas exploration for the New Mexico Bureau of Mines, uranium exploration for Gulf Minerals, and a variety of roles during 29 years at Anaconda, Arco, Vastar, and BP, from which he retired in 2010.

Rusty's AAPG career has been as diverse as his day jobs, beginning with committee work in the 1980s and 1990s to leadership roles in the 2000s that culminated in service to the Association as vice president-sections from 2008 to 2010. Along the way, Rusty made significant scientific contributions as Visiting Geologist, chairman of the Committee on Resource Evaluation (CORE), and winner of the Best Paper award in 1996 from the Energy Minerals Division (EMD) and the Frank Kottlowski Memorial Presentation award from EMD in 2006. In addition, Rusty has been a steady contributor to his local community through participation in the Houston Geological Society and as an adjunct professor at Rice University, where he continues to teach.

Rusty's service as vice president-sections involved the usual heavy load of service on the AAPG Executive Committee (EC), but Rusty's time as VP was distinguished by additional burdens: the tremendous interest in and activity of the Global Climate Change Committee and the proposals of a new corporate structure for AAPG. As EC liaison to the Global Climate Change Committee, Rusty skillfully balanced the scientific and political pressures as well as unprecedented volumes of e-mail. In a similarly diligent manner, Rusty assessed all aspects of the proposed organizational changes to AAPG and obtained legal opinions that helped guide the Association. He also took time to listen to and understand the concerns of the AAPG Sections about the proposed changes so that he could advise the EC and others in AAPG as required.

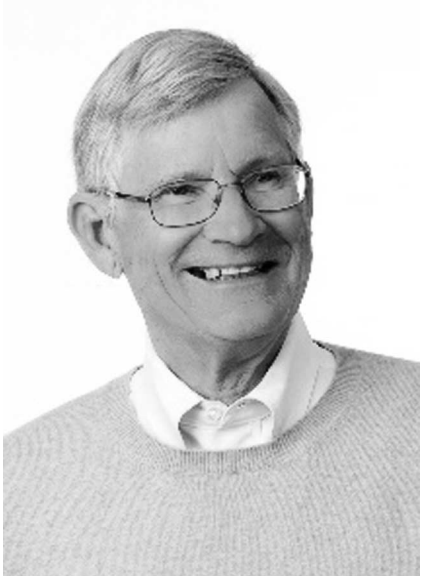
Rusty served as Master of Ceremonies for honors and awards at the 2010 Annual Convention and Exhibition in New Orleans. His duties included giving the Jules Braunstein Award to Nikki Hemmesch and her advisor, Nick Harris. Nikki Hemmesch died tragically while traveling before the announcement of this award, but her grieving parents were present in New Orleans to accept it. Rusty's compassionate nature made for a fitting and memorable tribute for the premature loss of Nikki Hemmesch.

As a member of the EC, Rusty provided a voice of reason in virtually all discussions. His thoughtful and intellectually rigorous approach ensured that decisions were considered from all angles, but only after 9 a.m. Rusty will never be accused of being an early bird.

Rusty has retired from his professional career, but it is clear that his dedicated service to AAPG

will continue through his election to the House of Delegates, his ongoing committee service, and his preparation for the role of Distinguished Ethics Lecturer in 2011. Rusty represents the rare combination of a first-class scientific mind, a generous volunteer spirit, and a true gentleman and friend.

Gretchen M. Gillis



LAWRENCE D. MECKEL
Grover E. Murray Memorial Distinguished Education Award

Citation—To Lawrence D. Meckel, inspirational leader, for outstanding achievements in education of students and professionals in integration and development of new exploration concepts for petroleum geologists derived from research in Sedimentary Geology, Geochemistry, Geophysics and Petroleum Engineering.

AAPG is a scientific and professional organization dedicated to advancing and transferring knowledge about the science of geology as it relates to mineral resources to benefit members and society. Supporting and advancing educational activities are important components of the Association's programs. This award recognizes distinguished contributions by individuals to geological education for the teaching and counseling of students at levels of knowledge at the university, in professional careers (continuing education) and for the general public.

To meet the growing demand for petroleum, post-World War II, major oil companies founded new laboratories to conduct research in sedimentary geology and gave support to advancing sedimentary geology programs by professors and students in universities. In addition, company needs were fulfilled by initiation of in-house training with graduate level courses designed to transfer new proprietary information to employees to gain and retain a competitive edge in exploration and production projects. For more than 40 years, Dr. Lawrence D. Meckel has been one of the most successful and influential teachers in these important industry activities, as well as giving lectures and courses for universities. His expertise and presentation style were recognized and applauded by all participants. After all, the fuel for exploration is new ideas, and Larry excelled in giving that fuel to active professionals and students.

Larry grew up in Baytown, Texas—a refining town along the Houston ship channel. His interest in geology began by collecting rocks especially while on numerous family summer vacations to the American West. By his senior year in high school, Larry decided he wanted to be a geologist, and attended Rice University where he completed a B.A. in geology in 1959, graduating with honors and membership in Phi Beta Kappa. He chose Johns Hopkins University for graduate studies where his Ph.D. thesis in geology was a study of the Pottsville Sedimentology, Central Appalachians, with completion of the degree in 1964 (minor in oceanography). As a graduate student, Larry spent three summers working for Shell in Houston, and as a field assistant in the Arkoma Basin and Utah, that led to employment by them after graduation. He married a fellow graduate student, Barbara Toan, a native of Billings, Montana, who graduated in geology at Bryn Mawr and completed a master's degree at John Hopkins University. She has not only been constantly supportive of Larry's activities but also makes important contributions as a co-worker and advisor on all technical and business matters—a partner for life. They have four sons, all high-performing professionals.

Larry' professional career has provided him the opportunity to work in almost every basin in North America and several on other continents. With Shell, he started as research geologist in 1964 and was later manager of Geologic Research, Shell Development Company, Houston, in charge of all of Shell's geological, geochemical, and seismic stratigraphy research. For four years he had assignments as staff geologist for Shell Oil Company. For seven years he was partner and vice president of Sneider and Meckel Associates, an oil and gas consulting company (1974–1981), before forming L. D. Meckel and Company (president, 1981–present). For the past six years, Larry has been an adjunct professor at Colorado School of Mines teaching graduate

level courses in advanced petroleum geology, recent sand models, unconventional petroleum systems, and geology and seismic signatures of reservoir systems. In addition, he has served on thesis committees in the Geology and Geophysics departments and offered continuing education courses.

Larry is a member of AAPG, Society of Exploration Geophysicists, Society of Economic Paleontologists and Mineralogists, Rocky Mountain Association of Geologists, and the Mexican Geological Society and has published over a dozen papers and authored over 60 in-house studies and reports on various basins, stratigraphic units and play opportunities.

Larry started teaching his first year out of graduate school in various training classes conducted by Shell Development for Shell Oil Company. These were usually individual lectures or specific field trip stops. When transferred to Shell Oil Company he was part of the AAPG Visiting Petroleum Geologist program and gave lectures at many universities in the West and Midwest. However, it wasn't until he became a consultant (1974) that he really became involved in giving complete exploration courses and field seminars (individually and as a co-instructor) for the industry.

Over the span of his career, prospect generation for a number of companies has led to discovery of more than a dozen fields in Texas, Oklahoma, Alabama, Alberta, British Columbian and Tamaulipas (Mexico) including the giant Elmsworth Field in Canada and the large Bonne Terre Field in South Texas. His success and extensive subsurface experience allowed Larry to put the course subject matter into a practical and useful context. This background placed a demand on his time to teach in-house courses and seminars for over 40 domestic and international companies, as well as serving as a lecturer in a number of AAPG, SEG, and HGS schools, at universities, and for several open enrollment courses. He has given 15 different in-house exploration courses (some many times), and 12 different modern and ancient field seminars. The length of time for each of these activities is generally three to six days. Course content is diverse and covers petroleum systems in both clastic and carbonate reservoirs and the new technology being used in the discovery and development of fields. For 11 years, he did monthly training and advisory work to Pemex on a variety of exploration programs and on identification of new drilling locations from seismic in Mexico. His educational interests continue to grow as Larry is now preparing an introductory course on natural hazards requested by the University of Denver Adult Continuing Education Program; the content is volcanoes, earthquakes, and impact craters. Currently, his most popular courses are on the new unconventional oil and gas petroleum systems.

As with many successful scientists, Larry recognizes the important role of mentors throughout his career—from undergraduate days to current teaching at the Colorado School of Mines. The list is too long for complete acknowledgements, but he particularly is grateful to a Shell colleague, Bob Sneider (Sidney Powers Medalist, 2001). Bob took Larry under wing during those first months at Shell Development Company. In 1974, they left Shell and formed Sneider and Meckel Associates, Inc. A significant part of their business became preparing courses for the oil and gas industry, which were designed to address problems the subsurface geologist had to solve. These field seminars and classroom courses became and still are the strong foundation to over 40 years of industry training, although the courses have changed to integrate new advances in geology.

AAPG honors and thanks Dr. Meckel for his dedication to educational excellence and for enhancing the professional careers of members, students and others.

Robert J. Weimer

Response

I am indeed honored and pleased to receive the Grover E. Murray Memorial Distinguished Educator Award. I sincerely thank the American Association of Petroleum Geologists for this honor. And I especially thank the Awards Committee and my friends and colleagues here in Denver and elsewhere who nominated me.

I also thank my longtime colleague and friend, Bob Weimer, for his generous citation and biography.

We are all indebted to colleagues and mentors who have shared insights and influenced who we are and our career. I have been blessed with many—from my early undergraduate school days to my present position at the Colorado School of Mines. An honor such as this provides a good opportunity to pause and reflect on, and thank those people: colleagues, mentors, and organizations. In keeping with the nature of this award, I would like to honor those that have been

very influential in the teaching part of my career. This award is also a tribute to them.

In 1959 the Woodrow Wilson Foundation provided me a scholarship for my first year of graduate study at Johns Hopkins University. The scholarship was for students who expressed an interest in teaching at the university level. Coming from a modest family in Baytown, Texas—a refinery town along the Houston ship channel—this was an important financial help. Their investment finally paid off; in 2004 I joined the faculty at the Colorado School of Mines as an adjunct professor. The NSF awarded me another three years of graduate school fellowships. I truly thank both organizations for their early encouragement and that financial aid.

Francis Pettijohn was an instructor and my thesis advisor at Johns Hopkins. He had a unique way of teaching. He asked lots of questions. Some were as simple as "Curious?" and then walk off and leave the students huddled around the outcrop to wonder why it was curious. I look at my own teaching habits and realize I too ask a lot of questions of the students or participants. Like Francis, I don't always expect answers, but I hope the questions will prompt them to think.

My first job after graduate school was on the Recent Clastics Research Project at Shell Development in Houston. The objective was to develop criteria for the recognition of depositional environments for the many reservoir sands we explore for. Rufus LeBlanc and Barney Bernard—two lovable Cajuns—taught me the value of modern sands in interpreting those in the subsurface. They took me on many field trips and invited me to lecture in Shell's training programs. Since becoming a consultant in 1974, I have conducted over a hundred field trips to look at a wide variety of modern depositional environments: Texas Gulf Coast, Louisiana Gulf Coast and Mississippi Delta, Santa Clara River Delta in southern California, the Salton Basin, Colorado River Delta in Baja California, and Tabasco coastal plain in southern Mexico. I am simply passing on their love and respect for the importance of the Recent to others.

My colleague and business partner, Bob Sneider, and I decided to teach industry courses in 1974 as part of our new consulting company. Together we assembled a number of courses—both classroom and field trips—to provide the industry. Bob insisted that whatever we presented had to stand up to one single question: "So what?" Those courses were the real start of my active teaching, were entirely for industry professionals, and are still a significant part of my courses today. Bob also taught me not to be afraid of carbonates. Yes, they were different and more difficult to predict, but were also rather logical. We added carbonate courses to our selection.

I would also like to acknowledge one other Shell colleague who has shared many insights into the problems we address in exploration. John T. Smith has advised me on various difficult questions relating to geochemisty, seismic, and reservoir engineering that were outside my field of expertise. I have always incorporated many of his insights and logic into my courses.

My wife, Barbara, who before marriage taught at a private girls' high school in Virginia, has shared many of her useful insights into teaching. One of her guiding principles was "be elegant and keep it to the point." I have tried to incorporate these excellent guidelines into all my courses and lectures. She also helps me on the preparation of many of my courses. Thank you Barbara for all your help.

To each of the above mentioned, and to all of my colleagues and students who have shared with me their observations and insights into geology and exploration, I am truly grateful.

The importance of good rock information—outcrops, cores, cuttings—was impressed on me during my Shell career. I learned that the answers to many of our difficult questions are in the rocks. Today I still emphasize the value of looking at the rocks into all my courses, whether they be field trips or classroom courses. And it is clear to me that the description of the rocks is not sufficient by itself. It is also critical that the rock information be tied to our three main exploration databases: logs, seismic, and test results.

I met Barbara at Johns Hopkins where we were both enrolled in geology graduate school. After our marriage in 1964, Barbara gave up a promising career as a teacher and moved to Houston so that I could follow my career. Jobs for women geologist in the mid-60s were very scarce. So family became her career—namely successfully raising four active boys. Two are geologists (Trey and Tip), one is a veterinarian (Bret), and one is an architect (Kit). We are both very proud of their accomplishments and their families.

