AAPG Honorees, 2012

KOENRAAD J. WEBER
Sidney Powers Memorial Award

Citation—To Koen Weber, mining engineer, geologist, mentor and gifted teacher, for his role in making reservoir and development geology recognized disciplines within the upstream oil industry. Trained as an engineer, he made his mark amongst petroleum geologists and enhanced Royal Dutch Shell's reputation for technical excellence amongst industry peers and academic colleagues.

Koen Weber made his mark on the oil industry by combining an incisive mind with curiosity, a willingness to face new challenges in unfamiliar surroundings, being very sociable and outgoing, and—last but not least—by hard work. Following his graduation as a mining engineer at Delft University of Technology (The Netherlands) in 1960, he was offered a job at Royal Dutch/Shell's newly established Exploration & Production Laboratory in Rijswijk (a suburb of The Hague). This R&D facility supported Shell's worldwide E&P operations while Shell's Bellaire Research Center supported Shell Oil's North American operations.

Although he was employed as a research engineer, Koen Weber quickly showed his practical savvy during an operational assignment in Iran. Being tasked with a comprehensive review of the volumetrics and production performance of several super-giant carbonate fields including Gachsaran, he quickly realized that paper records would not suffice to do a good job. By going out to the well site and witnessing the various data-gathering activities, he was able to prove that the paleontological correlations of those thick carbonate reservoirs were extremely inaccurate. During a well site visit he noted that the roustabout, who collected the drill cuttings, preferred to seek shelter in a shady spot and only once every hour or so collected a shovel full of cuttings from the shaker and filled 20 cutting sample trays in one go. These were then washed and labeled by another gentleman who also carefully selected the largest chips for thin section preparation. These larger chips were mostly cavings from coarsely crystalline dolomite intervals higher up in the open-hole section. The thin sections prepared from these cavings were then examined in great detail by the office-based paleontologist who correlated the wells on the basis of a few identifiable forams. Weber's conclusion was simple: the correlation scheme for the Asmari Limestone was not worth the paper it was printed on. A much more fundamental lesson was "Never take data at face value – always check data sources and data quality."

Having reported his findings about the doubtful reliability of the correlation framework to management, he then added insult to injury by recommending that all wells be wire-line logged. His suggestion to routinely log these marginally economic wells (average production: a mere 5000 barrels/day), was considered to be so clearly lacking in practical judgment that it nearly cost him his job. In defense of the managers involved it should be mentioned though that in those days oil was only $ 1.60/barrel and this left little room for fancy technology. This taught Weber another important lesson, "Always describe the benefits to be realistically expected when you propose a new technology or a change in standard practice." Throughout his professional career Weber consistently applied these two key lessons.

After this operational interlude in Iran, Weber returned to Rijswijk. In the early sixties it had just been realized that the Permian Rotliegendes sands, which formed the reservoir of the supergiant Groningen gas field, had been deposited in a desert environment. Consequently Weber was asked to help build better reservoir models of the poorly understood Rotliegendes gas fields under the North Sea. Another Shell geologist, Ken Glennie—the 2005 Sidney Powers medallist—went to North

Africa and the Middle East to study present-day desert environments. Koen Weber visited the Four Corners area of the United States to study ancient analogues of the Rotliegendes desert deposits. In Canyon De Chelly National Monument, Weber made detailed studies of the geometry and interval architecture of aeolian dune deposits. Weber's models proved to be very valuable in optimizing well patterns and well numbers in the development of Rotliegendes gas fields in the UK sector of the North Sea.

At Shell's Rijswijk laboratory, Weber not only worked on practical reservoir-characterization problems with immediate operational applications, he also worked on fundamental problems. He was for instance instrumental in developing a practical air mini-permeameter that allowed nondestructive measuring of small-scale permeability variations in both consolidated and unconsolidated reservoir rocks, over a permeability range of 1milliDarcy to 10 Darcy.

In 1968 Koen Weber was transferred, together with his wife Addy and their two young children, to Shell's Nigerian operating unit. During their two-year posting in Nigeria he applied modern sedimentological concepts in numerous reservoir studies. The practical value of his work was two-fold: (1) understanding how the reservoir geology influenced production behavior, and on the basis of that (2) improving reservoir management through optimized well placement and (re)completions.

Weber returned to Shell's EP research laboratory in Rijswijk in 1971, and was appointed head of production geology research. This marked the start of a very productive period in terms of publications. In 1971 and 1972 he published eight peer-reviewed papers covering a wide range of topics. The best known is "Sedimentological aspects of oil fields in the Niger Delta." He also demonstrated his wide-ranging professional interests with his papers on mini-permeametry, dipmeter interpretation methods, automated fluid-level detection in water wells, subsurface waste disposal, and most importantly the discipline in which he would establish his professional reputation: reservoir modeling.

During his second posting to Nigeria from 1973–1977 as Senior Production geologist, Weber still managed to do fundamental geological work, despite much increased managerial tasks. Weber established excellent relations with his Nigerian Shell colleagues, such as Edmund Daukoru, who became group managing director of the Nigerian National Petroleum Corporation in 1992. Subsequently Daukoru accepted positions as presidential advisor on Petroleum and Energy, Minister of State for Energy, and in 2006 President of OPEC. Weber and Daukoru jointly authored the well-known paper "Petroleum geology of the Niger Delta." Throughout his Shell career Weber maintained close links with the Nigerian oil industry and his former colleagues in that country. His important contributions to the earth sciences of this African nation were recognized in 2003 when the Nigerian Mining and Geosciences Society awarded him the NMGS/Shell Award. This is that Society's highest honor and all the more special as Weber is the only westerner to have received it.

Following his return to the Netherlands from his second operational assignment to Nigeria, Weber occupied increasingly senior technical positions in Shell. From 1977 until 1981, he was department head of Production Geology research at the Rijswijk R&D laboratory. In 1981, he moved to Shell's head office in The Hague where was in charge of the African/Asian Study Team, a petroleum engineering department with a professional staff of several dozen engineers and geologists. In this capacity, he had regular contacts with Shell's Nigerian operations.

In 1985, Weber de facto withdrew from day-to-day involvement in mundane management tasks. He accepted a position as Senior Consultant Reservoir Geology. In the same year he was appointed professor of Production Geology at his alma mater, Delft University of Technology. This dual role allowed him to pursue his research interests and keep publishing papers at a high rate. The count of published papers stands at over 50. This includes much-quoted classics such as "Framework for constructing clastic reservoir simulation models" and "The role of faults in hydrocarbon migration and trapping in Nigerian growth fault structures."

Within his busy schedule, Weber still found time for Distinguished Lecturer tours for SPE, AAPG and EAGE. In addition, he was an associate professor at the Ecole Nationale Superieure du Petrole et des Moteurs in Paris, and an external examiner at Heriot-Watt University (Edinburgh, Scotland) and at Imperial College (London).

Koen Weber retired from Shell in 1993 at the age of 59. This allowed him to devote all his energy to his research work and teaching duties at Delft University of Technology. In 1999, he officially retired as a professor at the age of 65. For

Weber retirement did not mean he stopped working; he perhaps slowed down a bit, but stopping—definitely no! As well as (co)authoring scientific papers such as the chapter "Petroleum Geology–Production" in the Encyclopedia of Geology, Weber is also doing archaeological research. The discovery of Flores Man some years ago rekindled his interest in archaeology. In the sixties, he had investigated Roman archaeological sites near Rijswijk, in Iran he had investigated Bronze Age sites, and in Canyon De Chelly the sites left by the Ancient Pueblo Peoples attracted his attention. His latest publication in 2011 is a paper entitled "Meteorites and mining," which is yet another example of Koen Weber's wide-ranging professional interests.

The award of the Sidney Powers Medal to Koen Weber in recognition of his impressive contributions to the science of petroleum geology and to our profession, is much deserved. This recognition by AAPG has been preceded by the award of the Van Waterschoot van der Gracht Medal by the Royal Geological and Mining Society of the Netherlands, the Wegener Medal by the European Association of Geoscientist and Engineers, and by an Honorary Doctorate from Heriot-Watt University.

W. J. Evert van de Graaff

Response

The message from Paul Weimer that I was to receive the Sydney Powell award was a very pleasant surprise. I should emphasize that most of my studies were carried out together with enthusiastic colleagues both in Shell as well as at the Delft University. In 50 years this means cooperation with so many people that I cannot mention all their contributions. Instead, please accept my heartfelt gratitude.

In place of going for a chronological overview highlighting important advances. In petroleum geology, it appeared to me more useful to use this opportunity to vent some philosophical ideas on how to conduct our business and to outline some basic principles that will not change with time. First, let us consider which factors will always enhance ones chances on a successful career as a specialist.

As a starter one requires a good comprehensive education preferably covering a wider range of topics than geology. Reservoir geology has been called "geological engineering" and a considerable overlap with geophysics, petrophysics, and reservoir engineering is necessary. Add production technology, drilling, statistics, and economics and you have an ideal curriculum. Luckily there are several universities with programmes that come close, including my alma mater in Delft.

The second step is to go to work for an employer who is in favor of using new technologies and who supports research. Next you should be surrounded by multi-disciplinary experts from whose experience you may learn the tricks of the trade and with whom you can cooperate in new developments. The key to success is when you can apply your ideas in practice and prove their value. Finally nobody can function well without the loyal support of an understanding partner. I was extremely lucky in this respect and my loving, resourceful, and well-organized wife is still with me after 55 years!

Any field development project should be approved with an open mind, without preconceived ideas. It is strongly advised not to plunge headlong into the job but to first review the data with a critical eye. It is very rare to find everything in order. Also much available and relevant information is often overlooked. One should not go too far in applying data from analogue fields or outcrops. Every reservoir has its individual characteristics although it may be a fairly typical member of a reservoir family. Regional data like geothermal gradients, pressures, seismic velocities and aquifer strength can all be of significant economic value.