Once the kids were all in their schools, Barbara rejoined geology as a colleague to meet a critical deadline on a Texas offshore project. Since then she has been a

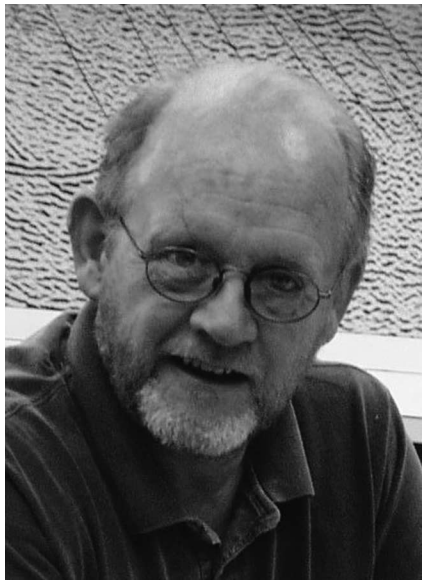
coworker on many projects. She is also an invaluable advisor on all technical and business matters.

One also reflects on where one's interest in geology really began. After World War II, my family would take annual vacations to the American West, to the main national parks. Coming from a home on the Pleistocene 12 feet above sea level, I was fascinated with the mountains and canyons on those many trips. Every year our car was loaded to the axles with rocks collected on those trips. The collection became huge—initially the color was all important, then their identification became critical. That interest in rocks and minerals directed me into geology as an undergraduate at Rice University.

Growing up in Baytown, one constantly lived with the odors of the Humble refinery; they become part of your life. Dad worked there as a process operator and subscribed to the *Oil and Gas Journal*, which I faithfully read each month. I didn't really understand most of what I read, but it was always fascinating anyway. These early experiences combined with three wonderful summers jobs at Shell (two as field assistants in Oklahoma and Utah) sent me into the oil business, initially with Shell Development and Shell Oil companies. I thank Shell for the many challenging assignments they provided me as a researcher, explorationist, and manager during that 10-year period.

I am indeed grateful to the AAPG for this honor and this opportunity to acknowledge the importance of students, colleagues and mentors who have shaped my teaching career.

Lawrence D. Meckel



RONALD J. STEEL
Grover E. Murray Memorial Distinguished Educator Award

Citation—To Ronald J. Steel for being such an enthusiastic and inspiring teacher, supervisor, colleague and mentor for a whole generation of sedimentologists. Through his unique personal skills combined with scientific curiosity and endurance, his impact on teaching and research has been immense.

Ronald (Ron) Steel received his Ph.D. degree in geology at the University of Glasgow. He was lecturer and then reader in sedimentology at the University of Bergen, Norway, for over nine years before moving to the petroleum industry. At Norsk Hydro (now Statoil) in Bergen and in Oslo for the next eight years he was head sedimentologist, manager of geological research and then chief geologist in exploration. He returned to the University of Bergen in 1990 as professor of reservoir geology, before becoming the Wold Professor of Energy at the University of Wyoming in 1995. He taught field courses in the European Arctic as an adjunct professor at the University Center in Svalbard (UNIS) 1995–2004. He is presently full professor holding the Davis Centennial Chair at the University of Texas at Austin (since 2003) and is an adjunct professor and Sixth-Century Chair of Sedimentary Geology at the University of Aberdeen, Scotland (since 2006). He has held Distinguished and Endowed Lectureships for AAPG, Japan Society for Promotion of Science, and University of Texas at Austin. He is associate editor of Marine and Petroleum Geology and member of evaluation panel for Norwegian Research Council, and was SEPM Councilor for Sedimentology and convenor for IAS and SEPM conferences. At UT Austin he is chairman of the Jackson School Appointments Committee.

Having studied under Ron Steel at University of Bergen, worked alongside him at Norsk Hydro's Bergen Research Center, and later collaborated with him when he resided in Laramie and Austin, I have come to know him very well, both personally and professionally.

Through his teaching and research in clastic sedimentology at the University of Bergen, Ron has supervised, influenced, and inspired a whole generation of Norwegian geologists. His studies of the Devonian Hornelen Basin, western Norway, and the sedimentary successions in Spitsbergen during his years in Bergen are particularly noteworthy, in terms of both publications and the large number of students that accomplished their master theses through these research projects.

The Norwegian oil industry has benefited enormously from Ron's work: firstly through his work as administrator and researcher for Norsk Hydro, and secondly through

the recruitment of his students, many of whom have reached central positions in administration, research, exploration, and production. His inspiring lectures, his meticulous research, and his extraordinary administrative and personal skills have secured him many devoted friends and a unique position in Norwegian geology. After moving to the United States, he has maintained his impressive level of activity with a large number of students and high scientific production, while also keeping his link to Norway through continued research in Spitsbergen. In the summer of 2009, previous students organized a field trip to some classical localities in Svalbard in honor of their much-admired supervisor and mentor; 20 former graduate students had gathered for this eventful week, with the Grand Master himself being as vigorous as ever in discussing the origin of the sedimentary rocks under the steep Arctic cliffs.

Ron's research interests range from clastic sedimentology and sequence stratigraphy to basin analysis, tectonic control on sedimentation, and reservoir geology. His innumerable papers are based on field data from many parts of the world, most notably from the Permian and Triassic of northwestern Scotland, the Devonian of western Norway, the Carboniferous, Cretaceous and Tertiary of Svalbard, the Triassic and Jurassic reservoirs in the Norwegian and British sectors of the North Sea, the Tertiary of the Pyrenean foreland, the Late Cretaceous Western Interior sediments in Wyoming and Utah, and the Eastern Maracaico Foreland Basin of western Venezuela. The topics he investigated during his long career include the origin of caliche (his first paper, published in *Nature* in 1971); reservoir characterization and interpretation; rift sedimentation; tectonic signatures in sedimentary successions; transgressive sedimentation; alluvial-fan, fluvial, tidal/deltaic shallow-marine and deep-water turbiditic systems; shoreline autoretreat and autostratigraphy; clinoforms and transfer of sediment form shallow to deep water; shelf-margin deltas and hyperpycnal flows. He currently has research programs with postgraduate students and postdoctoral researchers dealing with accreting shelf margins and turbidite generation (Spitsbergen, Porcupine, Orinoco and Fox Hills-Lewis shelves), relationships between tidal range/currents and changing sea level, and the linkage between highstand and lowstand sediment bodies in the Cretaceous Western Interior Seaway. He has some 150 scientific publications in international journals and has edited 7 books; 65 master students have graduated under his supervision; and he also has supervised 30 Ph.D. students and many post-doctoral research fellows.

His academic achievements aside, my lasting impression of Ron is of a friendly enthusiast who, no matter how busy his schedule might be, always has had the time to listen and exchange ideas about geology with those seeking his wise opinion and advice. In conversations he would never focus on himself, considering research and the work of his students far more important than his personal merits. His curiosity and open-mindedness have pulled him constantly towards new directions in his research; he is constantly on the move, never stuck with old concepts and always ready to discuss alternative views. As a teacher, he has always been able to inspire his students by bringing in his own current research and the work of others in the lectures, in this way igniting the research flame in the minds of young students looking for directions in their professional careers. With his gentle and inclusive attitude towards students, he manages successfully to create an atmosphere of comradeship, assurance, and mutual respect both in the classroom and in the field. No question could possibly be "stupid" to Ron, as he always receives his students respectfully, responds constructively and positively, and seeks the best in them. He enjoys spending time with his students and offering them professional guidance, particularly in the field.

Nobody deserves the Grover E. Murray Memorial Distinguished Educator Award more than Ron Steel, as he has meant so much to so many students worldwide.

William Helland-Hansen

Response

I'm honored to have been proposed as AAPG Distinguished Educator, and it was with great pleasure that I received word of this. My thanks go primarily to my former graduate students at the University of Bergen in Norway, at the University of Wyoming, Laramie and at the University of Texas in Austin who have continually inspired me in both teaching and research. I also thank my former student and biographer William Helland-Hansen for his kind words in the citation. My teaching career at five universities

(including a short period at the University of Manchester, UK and a current joint appointment at the University of Aberdeen, UK) has allowed me an unusual perspective on university systems and graduate students in three different countries. This has spanned a 38-year period and has involved some 95 graduate students and 11 post-doctoral fellows.

During my "Norwegian" period (1973–95) I helped prepare graduate students for careers aimed at the newly discovered oil and gas resources on the Norwegian Continental Shelf. My arrival in Norway happened to coincide with a government decision that University of Bergen would be one of the choice sites for the education of geologists and geophysicists that would be needed for the new offshore Norway exploration activities. After a short period as a post-doctoral fellow I became engaged in teaching sedimentology, basin analysis and petroleum geology as a lecturer. One of my greatest pleasures in Norway in this first nine-year period was the supervision of graduate students in their research activity in the Devonian basins of western Norway, in Carboniferous to Paleogene sedimentology studies on Svalbard and in Mesozoic subsurface studies of the northern North Sea, the mid-Norway shelf, and the Barents Shelf. Post-doctoral fellows Karen Kleinspehn and Tihi Marjanac were important to the sedimentologic and stratigraphic work on Svalbard and the North Sea respectively. These field and subsurface adventures eventually led to me leaving the University of Bergen and spending the next nine years as a geologist in the oil and gas division of Norsk Hydro, as I saw that the main subsurface database could be optimally accessed only from within a company. During my nine years in the oil and gas industry in Norway, my graduate-student contact was greatly reduced, but I learned a great deal about the development of the Norwegian continental shelf. In 1990 I returned to the University of Bergen as professor of reservoir geology, and renewed my contact with education and graduate students. In this second period at the University of Bergen (five years), especially through the activities of the Norwegian Companies/OilDirectorate "Safari Project" (an outcrop analogs project for Norwegian shelf reservoirs) who financed my new graduate students, and through post-doctoral fellows such as Ole Martinsen and Donatella Mellere who initiated Bergen-based sedimentology research in the Rocky Mountain region of Wyoming, I moved a significant part of my research activity to the Cretaceous Western Interior Basin in Wyoming, Colorado, and Utah.

I was kindly encouraged to move to the University of Wyoming by Randi and Jim Steidtmann, and as Wold Professor of Energy in the Geology Department I began my "Wyoming period". My interest in the Cretaceous Western Interior seaway was developed further, and a new student group that worked on Cretaceous depositional systems was grown. At this time, Randi Martinsen, Lee Krystinik, Ole Martinsen, and myself (with help from the State of Wyoming, Norsk Hydro, Union Pacific Resources and Slumberger) developed a University of Wyoming behind-the-outcrop drilling project to provide a world-class core and well-log data sets from the Campanian Almond, Ericson, Rock Springs and Blair formations on the Rock Springs Uplift. This was to provide research material and a great reservoir teaching data set at the University of Wyoming. Italian and Norwegian post-doctoral fellows Antonio Cattaneo and Lars Seidler joined me at this time, working teapot sandstone and muddy sandstone in Wyoming. Ironically, another project developed at this time at the University of Wyoming was the characterization of shelf-to-deepwater clinoforms in an Eocene foreland basin in the Norwegian-governed islands of Svalbard. Many Wyoming students and post-doctoral fellow Jeff Crabaugh were key players in this Arctic work that provided classic seismic-scale outcrop examples of Exxonian lowstand shelf-edge, slope and basin-floor fan deposits. This deepwater project, by the time it finished in 2006, capped some 30 summers of arctic research with graduate students on Svalbard. Another research theme pursued at this time was "autogenic stratigraphic responses" using data collected from the Svalbard project, through the driving influence of my longtime colleague Tetsuji Muto of Nagasaki University. This work took on greater proportions later in Texas. I greatly enjoyed the work with colleagues and students at the University of Wyoming during these eight years, and became entranced by the Rocky Mountain region.

It was time to move on, and I accepted the Davis Chair in Petroleum Geology at the University of Texas at Austin in 2003, joining a school with great historic strength in Sedimentary Geology. A small group of graduate students and post-doctoral fellow Shuji Yoshida

moved to Austin with me. For the last seven years I have taught in the Jackson School of Geosciences, but have continued to bring UT graduate student classes 2–3 times a year to Wyoming or Colorado. Graduate student projects in Spitsbergen and in the Rocky Mountains have continued, as well as new projects on the architecture of tidal bars and shelf margins (South African Karoo and the Orinoco shelf in Trinidad and Venezuela). A greatly expanded Jackson School of Geosciences (Geology Department, Bureau of Economic Geology, and Institute for Geophysics) in the last few years is a student-focused, friendly, and technically diverse environment with continuing emphasis on field geology training and field-based research. I am happy to contribute to this. I was awarded a Sixth-Century Chair at the University of Aberdeen in 2006, on the occasion of the University's 600th Anniversary. This enabled me to renew contact with Scottish geology, and to enjoy part-time teaching and co-supervision of student research there.

Thanks again to students, post-docs, and other "enablers" who have made my educational ventures so enjoyable.

Ron Steel

ANTHONY DORÉ
Special Award

Citation—To Tony Doré, for an outstanding career simply doing what he loves most.

Despite the commonly held perception that British society is class-ridden with a nuanced hierarchy of medieval titles and medals, Brits generally don't like fuss and attention. "Good show, Carruthers, keep up the good work! " is as much praise as one can reasonably expect in a lifetime, so I am sure that no one was more embarrassed or amazed than Tony Doré when told that he was going to receive the 2011 Special Award for simply pursuing his life's passions. The thing is that his driving passions have had enormous impact on his company, his profession, his science, and his colleagues, and it is my pleasure to make him squirm a little by recounting some of those achievements.

Tony took his Ph.D. in the marine geology of the northeast Celtic Sea from University College London in 1977 and cut his industry teeth with Britoil as an exploration geologist. After three years he moved to Conoco where he rapidly rose through technical and managerial positions including chief geologist in Norway and chief geoscientist for advance exploration in Houston. In 1994, Tony joined Statoil in the UK returning to technical work with acreage evaluations in the North Sea and West of Shetlands. His exploration talents ensured that his geographical empire expanded from the UK to Western Europe, to International and, following the merger between Statoil and Norsk Hydro, to his current position as vice president for North American New Ventures.

Exploration passion and the thrill of the deal combine to make Tony a consummate finder of oil in the ground and in other people's portfolios; it is fair to say that much of Statoil's present positions and discoveries in the GoM, Brazil, Alaska, and Canada follow from his professional judgment in where to drill and what to buy into. Throughout his career with Statoil, Tony has been an enlightened senior manager who has influenced his organization to embrace new geological play concepts and new technology to explore and exploit them. It is not a coincidence that Statoil has emerged as one of the fastest adopters of new technology and competes actively on the global stage. This is due in large part to the recognition that open interaction with science and technology outside the company provides challenge and stimulation for new concepts in exploration and access. Tony is one of the architects of this way of thinking that stems from his attitude to his science, exemplified in his own professional life.

Instead of abandoning science after entering industry, Tony has continually pushed back the frontiers

with some 50 peer-reviewed publications including several seminal works on the opening of the North Atlantic Ocean and the structure and petroleum geology of the northwest European Atlantic margin. This is a complex magmatic margin exhibiting tectonics, subsidence, intrusive, and extrusive volcanics, along-strike segmentation and compression/inversion but the proven existence of petroleum systems in the nonbasalt-covered areas makes the region's geo-political stability a tempting counter to its icy, stormy waters. Tony's published tectonic-palaeogeographic syntheses of the North Atlantic-Arctic region present a wealth of ideas, forming a much-cited basis for exploration and academic research. Statoil remains the leading explorer in this challenging frontier province, achieving the first offshore penetration of the basalt sequence and a second well planned for 2011, in addition to the successful joint discovery of Rosebank in conjunction with Chevron.

I first met Tony when we both sat on the UK's Natural Environment Research Council's Management Committee for the joint industry-academic Ocean Margins research program. We were part of the team trying to decide how to get the best research and training bang for the buck out of the program budget and ended up having a great deal of fun together. I then kept coming across Tony on various bodies such as the UK industry liaison panel for the Integrated Ocean Drilling Program, the Earth Sciences Advisory Board at Durham University (where he is also honorary professor of petroleum geoscience and a director of the Centre for Research into Earth Energy Systems), and the editorial team of the journal *Petroleum Geoscience*. Either the UK is a geoscientific microcosm or Tony manages to be everywhere at all times, popping up at just the right moment like an exchange meson for the force that binds industry and academic research. How Tony finds the time for these extra-curricular activities and to hold down a demanding management role in Statoil is beyond comprehension but it testifies to his drive to promote a single community of earth scientists undivided by academic or industrial affiliation. I am sure that Statoil sees benefit in supporting these activities through the exchange of innovative ideas across the corporate boundary and the opportunity to enhance the development and career prospects of young geoscientists.

Tony's impact on colleagues can be seen through his active contributions to the AAPG, the Norwegian Petroleum Society and the Petroleum Group of the Geological Society of London, where he has been one of the drivers behind the great expansion of the group from 1997 onwards. He has edited the output of several conferences including the monumental proceedings of the 6th Petroleum Geology Conference of Northwest Europe in collaboration with Bernie Vining of ExxonMobil. His dynamism resulted in the award of the GSL Petroleum Group Silver Medal in 2007, a fitting recognition for his outstanding contributions. And, lest I forget, he was also recognized by the decidedly non-medieval current British monarch with the award of Officer of the Order of the British Empire in the Queen's 2010 Birthday Honours List.

Whether it is geology or playing music (a whole new story) Tony's passion shines through his energy and commitment—a truly exemplary act that stands out because it is so difficult to follow. It is a personal pleasure both to have nominated him for this prestigious award and to have the privilege of writing this citation.

Phil Christie

Response

Phil Christie's got it dead right. I really do get uncomfortable with accolades. Other people hide behind the sofa during horror films; I hide during the Oscars. In the past I've often been skeptical about geology awards. Geology is a science not a beauty contest, right? Of course, my perspective changed overnight when I actually got one. I discovered that, like everyone else, I really do have an ego after all: quite a large one, actually. So there is no way to disguise the unmitigated and shameless pleasure I felt when I heard I was to receive the 2011 AAPG Special Award.

As well as being uncomfortable with praise, we Brits have a saying that I am sure exists in various forms throughout the world: "You wait hours and hours for a bus, then two come at once". So this year receiving a gong from the Royal Family (see Phil's testimonial), and being honored by AAPG, the largest and most prestigious petroleum geology organization in the world, certainly fits that pattern. The fact that two of us from Statoil are receiving AAPG honors this year (see Ole Martinsen's Outstanding Research Award) provides further support to the old adage, and speaks well of some enlightened Statoil executives who

understand that encouraging scientific contributions outside the corporation can be a major motivating influence. Add in the tumultuous events in North American petroleum exploration, and some radical career direction changes for me, and this really has been quite a surreal year.

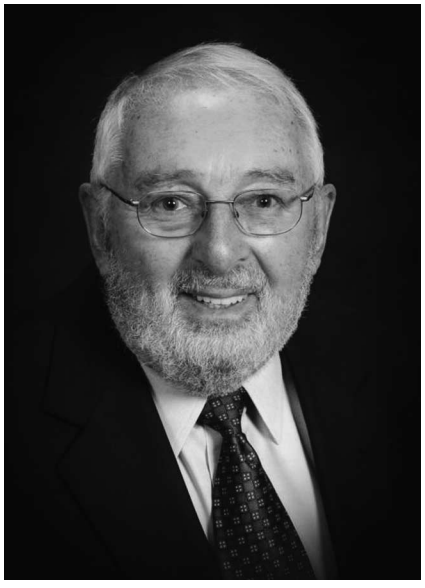
I gave some thought to Phil's strap line about "doing what I love most". It didn't take me long to realize that, uncannily, he's got me fair and square again. It's true. I've been able to put bread on the table by doing something I really love, and I count myself lucky. Back in the Early Holocene, after some hiking trips to north Derbyshire on which I picked up some minerals and fossils, I earnestly informed my mum and dad that I was a geologist. I was 8. I am eternally thankful that, instead of saying "Shut up and watch TV", they rushed out to buy me some books. I've been a geologist from that day, despite my myopic headmaster who informed me that kids like me shouldn't set their sights so high. I haven't really wavered, except perhaps in the late seventies when, struggling with a difficult Ph.D., I was half convinced I wanted to ditch it all and go on the road as a musician. Luckily my wife Barbara (36 years together and still going strong) put it simply for me; "Either finish that thesis *now*, or move on and be happy about it!" I chose to go for broke on the geology and keep music as the icing on the cake, a decision I have never regretted.

Some other pivotal career moments spring to mind. One was in 1994, when I joined Statoil. In my earlier Conoco life, I had built a scientific reputation on basin modeling, stratigraphic correlation and northwest European paleogeography. Statoil, however, had something much bigger in mind and gave me free rein to pull together the whole tectonic evolution of the NE Atlantic as a basis for their ambitious acreage acquisition policy. To me, that was the geological equivalent of being a kid left alone in a candy store. It allowed me to further develop ideas on ocean margin structure, basement reactivation, passive margin compression, volcanic margins, exhumed petroleum systems and frontier source rocks. Even through progress up the managerial ladder, I've managed to keep those themes going to this day. It hasn't been easy—I don't write papers in work time—but has been made possible by a very tolerant and supportive wife, and not least by my long-term conspirator Erik Lundin. Erik, "ideas-man" *extraordinaire,* worked with me on most of the above themes. Even when I've been at my most snowed-under by business, Erik has always been there keeping the geology alive. It's easily been the most productive collaboration of my career, and I'm thrilled that Erik still allows me into his magical geological world.

Phil mentions "the thrill of the deal" and yes, I have to say that despite all my expectations to the contrary, deal-making provides an adrenaline rush that's almost up there on a par with new geological ideas. One of the biggest thrills, for me, was doing the two deals that brought Statoil back into the Gulf of Mexico. When my boss at the time, Bill Maloney, told me he wanted me to lead re-entry into the Gulf I wondered if I was hearing him right. After all, the corporation had only exited the area a few years previously. But we managed to build a strategy, get company backing and pull it off just in time to get back on the discovery train. I would never claim that Statoil's current major presence in North America is down to me, but I can say with some confidence that my team helped lay the basis for it. So to Bill, my inspirational co-workers Helen Butcher, Berit Tvedt, and many others whose creativity and energy made those and many subsequent deals happen—I salute you. We've found a lot of oil together!

It's traditional in these responses to thank one's family, and since mine are a most delightful bunch I'm not going to miss this opportunity. So—grateful thanks to my wife Barbara (who runs a patient advocate group), my son Michael (a post-doc mathematician), my daughter Jenny (a graphic designer) and not least mum and dad who started me down this "rocky" road. Without your support, encouragement, lack of pretension and off-the-wall sense of humor none of this would be possible. If I've managed to reciprocate, I'm glad. And AAPG—I can't thank you enough for the Special Award. Living in the company of the Brothers Schlumberger, Nikolai Lopatin, and the first geologist on the moon is going to be tough, but I'll give it my best shot.

Anthony Doré



MYRON K. HORN
Special Award

Citation—To Myron (Mike) Horn for his invaluable contributions to AAPG and its publications and data, in particular the development of massive digital databases/atlases for Datapages.

Myron (Mike) Horn was born in Miami, Florida, in 1930, but he spent his formative years in Kew Gardens, New York, and on the coast of Maine. He attended Forest Hills High School, where his early interest in science was centered on astronomy, due in no small part to spending a great deal of time at the Hayden Planetarium in New York City. After graduating from high school, Mike worked a brief time as an advertising apprentice on Madison Avenue, where he spent his free time at the New York Library on Fifth Avenue. He became seriously interested in geology in the stacks of that library, which contained a fine geological section. In March, 1948, he left New York for the University of Colorado in Boulder, where he received a B.S. degree in 1952. He then worked for a brief time in the United States Navy Hydrographic Office in Suitland, Maryland, before accepting an appointment to the Navy OCS program in Newport, Rhode Island. Upon receiving his commission, he was assigned to the *USS Sheldrake* (AGS-19), an oceanographic survey ship. During his tour on the *Sheldrake*, he met and worked with several oceanographers from Woods Hole and Lamont, including Maurice Ewing. Also, in 1954, during his tour, he became a member of the AAPG.

After leaving the Navy, Mike with his wife, Barbara, headed for Houston, Texas, where he obtained employment at the Halliburton Well Logging Research lab. He attended the University of Houston at night obtaining a M.S. degree in 1958. With the encouragement of Halliburton, he entered the Ph.D. program at Rice; however, he left Houston before the dissertation was written in order to accept a position as research geophysicist in 1960 with the Pure Oil Company Research lab in Crystal Lake, Illinois. Pure Research at that time was at the forefront of computerizing well log interpretation. Mike developed the first comprehensive computer system for log analysis (COMLOG), prepared and taught an internal school in formation evaluation, and conducted experiments in neutron activation, as well as regional geophysical studies. When Pure merged with Union Oil, Mike accepted an appointment with Cities Service Research as research geophysicist in Tulsa, in 1964. He received a Ph.D. degree from Rice that same year, upon completion of his dissertation on computer-oriented geochemical modeling. From 1964 to 1970, he moved through several management positions at Cities Research before becoming director of Exploration and Production Research. During this period, he introduced Maurice Ewing to the Doherty (Cities Service founder) Charitable Foundation, resulting in Lamont becoming Lamont-Doherty. His Cities' staff involved in exploration conducted a wide range of research, which included seismology, stratigraphy, geochemistry, geostatistics, remote sensing, global tectonics, sedimentology, and petrology. His liberal policy in regard to publication, professional involvement, and attendance at technical meetings not only served Cities' recruitment well, but also the profession and AAPG, in particular. Dr. Horn was director until 1984, when Cities was merged with Occidental Petroleum. Mike then became director of Operations, Applied Research and Technology, and later as assistant to the vice president, Mid-Continent Region, he continued his drive for application of technology in operations. In 1985 he retired from Occidental to begin his career as a consultant.

More importantly, during this period, 1970–1985, Mike took an active interest in the AAPG, serving on several committees and projects, including chairing the Research Committee and co-chairing the Geothermal Survey of North America. He served as AAPG editor from 1979 to 1983. Further he encouraged his staff at Cities to present and publish results of their research, and correspondingly they made significant contributions in a wide range of disciplines. During his tenure as editor, AAPG published more pages than at any other comparable time; the publications included the innovative/creative

Atlas of Seismic Expression of Structural Styles and *Atlas of Seismic Stratigraphy* and the classic volumes, *Sandstone Depositional Environments* and *Carbonate Depositional Environments*. Dr. Horn received the Distinguished Service Award in 1986, the Certificate of Merit in 1993, and Honorary Membership in 1997. More recently he has served as a member of the editorial board of Search and Discovery.

Dr. Horn, during different times in his career, was responsible for Oil and Gas Review in *Geotimes* (now *Earth*) and served on the Science Executive Advisory Committee for the NSF Ocean Margin Drilling Program, U.S. Scientific Advisory Committee for JOIDES, and the ad hoc NSF committee for advice on the initiation of ODP as a continuance to DSDP.

During his consultancy/retirement, Mike has prepared research reports on a number of subjects, including burial history, source rocks, basin history, giant fields, and stratigraphic traps, and conducted workshops on fractured reservoirs, habitat of hydrocarbons on continental margins, computer applications, and geologic aspects of horizontal wells. He taught short courses for both AAPG and private companies on topics ranging from natural fracture systems to giant fields. Mike has worked tirelessly as a volunteer with the AAPG on several important projects, centered on the digitization of geologic systems, including global databases of burial histories, source rocks, and giant fields. The burial history analyses are linked with paleo-stress and fracture production. His most recent project, in conjunction with Peter Wigley of the UK, has been the location spatially and cataloging of over 6,100 published seismic images, to date, for enhanced publication in GIS and Google Earth systems. This task alone has involved several thousand hours of Mike's time, utilizing his ingenuity, innovation, and intellectual insight.

This Special Award, so richly deserved, is awarded to Dr. Horn within the context of his invaluable, long-term service to AAPG and for his many contributions to the profession. In particular, it is in recognition of his unparalleled work, as a volunteer, on behalf of AAPG/Datapages in the design, development, and implementation of its various digital products and services.

John W. Shelton

Response

Thank you for the Special Award, I am most appreciative. I have enjoyed my association with the AAPG for the last 57 years; ever since John Chronic of the University of Colorado submitted my application for membership in 1954 while I was serving in the Navy.

Looking back, the thread tying together most of my career was, and continues to be, the computer. Prior to 1960, during the early days in Houston, technical computer applications played a relatively minor role. But a major change occurred in the early sixties. Pure Oil Research in Crystal Lake, Illinois was developing computerized mapping, seismic, and well logging systems concurrent with the industry shift from analog to digital. I was involved in developing a computerized log interpretation system, and published these results in the early 1960s. In fact, my Ph.D. dissertation at Rice utilized iterative and optimization techniques developed for well log analysis, but applied to geochemical modeling.

The interaction with computers continued for me into the 1970s, especially while serving as AAPG Research Committee Chairman, when we published the AAPG Geothermal Map of North America. The computers at the Cities Service lab were used for this study. Because of this project, a strong link was developed with the AAPG's digital efforts, including serving on the primal AAPG Committee on Electronic Data Processing (1969-1970). Other computer-related projects followed, including Memoir 78, *Giant Oil and Gas Fields of the Decade 1990–1999*, with its CD-ROM of giants field rankings and associated data (we are now working on revision 13); and the current compilation and map-positioning of over 6,100 seismic images derived from AAPG digital publications.

I especially enjoyed the relationship during the years at Cities Service. Building a successful exploration and production research program at Cities remains a highlight, thanks to the excellent staff, which included Drs. Kenneth F. Wantland, Lyle Baie, Roger M. Slatt, Peter Scholle, Bob Loucks, Arthur Saller, Roderick W. Tillman, Kenneth P. Helmold, Bill Almon, and Mark Longman.

After retiring from Cities Service/Occidental in 1985, our family's decision to remain in Tulsa was in no small part related to the continued association with Headquarters personnel and projects. John Shelton has been an especially good friend and provided excellent encouragement and ideas during the last 40 years.

My wife Barbara of 55 years, my son Dr. Marc Horn of BP, and my daughters, Lisa and Nina, all provided support and encouragement along the way. To all, I say thank you.

Myron K. Horn

MARK J. DOELGER
Public Service Award

Citation—Mark Doelger is an unassuming gentleman, a successful, geological and energy giant who never says no to Wyoming's Governor, his industry's call, and in particular to the American Association of Petroleum Geologists.

When one has the capability to effect positive changes and the foresight to recognize need prior to it becoming a reality and that person willingly engages in the effort to create opportunities for all and guide public involvement, at a cost to themselves, then that person is truly providing public service. Mark Doelger is just such a person.

Mark Doelger has been a member of AAPG since 1974. In 1978, he left Gulf Oil Corporation as a senior geologist and joined Barlow and Haun, Inc. of Casper, Wyoming, advancing to the position he currently holds of president. His plate has always been full with consulting, regional geologic analyses, and specific prospect identification for oil and gas and energy minerals. His company conducts business successfully in the economic and ethical tradition of its founders.

While the surges and retreats of the energy industry activity in the Rockies have forced geologists to continuously reinforce their knowledge base and spend long hours maintaining and growing their technological capabilities, Mark has always found time to enthusiastically support the activities of AAPG, the Rocky Mountain Section and the Wyoming Geological Association. He truly believes we have a debt of respect to the past and an obligation to the future to leave a place better than we found it.

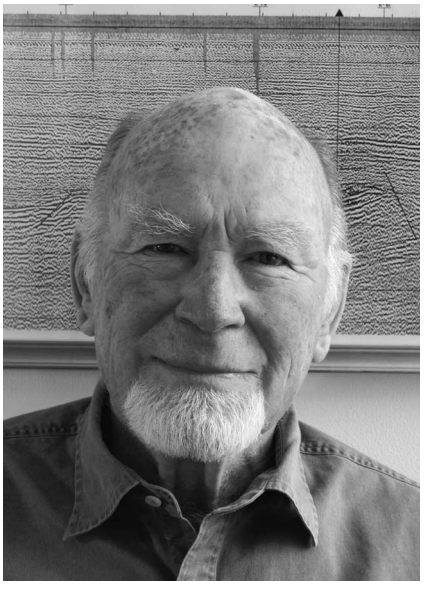
By appointment and at the request of several Wyoming governors, Mark has served on the Energy and Natural Gas sub-cabinet, the Enhanced Oil Recovery and CO2 Task Force, the Clean Coal Technologies steering committee, and the Coalbed Methane Water task force. He is perhaps best known for his leadership as chairman of the Wyoming Pipeline Authority for eight years. He and his committee reactivated the Authority, modernizing its enabling legislation and building and establishing a recognized mission. The Authority was extremely instrumental in generating support and for and defusing sentiment against the construction of significant natural gas pipeline take away capacity from Wyoming to points east, west, and southwest. This allowed Wyoming natural gas producers to find markets for their production in higher value regions, which meant greater revenue to the State of Wyoming, a healthier industry, and increased gas supplies for consumers.

Since the Santa Barbara oil spill in 1968, there has been a growing need for the story of those who explore for and develop natural resources to be accurately communicated. Mark has represented our industry through testimony before state and federal regulators, government agencies, environmental organizations, industry trade groups, industrial endusers, and commerce associations. He has served on the IPAMS executive committee, the Institute for Energy Research advisory board, the Gas Research Institute technical advisory group and the Wyoming business Alliance steering committee to name only a few assignments. He has the uncanny capability to foresee the mix of future economic, environmental, and resource issues which will require knowledgeable spokespersons and he has helped create the forums and media opportunities through which reasoned thoughts may be presented and prevail. Mark has been a thoughtful and respected spokesperson in all these areas.

Mark Doelger looks for ways to improve and stabilize the economics of our industry especially in the Rockies through the commitment of his time and personal resources. He frequently acts without being asked. His significant public affairs contributions constitute an outstanding example and witness to his colleagues and, a motivational force for all of us to act in a similar manner when presented an

opportunity to do so. Mark Doelger is simply a very successful, unassuming geologist and an energy giant who always says yes to his governor, his industry, and to the AAPG.

David Hawk



J. MYLES BOWEN
Pioneer Award

Citation—Myles Bowen participated in, and later led exploration teams for Shell and Enterprise Oil which led to discoveries in Nigeria, The UK North Sea and Italy, including several giant fields.

Dr J. Myles Bowen was born in Kent, England in 1928, drafted into the Army in 1946, and commissioned in the Royal Artillery. He was accepted at Lincoln College, Oxford, and took a First Class Honors degree in geology in1951. His stratigraphic studies along the Scottish/English border led to the award of his Ph.D. in 1954.

Myles joined Royal Dutch/Shell after graduation and was immediately sent to the wilds of Borneo to head a geologic field crew of laborers (while not yet speaking a word of Malay). His next job was a reconnaissance of Ulu Rajang, doing geologic mapping directly on aerial photos, traversing the area by foot and by canoe, resting at longhouses. He moved to North Borneo (Sabah) and surveyed the Crocker Range from the Sarawak border to the Kudat Peninsula. He spent three years nearly continuously doing field geology in Borneo.

The next assignment took him to remote areas of Venezuela where he did more field mapping in east Falcon, the Andean Foothills and the Sierra de Perija until 1960. Returning to the Hague, he found himself a "lowly well sitter" on the Schlochteren 2 ... the discovery well of the giant Groningen gas field!

In 1961, he joined the exploration team for Shell/BP in Nigeria, where his team had a really remarkable record of exploration discoveries. Returning to Venezuela, this time for six years, he was able to make a geologic survey of the Guiajira Peninsula, as a supplement to his duties as exploration manager.

In 1969, Myles was designated exploration leader of Shell Expro (operator for Shell/Esso) in the North Sea. In the UK Third Bidding Round, Myles and his team applied for a huge tilted fault block 150 miles north of current activity, (in "impossibly deep water" ... as the production engineers said). The discovery well (drilled as a tight hole in advance of the Fourth Bidding Round) found Brent, the remarkable 2.7 billion barrel field, largest in the UK North Sea.

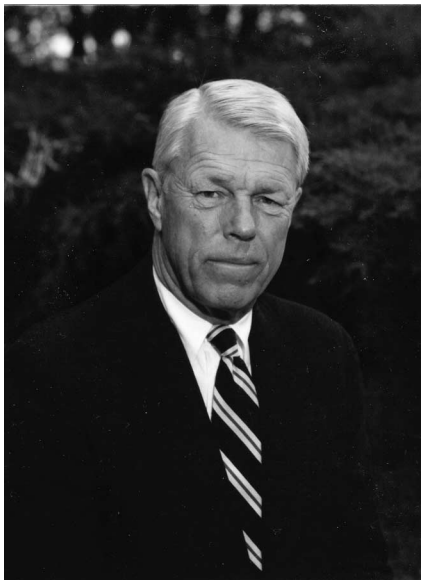
Some of other fields found during Myles' eight-year tenure as leader of the Shell Expro group include Auk, North Cormorant, South Cormorant, Dunlin, Tern, penguin, and Fulmar. Total reserves attributed to these fields (including Brent) total some five billion barrels.

Myles moved on to head exploration at Billiton, Shell's ailing mining subsidiary, and helped expand operations from 6 to 22 countries, while making a number of significant metals discoveries.

Myles took early retirement from Shell in 1984 and became exploration director for newly formed Enterprise Oil. Success followed Myles as Enterprise found 450 million barrels in the Nelson Field. Enterprise farmed into Agip acreage in southern Italy, discovering the Val D'Agri complex including Monte Alpe, Tempa Rossa, and C Falcone, giving a discovery credit to Enterprise of more than 1 billion barrels.

Myles Bowen married Margaret Guthrie in 1961 and has three daughters: Belinda, Joanna, and Jenny. He has been a member of AAPG since 1964, was AVMPG president in 1968, PESPG president in 1973, Geological Society Council 1975–1976 and 1985–1986, EAPG president 1992, received the Outstanding Achievement Medal from the Geological Society Petroleum Group in 1992, and was honored with the OBE for services to the UK petroleum industry. He retired from the industry in 1999.

Marlan Downey



JOHN WOLD
Pioneer Award

Citation—To John S. Wold, professional geologist, consummate entrepreneur, philanthropist, and exceptional achiever, for his life-long contributions to geology and natural resource development.

John Wold is the first professional geologist ever to serve in the U. S. Congress. As the "member from Wyoming," Congressman Wold served on the House Interior Committee and was the original author and sponsor of the National Mining and Minerals Policy Act of 1970. It extols the need for a strong, domestic, free enterprise mineral industry to strengthen national security.

The American Heritage Foundation of the University of Wyoming in 1999 elected Mr. Wold as Wyoming's "Oil/Gas and Mineral Man of the 20th Century", a singular honor for which the career appraisals included all mineral personnel at every industry level.

John earned his B.A. degree from Union College and St. Andrew's University Scotland, and his M.S. in geology from Cornell University. He has been honored with an L.L.D in 1991 from the University of Wyoming and a Doctor of Science in 2008 from Union College.

John's oilfield career started in 1939 as a geologist with Socony Vacuum's Magnolia Petroleum Company in Oklahoma and Texas. In early 1941, John volunteered as an officer with the Navy Bureau of Ordnance, later serving as Gunnery and Executive Officer of a destroyer escort in the Atlantic and Pacific Theaters. In 1946, he returned to the oilfields with Barnsdall Oil Company's gulf coast operations, moved to Wyoming as Rocky Mountain Division Geologist and became an independent oil and gas producer in 1950. Wold Oil and Gas has been a significant exploration and production operation in the Rocky Mountains for over 60 years.

In the early 1970s, John added joint venture coal exploration and acquisition programs, on a nationwide basis with Peabody and Consolidation Coal Companies. He introduced Exxon, Mobil, Sun, Mapco, and other major players to the coal resources of the Rocky Mountains.

In 1973 he founded Wold Nuclear Company and with Page T. Jenkins was co-discoverer of Wyoming's Christensen Ranch major uranium ore deposit. He was a principal in the Highland Uranium Mine, which became the largest uranium solution mine in the world.

John is chairman and CEO of GasTech, Inc., of Casper, Wyoming, associated with Linc Energy of Australia, in developing deep underground coal energy extraction technology to achieve U.S. "energy independence." He headed Wold Trona Company that developed soda ash technologies which have the potential of revolutionizing Green River operations which produce one third of the world's soda ash. John is also the chairman and CEO of American Talc Company at Van Horn, Texas, which operates one of the largest, most efficient talc mines in North America. This spectrum of interests gives an exposure which may be unique: significant activity in all of Wyoming's major minerals --oil, gas, uranium, coal, and soda ash.

Wold family ventures include the historic 30,000 acre "Hole-in-the-Wall Cattle Ranch" of southern Johnson County, Wyoming, a locale renowned in the annals of Butch Cassidy and the Sundance Kid.

In a parallel political career, John has served in the Wyoming Legislature where he was chairman of the House Labor Committee. He is a two-term Wyoming Republican State chairman, Republican State Finance chairman, member of the Republican National Committee and the executive committee of that group. He was chairman of the Western Republican State Chairmen's Association and Wyoming Republican candidate for the U. S. Senate in 1964 and 1970.

He has served as Wyoming Engineering Representative on the Interstate Oil Compact Commission, a director of the Federation of Rocky Mountain States, vice president for Wyoming and South Dakota of the Rocky Mountain Oil and Gas Association, and president of the Wyoming Geological Association.

In 1968, he was chosen by the Associated Press and United Press as "Wyoming Man of the Year" and in 1978 was picked as "Wyoming Mineral Man of the Year."

He is a past director of K-N Energy; Empire State Oil Company; Midland Energy Company; National

Association of Manufacturers; past chairman and CEO of Nuclear Exploration & Development Company, and director of Sierra Madre Foundation for Geological Research sponsored by the Geology Departments of Cornell, Harvard and Yale. He is a recent director of the Plains Petroleum Company and of Coca Mines, Inc., and has been the chairman of the Wyoming Natural Gas Pipeline Authority.

As a longtime trustee of Union College, Schenectady, New York, and former president of Casper College Board of Trustees, he and his wife, Jane, have endowed a Geology Chair and two Chairs of Religion at Union as well as the first fully endowed Wold Centennial Chair of Energy at the University of Wyoming. Their concern for science in college academics made possible the Wold Science Hall at Casper College. They recently fulfilled a $20 million commitment to these schools for scientific, religious, and residential programs.

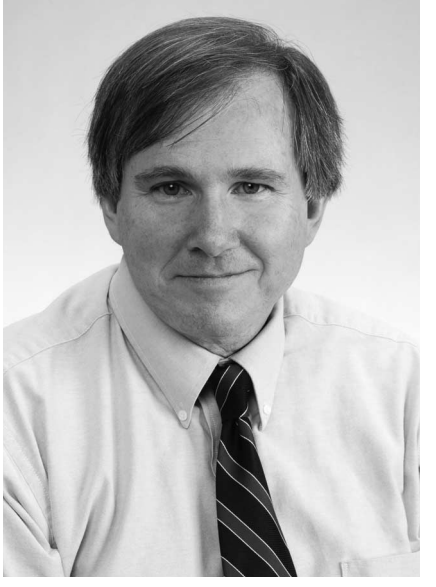
John is a founder and first president of the Wyoming Heritage Foundation, a 1,200 member, non-profit organization dedicated to the education of Wyoming citizens on the benefits of the free-enterprise system.

As an Eagle Scout, Wold has been especially interested in conservation and recreation. He played an important personal role in the development of Casper's Hogadon Basin ski area as founding president. He has been chairman of Advance Gifts of Casper United Fund, and served as a Sunday-school teacher, vestryman, and warden at St. Mark's Episcopal Church in Casper.

He is an active or past member of the American Association for the Advancement of Science, the Council of the American Geographical Society, Sigma Xi, AAPG, Independent Petroleum Association of America, American Petroleum Institute, Sigma Gamma Epsilon, Geological Society of America, Wyoming Mining Association, and Alpha Delta Phi.

At 94 years young and still driven by an intense curiosity, John continues his daily quest for resource opportunities, civic contributions, and professional involvement. His achievements are an inspiration, and he is truly a deserving recipient of AAPG's Pioneer Award.

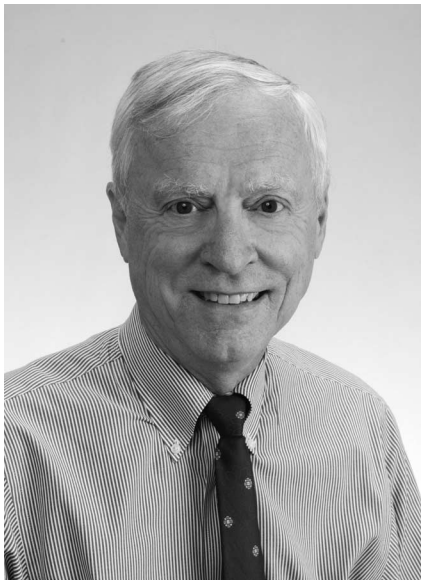
Stephen P. Morzenti



WILLIAM A. AMBROSE
Wallace E. Pratt Memorial Award

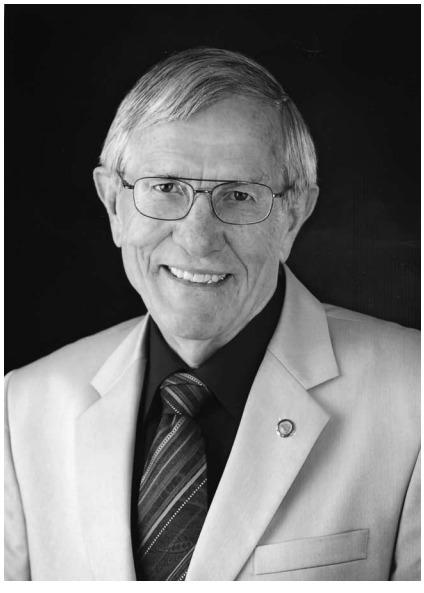
TUCKER HENTZ
Wallace E. Pratt Memorial Award

FLORENCE BONNAFFE
Wallace E. Pratt Memorial Award



ROBERT G. LOUCKS
Wallace E. Pratt Memorial Award

FRED P. WANG
Wallace E. Pratt Memorial Award



L. FRANK BROWN, JR.
Wallace E. Pratt Memorial Award

ERIC C. POTTER
Wallace E. Pratt Memorial Award

"Sequence-stratigraphic controls on complex reservoir architecture of highstand fluvial-dominated deltaic and lowstand valley-fill deposits in the Upper Cretaceous (Cenomanian) Woodbine Group, East Texas field: Regional and local perspectives" (*AAPG Bulletin*, v. 93, p. 231–269) presents a sequence stratigraphic and new depositional model for the lower Woodbine Group in historic East Texas field and represents a marked departure from previous geologic characterizations. It details the primary attributes and controls on the field's reservoir framework—chronostratigraphy, depositional facies, and character and quality of Woodbine reservoir sandstones—and their influence on fluid flow, incompletely swept reservoir zones, potential bypassed pay, and deeper pay zones that exist in East Texas field. Using ~500 well logs and analyzing 31 conventional cores, the authors (1) integrated the sequence-stratigraphic framework of the Woodbine interval in the East Texas Basin with that in the adjacent field; (2) determined the regional syndepositional structural influences, and their timing, on Woodbine deposition; (3) better defined the origin of the subregional base-of-Austin unconformity, the hydrocarbon seal in the field; and (4) documented the detailed facies variability, sandstone-body geometry, depositional systems, and their controls on oil production. Extension of sequence correlations from the basin to the field revealed that the field's primary reservoir zones comprise two systems tracts within two fourth-order sequences in the lowermost Woodbine: a conglomeratic lowstand fluvial incised-valley system in the north and west parts of the field, referred to as the "Main Sand" by operators, that truncates an underlying highstand deltaic succession composed of lenticular distributary-channel, splay, and delta-front sandstones collectively termed the "Stringer Sands." Previous studies of the Woodbine Group had inferred meanderbelt

sandstones flanked by coeval floodplain mudstones and well-connected, laterally continuous sheet sandstones of wave-dominated-deltaic and barrier-strandplain settings. This study demonstrates that this model is inappropriate and that a full assessment of reservoir compartmentalization, fluid flow, and unswept mobile oil in East Texas field should include the highstand, fluvial-dominated deltaic and lowstand valley-fill sandstone-body architecture. For example, most previous wells penetrated only the upper Main Sand, historically the field's primary producing zone and did not extend into the deeper Woodbine highstand deltaic sandstones that formed separate pressure compartments. Despite the field having produced oil since 1930 and being in the waning stages of production, these lower units are now actively targeted for additional mobile oil. In addition, waterflooding could locally be made more cost effective by reducing the number of water-injection wells in sandstone-poor areas. Other options include designing mini-waterfloods to provide pressure support in areas where discontinuous highstand deltaic sandstones have not been penetrated by existing well bores, or where relatively thick distributary-channel sandstones are favorably oriented along the structural gradient.

William A. Ambrose is a geologist specializing in sedimentology and reservoir characterization. He received a Master of Arts degree in geological sciences in 1983 from the University of Texas at Austin. Before joining the Bureau of Economic Geology in 1987, he was involved in regional subsurface studies of the Yegua and Vicksburg Formations and the Wilcox Group in the Texas Gulf Coast. Ambrose has worked on a variety of projects at the Bureau, including characterization of Frio fluvial and deltaic reservoirs in South Texas, co-production of gas and hot brine from Oligocene reservoirs in the Texas Gulf Coast, evaluation of coalbed methane reservoirs in Rocky Mountain basins, and reservoir characterization and basin analysis studies in Venezuela and Mexico. He is a past president of the Energy Minerals Divisions of AAPG, current co-vice chair of the AAPG Astrogeology Committee, and is currently the co-principal investigator of Project STARR at the Bureau of Economic Geology.

Tucker F. Hentz is a research scientist associate at the Bureau of Economic Geology, Jackson Schoool of Geosciences, the University of Texas at Austin. Tucker conducts research in siliciclastic sedimentology and sequence stratigraphy, specializing in basin-scale depositional architecture and facies relations. He has worked on regional sequence-stratigraphic and structural studies of hydrocarbon-bearing successions in the Anadarko Basin, Fort Worth Basin, East Texas Basin, Rio Grande Embayment, Burgos Basin, and offshore Louisiana. He has also been involved in a variety of other research projects during his 28 years at the Bureau, including regional field mapping and analysis of depositional systems of Pennsylvanian and Permian strata of the Eastern Shelf of north-central Texas, structural and diagenetic study of native sulfur deposits in Trans-Pecos Texas, and petrologic and diagenetic analysis of Gulf Coast and Val Verde Basin reservoir sandstones.

Florence Bonnaffé is a sedimentary geologist and geophysicist at the Bureau of Economic Geology, where she has been involved in characterization of siliciclastic and carbonate reservoirs in West Texas and the Texas Gulf Coast area.

Robert Loucks is a senior research scientist at the Bureau of Economic Geology. He received his B.A. from the State University of New York at Binghamton in 1967 and his Ph.D. from the University of Texas at Austin in 1976. His general research interests include carbonate and siliciclastic sequence stratigraphy, depositional systems, diagenesis, and reservoir characterization. His present research includes deep buried reservoirs in the Gulf of Mexico, evaporite and carbonate paleokarst, and pore networks in carbonates, sandstones, and mudrocks.

Dr. L. Frank Brown, Jr. is well known to geoscientists worldwide for his seminal contributions in siliciclastic depositional systems: not only formulating the initial concepts, but also applying them to seismic stratigraphy, sequence stratigraphy, and coastal studies management. During his five-decade career, Frank has had global influence as a researcher, consultant, and mentor. 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 UT-Austin (1966–1989). He also taught at Baylor University (1960–1969), and worked as a full-time consultant from 1989 to 1996. In 2010, he was awarded AAPG's Powers Medal, which recognizes his scientific contributions during all these phases of his career, as well as his extensive teaching and mentoring throughout industry and academia.

Dr. Fred P. Wang, research scientist, graduated from the Petroleum Engineering Department of Stanford University in 1986. He works at the Bureau of Economic Geology, Jackson School of Geosciences, the University of Texas at Austin. He specializes in reservoir characterization of conventional and unconventional reservoirs. His current research focuses on shale energy resources.

Eric Potter grew up in Clinton, New York. After receiving his master's degree in geology he joined Marathon Oil Company in Casper, Wyoming in 1975. After 11 years in Casper, he worked for 3 years in Houston as Marathon's region geologist for offshore North America. In 1990 he moved to Marathon's Petroleum Technology Center in Littleton, Colorado where he was associate director, leading the geoscience component of the Center. From 1994 to 2000, he was Marathon's exploration manager for the Mid-Continent Region, in Midland, Texas. Potter has been program director for energy at the Bureau of Economic Geology since April 2000. Potter's father, Don, and brothers, Chris and Bran, are geologists too.

CLAUDIO BARTOLINI
Robert H. Dott, Sr. Memorial Award

J. R. ROMÁN RAMOS
Robert H. Dott, Sr. Memorial Award

The Robert H. Dott, Sr. Memorial Award is presented to *Petroleum Systems in the Southern Gulf of Mexico, AAPG Memoir 90*. The petroleum geology of Mexico remains relatively unknown to the international geoscience community because of the limited number of articles published in international forums by geoscientists from Petroleos Mexicanos (PEMEX) and the Mexican Petroleum Institute. Sensitive PEMEX data have traditionally been treated with strict confidentiality. Thus, in the realm of Mexican petroleum exploration over the last 70 years, the publication of Memoir 90 is a watershed event as the first international publication that is devoted exclusively to Mexican authors from the petroleum sector. In consideration of the confidentiality issues, cultural differences, and the language barrier, this pioneering volume is a tremendous achievement. We strongly believe that it sets an important and encouraging precedent for future international publications by Mexican geoscientists. The 20 articles that comprise this book cover the onshore and offshore Mexican basins of the Circum-Gulf of Mexico Basin. Most of them have a multidisciplinary approach,with special emphasis on hydrocarbon exploration and petroleum geology. General subjects include petroleum systems, salt tectonics, structural geology, petroleum geochemistry, sequence stratigraphy, sedimentology, sediment provenance, play fairways, regional geology, biostratigraphy, and more.

Claudio Bartolini is a senior exploration advisor at Repsol U.S.A. in the Woodlands, Texas. He first was involved in the exploration of deepwaters in the Gulf of Mexico Basin, particularly the southernmost Gulf and Mexican territorial waters. He was subsequently transferred to the Alaska exploration team and became involved in the petroleum exploration assessment of the Chukchi and Beaufort Seas. He spent the last two years in Repsol Regional Studies Group in Madrid,

Spain, where he was involved in the regional reconnaissance geology of Llanos Basin, Colombia, and the coordination (along with PEMEX) of geological studies in the Campeche Shelf, Mexico. Claudio worked three years as an exploration geologist after he received his B.S. degree in geology from the College of Engineering, University of Sonora, Mexico. He earned a M.S. degree in geology from the Geosciences Department at the University of Arizona, and after graduation he worked for four years as an exploration geologist for Gold Fields Mining Corporation in Arizona, California, and Mexico. In 1992, he enrolled at the University of Texas at El Paso, and earned a Ph.D. degree in geology in 1997, with a major in tectonics and sedimentary basins. He graduated with honors, receiving the Outstanding Doctoral Student Award from the College of Science. Claudio was the recipient of a NASA Scholarship during the five years at the doctoral program. He is also the recipient of the American Geological Institute, the Houston geological Society, and El Paso Mineral & Gem Society scholarships, as well as an Internship at Amoco in Houston, Texas in 1994. Claudio's doctoral field studies were in part supported by an Exxon grant and Peñoles Mining Company in Torreon, Coahuila, Mexico. While pursuing his doctoral studies, Claudio worked as a consultant geologist in Mexico and Central America for Canadian exploration companies. After finishing his doctoral program, he joined ARCO International Oil and Gas Company, Latin America exploration group. Later, he was a basin and field researcher for IHS Energy in Houston, Texas. Claudio is the senior editor of the 1999 Geological Society of America Special Paper 340, *Mesozoic Sedimentary and Tectonic History of North-Central Mexico*. He also edited (2001) AAPG Memoir 74, *The Western Gulf of Mexico Basin: Tectonics, Sedimentary Basins and Petroleum Systems,* and AAPG Memoir 79, *The Circum-Gulf of Mexico and the Caribbean: Hydrocarbon Habitats, Basin Formation, and Plate Tectonics.* Bartolini maintains a strong interest in regional geology, sedimentary basin studies, and petroleum systems and plays analysis. He has published several papers and given talks at international geological forums.

Juan Rogelio Roman Ramos is a leader of the specialty in geological petroleum system modeling of PEMEX. He earned his B.S., M.S., and Ph.D. degrees as a petroleum geologist from the Peoples' Friendship University in Moscow, Russia between 1976 and 1987. His graduate work, supervised by Professor D. Nesmejanov, involved the hydrocarbons origin of the Sabinas basin (Mexico).

He began his professional career in 1988 with the Mexican Petroleum Institute (IMP) as a scientist researcher of the Enhanced Oil Recovery from tight and naturally fractured carbonated reservoirs. Simultaneously, he taught sedimentary petrology at the Mexican National University (UNAM), and was a member of the National Research System. In 1992 he joined Pemex Exploracion & Produccion (PEP) where he developed and supervised geochemical studies and geological modeling for the northern Mexican petroleum basins, and participated in technology transfer projects dealing with basin modeling and risk evaluation.

From 1999 to 2004, Juan Rogelio was project leader for the western Deepwater Gulf of Mexico where he supervised sampling programs, data acquisition programs, and geological interpretation leading to the geochemical characterization of hydrocarbons seeping from Gulf floor. This latter project led to the delimitation of plays and the definition of the first drill locations in the Mexican Ridges and Perdido Fold Belt Deepwater Provinces. Since 2005, he has coordinated basin and petroleum systems studies for the Northern Regional Exploration Asset Team, creating a foundation for understanding interregional 3D geological relationships, by modeling patterns of hydrocarbon generation and migration in the Veracruz, Tampico-Misantla, Burgos, Sabinas, Chihuahua, Gulf of California basins, and relating them to the deepwater Gulf of Mexico. These studies have defined new areas with economically interesting petroleum potential.

In 2006, he was elected leader of the Integrated Network for Geological Modeling for Petroleum Exploration. Juan R. Roman Ramos is an active member of the Mexican Petroleum Geological (AMGP), Geophysical (AMGE) and Engineers Associations (AIPM), where he has served as a Delegate President; Director of Membership, and of the Technical Studies Commission. He was recognized in 2006 as a Distinguished National Expert. He has promoted closer affiliation between the Mexican geosciences community and the AAPG by coordinating visits of Distinguished Lecturers to Mexico and collaborating in the organization of Joint Conferences.

DAVID M. DUTTON
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 David M. Dutton for "Four-dimensional analysis of the Sembo relay system, offshore Angola: Implications for fault growth in salt-detached settings" (*AAPG Bulletin*, v. 93, p. 763–794).

The aim of the paper was to help progress the understanding of fault growth in complex salt-detached settings and share new techniques on how to do so. Subsurface mapping of several relay ramps from a raft-related fault array in the lower Congo Basin, offshore Angola, reveals a full spectrum of fault linkage styles. A comprehensive three-dimensional geometric and kinematic appraisal of a more complex relay system within the fault array, the Sembo relay system (SRS) highlights differences with current structural models of relay ramp genesis, evolution, and breaching. The SRS is a rearward (upper ramp) breached relay system with a maximum fault overlap and spacing of 9500 and 3600 m (~31,000 and 11,800 ft), respectively. This system is characterized by a structural geometry that becomes increasingly complex with depth as the relay system is gradually assimilated into the structural architecture of a separate and structurally deeper fault system.

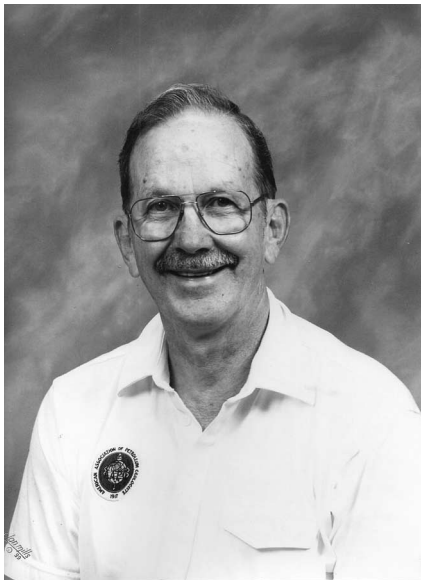
A detailed kinematic appraisal of the SRS indicates that the throw patterns on the frontal and rearward segments are intrinsically different. Throw backstripping reveals different initiation ages for the rearward and frontal segments of about 5.5 and 2.5 Ma, respectively. Mutual overlap is estimated to first occur about 2.5 Ma at the 5.0 Ma structural level, with fault linkage and ramp breaching occurring subsequently.

The SRS therefore represents a complex amalgamation of faults that have each developed independently at different times. The genesis and evolution of the SRS have been governed through time by both salt withdrawal and associated fault detachment histories, in conjunction with increased Congo Fan progradation and sedimentation rates and phases of tectonic tilting of the underlying salt detachment surface.

David Dutton has a Ph.D. in structural geology from Imperial College London. Prior to this, David read geology B.Sc. (Hons) at University of Portsmouth and also holds an M.Sc. in basin evolution and dynamics from Royal Holloway, University of London.

After completing his Ph.D. studies, David went to work for CNR International UK Ltd where he helped to mature satellite exploration prospects around the Baobab Field, offshore Ivory Coast. In 2005, David joined BG Group where he helped establish a new country entry position in Nigeria before moving to Norway to develop their exploration portfolio in the Norwegian Sea. Currently, David is a working as a senior geophysicist for Nexen Petroleum UK Ltd in the North Sea Exploration and Appraisal Team focusing on stratigraphic prospects around the Buzzard Field. He lives in the UK with his wife and two children. David is a regular attendee and presenter at AAPG conferences.

DWIGHT (CLINT) MOORE
John W. Shelton Search and Discovery Award



ROBERT O. BROOKS
John W. Shelton Search and Discovery Award (posthumously)

Dwight "Clint" Moore, vice president-corporate development with ION Geophysical Corporation, has dedicated his career to finding oil and gas for mankind by exploring primarily in the United States, and now around the world.

The son of a highly dedicated and determined wildcatter, the late Alfred C. Moore, Clint was raised while helping his father find oil and gas, which sparked his lifelong dedication to this shared endeavor. Clint's pursuit of exploration led him to be one of the industry's pioneering proponents of subsalt exploration, of which he has been a champion for over 25 years.

Clint has served in many capacities for AAPG. He has held the office of treasurer, is a past member of the Advisory Council and a 20+ year member of the House of Delegates, and has chaired several committees. He is also a past-president of the Houston Geological Society. Clint's service to our profession has been exemplary and of great service to AAPG's members. For his past service to AAPG, he's received the AAPG Distinguished Service Award, four AAPG Certificates of Merit, the Distinguished Member of the House of Delegates Award, and the DPA's Distinguished Service Award.

Clint and the late Robert O. Brooks are recognized for the significant and important content of their historic presentation and paper in AAPG's Search & Discovery, and additionally for Clint individually, as a progenitor of the new Search & Discovery Digest, AAPG's new quarterly e-mail digital publication.

"The Evolving Exploration of the Subsalt Play in the Offshore Gulf of Mexico," a landmark paper and its detailed slide set, were first presented in shortened form as a poster session at the 1993 Hedberg Conference on Salt Tectonics in Bath, England. Clint enhanced the posters and expanded the slide set, as you see it now in Search and Discovery today, for the 1995 AAPG Annual Meeting, and then further expanded it for more detailed written publication in the *AAPG Bulletin* as an E&P Note in June 1997, entitled "Subsalt Play, Gulf of Mexico: A Review", with E&P Notes co-author Scott L. Montgomery. When presented in 1995 to a full convention hall meeting room, and similarly again at the 1997 AAPG ICE, this talk extensively documented the many subsalt wells drilled in the offshore Gulf of Mexico during the first 12 years (1983–1995) of subsalt exploration there. It was also presented as a keynote address at the 1995 GCAGS Convention, as well as many more times at geological society meetings between 1995–97. It catalogs and explains the initial period of subsalt exploration history in the Gulf of Mexico, and encourages and forecasts what is now the subsalt and presalt play around the world today.

Clint's contributions to Search and Discovery also include his co-authored talks on the subsalt Mahogany field discovery, and another slide set with paper on using Supra-Salt Stacked Condensed Sections as predictors of subsalt stratigraphy.

Robert O. Brooks graduated with a B.S. in geology from Southern Methodist University in May 1958. He started his geophysical career in that year with Robert H. Ray Company, where he worked at sites in Iraan, Texas; Tatum, New Mexico; Farmington, New Mexico; Lamesa, Texas; and Midland, Texas.

During his time with Ray, Mr. Brooks served a short tour with the Army Reserve in the Ft. Hood Military Intelligence Battalion.

In December 1961, he took a position as an exploration geophysicist with Humble Oil and Refining (later Exxon) in Midland, moving to the Exploration department in Houston in 1968. After leaving Exxon in 1982, he worked for both Elf Aquitaine and Superior Oil.

In October of 1986, he started with TGS-Calibre Geophysical Company, where he developed the theories being honored today. Over the next 10 years, he became vice president of TGS and president of Calibre Consulting Services.

Mr. Brooks was a member of the Society of Exploration Geophysicists and AAPG throughout his career. He published four papers/presentations with E.H. Denman, D.J. Hall, and D.C. Moore between 1993 and 1995. He served on the AAPG House of Delegates committee from

1991 to 1994 and as an alternate from 1994 to 1996. He also served on the AAPG/OTC Tech Program Committee from 1995–1996.

He retired from TGS in September of 1996 and moved to East Texas. He passed away in August 2007.

SATINDER CHOPRA
George C. Matson Memorial Award

The George C. Matson Memorial Award for the best paper presented during an AAPG oral technical session is presented to Satinder Chopra for "Detecting Stratigraphic Features via Cross-plotting of Seismic Discontinuity Attributes and Their Volume Visualization." The co-author is Kurt J. Marfurt.

This paper is an outgrowth of the authors' attempts to get across the message that seismic attributes help in characterizing stratigraphic features that may comprise reservoirs, and should form an integral part of most interpretation projects completed today. Many geoscientists, who are engaged in interpreting seismic data, generate attributes by simply pressing some buttons on their workstations, without going to the details of how these need to be generated, or if the input data needs some conditioning before running attributes. Once generated, attributes need to be visualized properly to extract meaningful information for greater interpretation accuracy and improved efficiency. Three-dimensional volume rendering is one form of visualization that involves opacity control to view the features of interest "inside" the 3D volume. A judicious choice of opacity applied to edge-sensitive attribute sub-volumes such as curvature or coherence co-rendered with the seismic amplitude volume can both accelerate and lend confidence to the interpretation of complex structure and stratigraphy.

In this paper, besides co-rendering, we evaluate an interpretation workflow that cross-plots pairs of edge-sensitive attributes. By crossploting coherence and an appropriate curvature attribute, we can define a polygon that highlights "clusters" that exhibit low coherence (indicating a discontinuity) and high curvature (indicating folding, flexing, fault drag, or differential compaction). Modern volume interpretation software allows us to link and display these interpreter-defined clusters in the seismic volume for further examination. Once identified interactively, such visual 'clustering' can be used to supervise geobody delineation using neural networks and other classification algorithms. This saves the seismic interpreters considerable time and effort. We illustrated this new workflow through application to several 3D seismic surveys recently acquired in western Canada and demonstrate that multi-attribute volume co-rendering and clustering provides a powerful tool that leads to a better understanding of the spatial relationships between seismic attributes and the geologic objectives being pursued.

This work clearly demonstrated that geoscientists need to generate appropriate seismic attributes knowing fully well how these attributes have to be generated, what algorithms have to be used, and how they need to be visualized for maximum benefit from their applications.

Satinder Chopra received M.Sc. and M.Phil. degrees in physics from Himachal Pradesh University, Shimla, India. He joined the Oil and Natural Gas Corporation Limited (ONGC) of India in 1984 and served there till 1997. In 1998 he joined CTC Pulsonic at Calgary, which later became Scott Pickford and Core Laboratories Reservoir Technologies. Currently, he is working as chief geophysicist (reservoir), at Arcis Corporation, Calgary. In the last 26 years Satinder has worked in regular seismic processing and interactive interpretation, but has spent more time in special processing of seismic data involving seismic attributes including coherence, curvature and texture attributes, seismic inversion, AVO, VSP processing and frequency enhancement of seismic data. His research interests focus on techniques that are aimed at characterization of reservoirs. He has published 7 books on different topics, including seismic attributes, heavy oils and gas hydrates, and more than 200 papers and abstracts and likes to make presentations at any beckoning opportunity. He is the chief editor of the CSEG *Recorder*, the past member of the SEG *The Leading Edge* Editorial

Board, and the ex-chairman of the SEG Publications Committee. He received several awards at ONGC, and more recently has received the Top 10 Paper Award for his poster entitled "Extracting meaningful information from seismic attributes," presented at the 2009 AAPG Annual Convention held at Denver, the Best Poster Award for his paper entitled "Seismic attributes for fault/fracture characterization, presented at the 2008 SEG Convention held at Las Vegas, the Best Paper Award for his paper entitled "Curvature and iconic Coherence-Attributes adding value to 3D Seismic Data Interpretation" presented at the CSEG Technical Luncheon, Calgary, in January 2007 and the 2005 CSEG Meritorious Services Award. He and his colleagues have received the CSEG Best Poster Awards in successive years from 2002 to 2005. He is a member of SEG, CSEG, CSPG, CHOA (Canadian Heavy Oil Association), EAGE, AAPG, APEGGA (Association of Professional Engineers, Geologists and Geophysicists of Alberta) and TBPG (Texas Board of Professional Geoscientists).

George C. Matson Memorial Award
Top 10 Oral Presenters at the Annual Meeting in New Orleans, LA

Satinder Chopra
Kurt J. Marfurt

Jack Pashin

Alan S. Kornacki

James R. Moffett
Langhorne B. Smith
James Leone

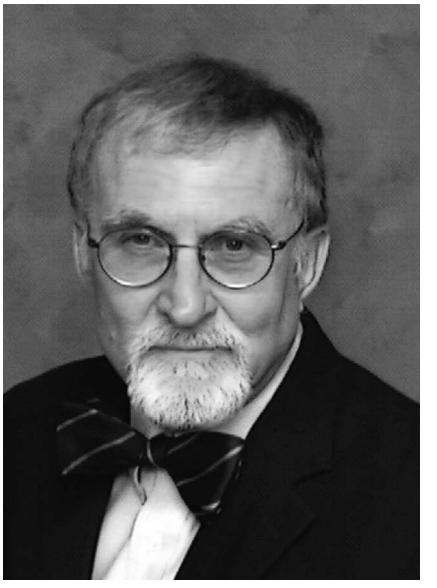
Gavin Elliott

Ingelise Schmidt
Matthew Docherty
Sebastien Lacaze
Fabien Pauget

Scott I. Fraser
Katya E. Casey
Kristan K. Reimann
Frank Love
Richard Davies

W. Hoxie Smith

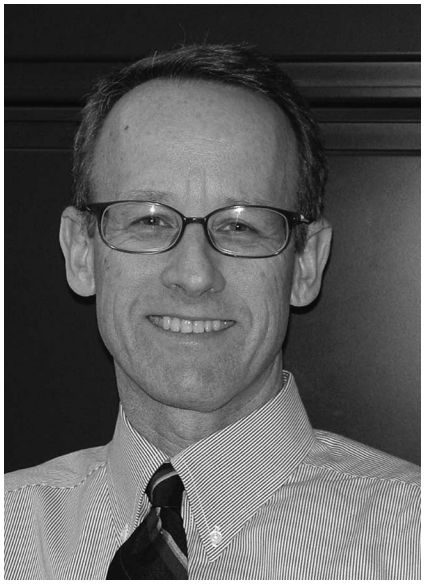
Ivana Novosel
Kim Manzano-Kareah
Alan S. Kornacki



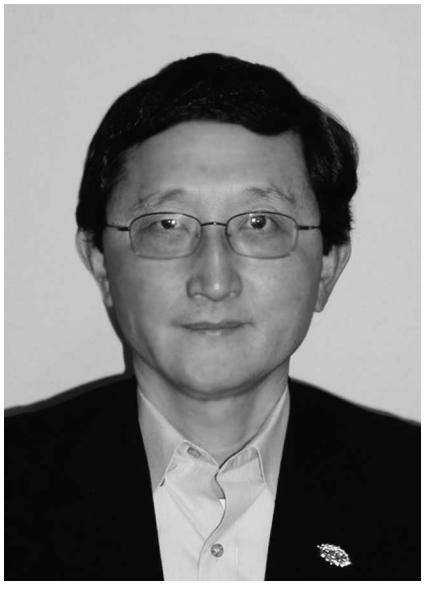
R. CRAIG SHIPP
Jules Braunstein Memorial Award

EDDY LEE
Jules Braunstein Memorial Award

WILLEM HACK
Jules Braunstein Memorial Award



J. LARRY GIBSON
Jules Braunstein Memorial Award



FA DWAN
Jules Braunstein Memorial Award

The Jules Braunstein Memorial Award for the best AAPG poster presenting is presented to Eddy Lee, R. Craig Shipp, Willem Hack, J. Larry Gibson, and Fa Dwan for their poster "Quantifying the Probability of Occurrence of Shallow Gas as a Geohazard."

This poster illustrates the successful application of an integrated geohazards assessment, which increased our ability to identify safe drilling locations in areas previously considered too difficult to drill.

The complex channel fairway in the study area is mainly controlled by underlying thrust folds and adjacent mass-transport deposits. Channels exhibit higher amplitude reflections, so they were easily mapped using seismic attribute extractions. Anomalies of high amplitude are usually associated with porous sands and are commonly interpreted as potential shallow-gas geohazards. Gas hydrates (with possible free gas below) have been identified from the presence of a bottom simulating reflector (BSR) and LWD log response in offset well-log data. This is particularly important as gas hydrates dissociation at the wellbore during operations could cause well trouble ranging from gas flows to borehole instability.

Using multi-frequency spectral decomposition and seismic coherency volumes, we were able to advance our understanding of the relationship between amplitude anomalies and complex nature of multistoried channel migration. More quantitative amplitude analysis, using seismic offset data, provided a probability distribution of encountering shallow-gas geohazards and assisted in identifying a suitable well location with greater confidence. Drilling results confirmed that thick, sand-prone channel-levee systems occur within the gas-hydrate stability zone, avoiding all shallow-gas geohazards. Application of an integrated geohazards assessment workflow in this complex setting provided the key understanding to drilling this near-surface section safely and with no well down time.

Eddy Lee is originally from Taiwan where he received his B.Sc. in marine geology from Chinese Culture University. He served two years in the Taiwan Navy before studying abroad in the U.S. with his wife and two-month-old daughter in 1992. He earned his M.Sc. (1995) and Ph.D. (2000) in oceanography (geological section) from Texas A&M University. During his graduate study he attended Ocean Drilling Program Leg 162 and Leg 181. In 1998, he was granted a research fund from the National Science Foundation for a study of the consolidation effect on sediment porosity changes using magnetic resonance imaging (MRI) technique.

In 1999, he joined C&C Technologies, Inc. where he started his career in geohazards assessment and was involved in the development of the first commercial autonomous underwater vehicle used for collecting high-resolution seafloor imagery and seismic data. He continued his geohazards assessment career with Shell in 2007 and incorporated tools used for direct hydrocarbon indicating to geohazards evaluation. He developed new workflows for identifying shallow-gas hazards using quantitative AVO and 3D volume visualization with spectral decomposition. He is now a senior seismic interpreter maturing near field exploration opportunities and looking after well operations offshore Brazil.

Craig Shipp earned a M.S. in geology at the University of South Carolina and a Ph.D. in geological oceanography from the University of Maine. He was hired as a research geologist by Shell Development Co.

1988. An early job assignment was a deepwater near-surface analog study for the deeper interval that evolved into the initial focus on deepwater drilling hazards. In 1997, he became a geohazards specialist on the multidisciplinary Shallow Water Flow Team, focusing on drilling hazard assessments in the deepwater Gulf of Mexico. Since 1999, Craig has been a member of evaluation group at Shell that specializes in the global assessment of offshore geohazards for drilling and field developments, serving as team leader of the group from 2003–2009.

In related activities external to Shell, Craig has served as the AAPG Chairman for the Offshore Technology Conference Technical Program Committee (2004–2009), founder and convener of the Operators Geohazards Forum (2003–2009), a member of the Expert Panel on Gas Hydrates for the Canadian Council of Academies (2007–2008), and co-chairman of the 4th International Symposium on Submarine Mass Movement and their Consequences (2009). Also, he was selected as an AAPG Distinguished Lecturer on geohazards and submarine mass movement for the Asia-Pacific Region (2006–2007). Presently, he serves on Environmental Protection and Safety Panel for the Integrated Ocean Drilling Program (2002–present) and U.S. Dept. of Energy Methane Hydrates Advisory Committee (2008–present). His current interests are deepwater depositional systems, geotechnical character of deposits formed by deepwater processes, and effect of mass-failed sediments and marine gas hydrates on deepwater drilling and development operations.

Willy Hack studied geophysics at the University of Utrecht in the Netherlands. After graduation he decided to postpone working in the industry for a little bit and did a post-doc at the Institut Francais de Petrole (IFP) in Paris. Since he joined Shell in the Netherlands in 1991, he has had the pleasure to work for exploration in such diverse, geological and cultural, environments as Germany, onshore Oman, deepwater Nigeria and Houston (USA).

During his career he worked on the full range of exploration activities, from regional geological assessment through hydrocarbon play development, from seismic survey design, seismic acquisition and interpretation, to prospect maturation, volumetric assessment, well design, well proposal and subsurface lead during well drilling. As an explorer he has a keen interest in the application of geophysical methods in geohazards assessment as it has proven to be a key enabler for real wild-cat exploration drilling.

Larry Gibson is currently team leader of Geohazards Assessment and Pore Pressure Prediction for Shell E&P International Inc. He earned a M.S. in geology from Texas A&M University, and was hired as a production geologist by Shell Offshore Inc. in 1983. During his 27 years with Shell, Larry has held a variety of positions in operations, research and technology services. He has been involved in development and production projects in the shelf and deepwater Gulf of Mexico, and onshore Louisiana, and has contributed to research programs in reservoir modeling and production geophysics. For the past 10 years, Larry has specialized in offshore geohazards assessment for drilling and field developments in the Gulf of Mexico, West Africa, Australia, Egypt, and Malaysia. Larry's professional activities external to Shell have included presentations at meetings of the AAPG, SEPM, SEG, and OTC. He also has served as an AAPG Program Committee Member for the OTC (2005), AAPG Technical Session Co-Chair for the OTC (2004 and 2009), and Organizing Committee Member for the 4th International symposium on Submarine Mass Movement and their Consequences (2009).

Fa Dwan has a Ph.D. in geodynamics from Texas A&M University before joining the Seismic Processing team of Shell Pecten International Company in 1991. Fa subsequently has had assignments on AVO, inversion and spectral decomposition R&D projects at Shell Bellaire Technology Center. Fa has taught "Understand Seismic Inversion", "Quantitative Interpretation Theory and Applications" and other short courses. He is currently based in Chengdu, China to coordinate geophysical operation for Shell China E&P.

JENNIFER SCOTT
Gabriel Dengo Memorial Award

The Gabriel Dengo Memorial Award is given each year in recognition of the best AAPG paper presented at the previous year's international conference. This year, the award is presented to Jennifer Scott for the paper "Petroleum Systems of the Northern Red Sea."

The integration of data from onshore samples, basin modeling, and oil and source rock geochemistry, has resulted in a better understanding of the petroleum systems of the Northern Red Sea, Egypt. By looking in detail at the geochemistry of a large number of samples from the Gulf of Suez and Northern Red Sea, a number of geochemical families derived from the pre-rift sourced oil samples were defined. Integrating the distribution of these oil families with biostratigraphic analyses allowed for an improved understanding of the pre-rift depositional environment, which has increased confidence in the presence and distribution of a prolific oil-prone source rock in this under-explored area.

Jennifer graduated from Cambridge with a M.Sci. in geological sciences in 2007. Her master's ("Investigating Northern Component Water initiation using 3D seismic data from NE Rockall Trough") was supervised by Nicky White. She was also president of the Cambridge Union Society. She had a summer internship with Shell in Rijswijk in 2006 and her M.Sc. in petroleum geosciences at Imperial College was sponsored by Shell. During her year at Imperial, she was on the Imperial Barrel Award team, which came in second overall at the AAPG annual convention in San Antonio. She graduated from Imperial with distinction and was awarded the ChevronTexaco All-round Contribution Prize (which is awarded to the student who has made the biggest overall contribution to the academic, organizational and social aspects of the course). Since starting at Hess, she has worked in exploration and pre-developments, and is currently in the Regional New Ventures team.

KATHRYN HOFFIMEISTER
Ziad Beydoun Memorial Award

DIANE KAMOLA
Ziad Beydoun Memorial Award

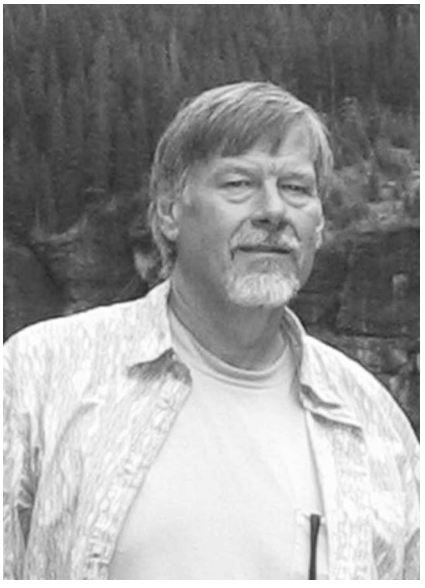
The Ziad Beydoun Memorial Award is given each year in recognition of the best AAPG poster presented at the previous year's international conference. This year, the award is presented to Kathryn Hoffimeister and

co-author Diane Kamola for the poster "Forebulge Influence on Deposition of the Cretaceous Castlegate Sandstone, Book Cliffs, Utah, USA."

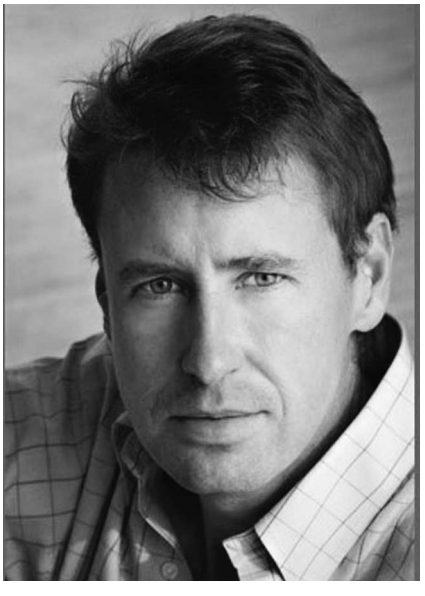
Paleoflow indicators in lowstand deposits within the Sevier Foreland Basin (FLB) suggest a major reorganization of flow between highstand and lowstand events, and the emergence of the forebulge causing a decoupling of the FLB from the Cretaceous Western Interior Seaway. Paleocurrent measurements from lowstand deposits in the Cretaceous Castlegate Sandstone indicate drainage parallel to the axis of the basin and parallel to highstand shoreline trends. This deviates from highstand paleocurrent indicators which record flow perpendicular to the shoreline (perpendicular to the axis of the basin). Recognizing this change in paleoflow direction impacts where to look for LST channel and deltaic deposits, which are commonly good reservoirs.

Kathryn Hoffmeister grew up in Atlanta, GA and received her undergraduate degree from the University of Georgia. She currently lives in Lawrence, KS where she is pursuing a master's degree in geology from the University of Kansas. Kathryn was a teaching assistant at the University of Kansas, a graduate research assistant (ConocoPhillips Research Assistantship (2008–2009)), and is currently the recipient of the Alice Mitchell Jackson Award for Graduates Students (2009–2010). She interned with ConocoPhillips in 2009 and will return to ConocoPhillips as a geoscientist upon graduation.

Diane Kamola received her B.S. from Allegheny College, and her M.S. and Ph.D. from the University of Georgia. She has been an associate professor at the University of Kansas since 2000. Before coming to KU, she was an assistant professor at Old Dominion University. Prior to her academic positions, she spent two years with the Clastic Facies Research Group at Exxon Production Research Company. Diane's research interests are in the areas of clastic sedimentology, sequence stratigraphy, and basin analysis. Current research includes field and subsurface studies on stratal patterns in sedimentary basins, and high-resolution stratigraphy of shallow marine and marginal marine sandstones. Diane's work in clastics includes a wide variety of depositional environments, but focuses mainly on facies analysis of shallow marine shorelines and associated marginal marine environments, including tidal and barrier island settings. Diane has also worked in eolian, lacustrine, and volcaniclastic deposits, relating the depositional record of these environments to paleogeographic reconstruction. Diane is currently the secretary-treasurer for SEPM, and on the Board of Editors for the new STRATA Website (http://sepmstrata.org).



RONALD C. BLAKEY
Geosciences in the Media Award



TOM ZOELLNER
Geosciences in the Media Award

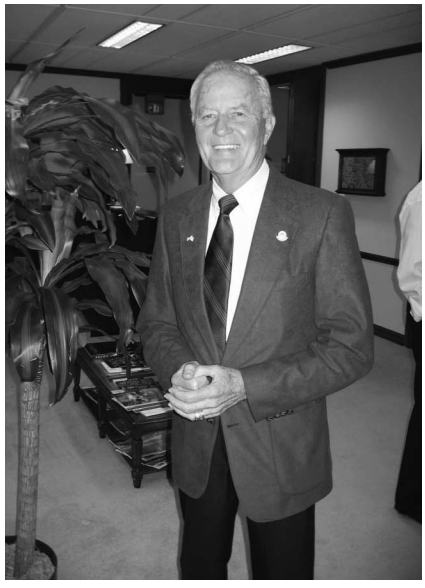
Ron Blakey is recently Professor Emeritus at Northern Arizona University following 34 years of teaching and research in the Department of Geology. During his tenure at NAU, he studied and published on the stratigraphy and sedimentology of many Late

Paleozoic and Mesozoic rock units on the Colorado Plateau. This nurtured his interest in paleogeography and for the last 15 years, he has been heavily involved in producing paleogeographic maps that range from regional to global in scope. Many of these maps appear on his two web sites, jan.ucc.nau.edu/~rcb7 and cpgeosystems.com. His latest endeavors have merged these two disciplines into books published by the Grand Canyon Association, *Ancient Landscapes of the Colorado Plateau* and Springer, *Plate Tectonics, Continental Drift, and Mountain Building.*

Ron received his bachelor's degree from the University of Wisconsin, his master's degree from the University of Utah, and his Ph.D. from the University of Iowa. He began his teaching career at Fort Hays State University.

Tom Zoellner writes about mining from a global perspective. He is the author of two books, *The Heartless Stone: A Journey Through the World of Diamonds, Deceit and Desire* (St. Martin's Press), an American Library Association Notable Book of 2006; and *Uranium: War, Energy and the Rock That Shaped the World* (Viking/Penguin), a New Scientist Best Science Book of 2009. He is also the co-author, along with Rwandan hotel manager Paul Rusesabagina, of *An Ordinary Man* (Viking/Penguin), a New York Times bestseller in cloth and paperback. Tom has discussed his books on "The Daily Show" with Jon Stewart, NPR's "All Thing Considered" and "Talk of the Nation", PRI's "Marketplace" and "Fox and Friends", CNN, Bloomberg TV, and C Span's Book TV. His work has been translated into 13 languages. He has previously worked as a contributing editor at *Men's Health* magazine and as a reporter for the *San Francisco Chronicle.*

Tom received his B.A. from Lawrence University in1991. He has been a newspaper reporter for *The Arizona Republic, San Francisco Chronicle, The Salt Lake Tribune, Savannah Morning News, Wyoming Tribune-Eagle, and Superior Express.*



JACK C. THREET
Foundation Weeks Medal Ward

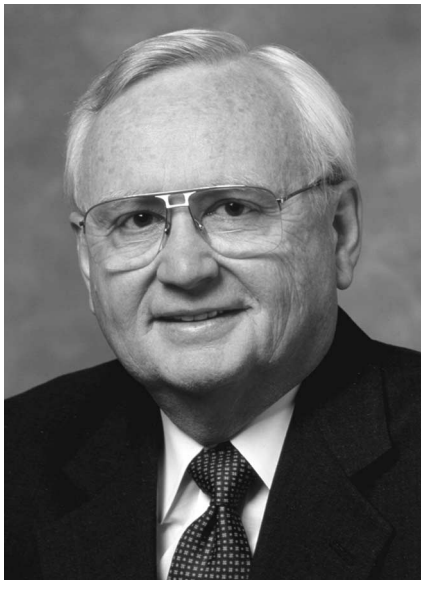
As an AAPG Honorary Member, Jack Threet has served for over half a century in both the AAPG and AAPG Foundation. By the time of his retirement in 1987, he had also served Shell Oil for 36 years, another lengthy commitment which terminated only after he had risen to the rank of vice president of exploration. After his Shell tenure, he moved on to found the independent Threet Energy Incorporated, a Houston-based firm which acts as an oil and gas exploration, management and advice company (he serves at once as its president, chairman, and treasurer.) Threet has also worked in collaboration with prime midwestern oil explorer Lawrence Funkhouser (the 2004 Sidney Powers medalist), a former competitor during Funkhouser's employment at Chevron.

Born in the small Southern Illinois township of Dundas in 1928, Threet spent his elementary school years in a three-room schoolhouse, until relocating to Champaign.

It was here that Threet enrolled at the University of Illinois, and where he first began his relationship with Shell—working his way through school, he took a summer job with the company and found the job engrossing enough to put his master's studies on hold. He relocated to Tulsa in 1951, where he became a junior stratigrapher. His employment with Shell yielded results with a surprising quickness, as his first successful exploration—the discovery of Oklahoma's South Atwine field—came after less than two years at the company. Threet advanced steadily through the ranks at Shell, holding numerous positions of increasing responsibility in not only the U.S., but also in the Netherlands, Canada, and Australia. All of this culminated in a nine-year run, in Houston, as the company's vice president and head of exploration. As such, Threet presided over Shell's renaissance period of exploration successes from 1979–1987. His strong personal initiative made him a natural for mentoring and leadership positions.

Since 1987, Threet has been a trustee associate of the AAPG, becoming a trustee and then chairman of the foundation from

the period 1994–2006. With his former competitor turned collaborator Lawrence Funkhouser, he also acted as chairman for a major fund-raising campaign for the Foundation. His awards with the AAPG include both the Robert H. Dott Memorial Award (2003, awarded for his work on the 74th AAPG Memoir) and the Distinguished Service Award (2005). A busy philanthropist, Threet also contributes regularly to organizations such as the YMCA, Habitat for Humanity, the Methodist Church and United Way. An avid golfer, he has been inducted into the Senior Golfers of America Hall of Fame, and his biography has appeared in the Marquis publication *Who's Who in America* every year since 1985. He currently resides with his wife Katy in Pagosa Springs, Colorado.



WILLIAM E. CRAIN
Foundation Chairman's Award

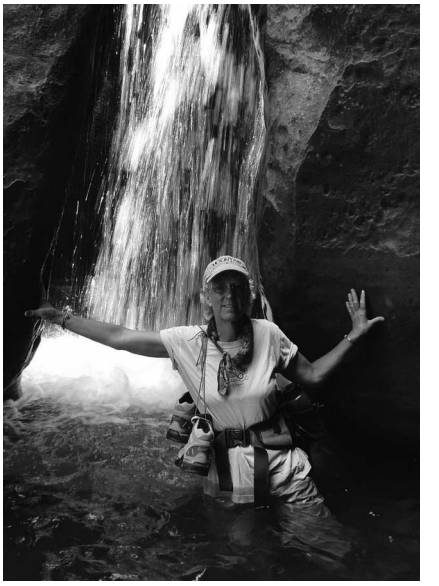
William E. Crain, a Duluth native, graduated from the University of Minnesota, Duluth with a B.A. in business and economics in 1953, and a B.S. in geology in 1955, taking all of his courses from Professor Robert Heller. He also received an M.S. in geology from the University of Minnesota, Minneapolis. He joined Chevron in 1957 as an exploration geologist and retired in 1994 as director and vice president of Chevron Exploration and Production.

Bill also retired as a director of Bouygues Offshore, a large international construction company headquartered in Paris, France. He is a trustee emeritus for the AAPG Foundation where he also served as co-team leader of the "Meeting Challenges" Funding drive for the West Coast in 2008 and 2009. Bill also serves as trustee of the American Geological Institute Foundation. He is currently president of W.E. Crain Enterprises, a domestic exploration oil and gas company, and an international oil and gas consultant.

Bill has always been committed to earth science education. He received the University of San Francisco Medallion Award and the American Geological Institute's (AGI) Explorer award, both of which pertain to Earth Science education. In 1998 he received the Stanford Associate award for his many years of committee and advisory services to Stanford University, including chairman of a specially formed visiting committee to help chart the direction of the School of Earth Science into the new millennium. In 2002, he and the late Dr. Heller received AGI's William B. Heroy Jr. Award for distinguished service; together they generated the vision and support of AGI's inquiry-based, secondary school Earth Science curricula.

Bill and his wife, Jean, have 7 children and 12 grandchildren. In 2001 they were awarded the University of Minnesota's Chancellors Society membership for their contributions to UMD.

In 2001 Bill and Jean established the UMD Millennium Geological Sciences Fund to support opportunities for undergraduate and graduate students within the Department of Geological Sciences, and in 2009 followed up with an AAPGF Grants-in-Aid program for the school.



SHARON MILITO
Teacher of the Year Award

Sharon Milito was born in Denver, Colorado. She was introduced to rocks at an early age by her grandfather, an amateur geologist, and later during weekend excursions to the family cabin in the Rocky Mountains.

Sharon received her bachelor's degree in elementary education from the University of Northern Colorado. Upon entering graduate studies at the Colorado College in

Colorado Springs, Sharon rediscovered rocks while working toward her master's degree. She received her Master of Arts in Teaching Integrated Natural Science in 2005.

During the following year Sharon earned basic and field certifications in paleontology at the Denver Museum of Nature & Science. Since then Sharon has acted as project paleontologist for two cooperative projects between the City of Colorado Springs and the Denver Museum of Nature & Science. Her field studies have provided information for the master plans for two Colorado Springs open spaces. Upon completion of the first project, Sharon had a paper published in *The Mountain Geologist* (the journal of the Rocky Mountain Association of Geologists) and co-authored a book entitled *A Geologic Folio of Red Rock Canyon Open Space*.

Sharon currently teaches fourth grade in Colorado Springs School District 11. She has been teaching children from preschool through fourth grade for 25 years. Sharon has used her geological experiences and writing to inspire her students to find awe in their world, to follow their dreams, and to never stop learning.