Developing a field is very much a multi-disciplinary team activity, which means that there should be overlap in the knowledge of each other's specialty. Between seismologists, geologists, and petrophysicists this is often the case. However, reservoir engineers usually have studied physics or chemistry and to them geology is a very imprecise science wrought with uncertainty and using a strange jargon. As a starter it can be very useful to take reservoir engineers along to outcrops. At first they may see this as holiday trips but I was amazed how enthusiastic most of them became. Anybody walking along the Book Cliffs can't help to be impressed. Eventually we organized multi-disciplinary conferences for Shell personnel in places where the afternoon could be devoted to outcrop excursions.

The use of outcrops to derive sedimentological configurations and dimensional relationships or even fault zone characteristics has become widespread. Unfortunately the information is scattered over many companies and universities. Therefore I am strongly in favor of the plan to create a generally accessible outcrop database. In fact,

at Delft we prepared a software package for this purpose which so far has not been used for lack of a suitable custodian. It would be great if AAPG could take up this task.

Looking back on my experience in field studies I was struck by the phenomenon that in most cases reservoir behavior was dominated by only a few crucial parameters such as the presence of open fractures or baffles to vertical flow. Often such parameters cannot be evaluated via geological studies alone. Pressure build-up tests, pulse-tests, and well performance analysis may be required. Here it pays off to estimate the economic value of obtaining a proper reservoir model and also to convince management in time to carry out the tests at an early stage. Another factor often forgotten is the time needed by contractors to bring up non-standard equipment to meet the restricted time-window allowing the measurements.

For specialists, confidentiality is a nasty word. There is always a strong reluctance from management to publish interesting data and research results. This is understandable but in the end it is self-defeating. The exchange of ideas between people working in the same profession is nearly always very beneficial for both parties. Conferences and forums are the ideal venues to vent one's ideas and invite comment and discussion.

My personal experience is very positive and I have also made many friends among the kindred spirits you meet at conferences. Publications are also useful and serve an important purpose. From the company's point of view it shows the world that it employs good specialists and the authors benefit from the reactions that follow the publication of an interesting paper. Needless to say that the excursions that are organized around conferences are also opportunities for fruitful discussions and making friends. Ideally you develop a network of friends around the world with whom you can continue to keep in contact.

At the end of a long career in the industry one has gathered vast experience and it would be a great pity to lapse into an idle existence just playing golf. I had the luck to be nominated as professor in the Delft University in 1985, which could be combined with my job with Shell. This was an excellent chance to share my experience with a large group of enthusiastic students. Also many chose to do a research thesis study in reservoir geology. These were busy times but most rewarding and, looking at the present jobs of the graduates, fruitful. After retiring from Shell in 1993 I could devote much more time to the university and also give week-long reservoir geology courses in many countries. I think that this is a suitable activity to spread ones knowledge and experience among the next generation of petroleum engineers.

Unfortunately I cannot attend the Long Beach conference due to a malfunctioning leg that renders me poorly mobile. This may appear to be a great nuisance but now I can use my time to study many subjects for which I never had time. Recently my interest was caught by meteorites whose subject offers a vast scope for further studies.

I would like to end with again thanking the AAPG committee for granting me this prestigious award and wishing you all a wonderful conference.

K. J. Weber

ROBBIE R. GRIES
Michel T. Halbouty Outstanding Leadership Award

Citation—AAPG's Halbouty Leadership Award is awarded to Robbie Gries for her pioneering and relentless efforts to advance the society's reach to women, young geoscientists and the international community, not only as its first female president, but as a successful explorationist with an un-matched enthusiasm and passion for the profession of geology.

Perhaps the most rewarding thing a biographer can do is to take some time to dig a bit deeper into an awardee's background and try to figure out "what makes them tick." Robbie grew up the daughter of a Gulf Coast shrimper, surrounded by the "oil patch" but oblivious about geology or oil and gas exploration. Like most 19 year olds, she was struggling to meet several science requirements when she stumbled into a geology course at Del Mar Junior College in Corpus Christi in 1963.

Robbie transferred to Colorado State University to take up geology as a career. In the mid 1960s, CSU

had a small department where you knew all the professors and all the students. The Rockies and all the geology they offered were your backyard, available in a bicycle ride from campus. At CSU, Robbie broke new ground, as the first female geologist to take field camp and the first female graduate from the department. By the time I entered CSU in 1978, women were well established and Robbie was already well on her way to success as an oil-finder with Texaco in Denver, Colorado.

At Texaco, Robbie broke further barriers to women, took on the dual role of mother and geologist and was one of the pioneer Denver women to insist on, and be allowed, well site duty. At Reserve Oil, a couple of years later, she was the first woman geologist to be granted membership in the exclusive Denver Petroleum Club.

I met Robbie first at an RMAG luncheon talk in 1981 in Denver where she had the audacity to proclaim that oil and gas would be found by drilling through the Precambrian thrust faults of the Rocky Mountain foreland. It was a hotly debated topic, with prevailing wisdom that the Rockies were a normal fault province. Her championing of compressional tectonics theories and future sub-thrust hydrocarbon resources were later proven through drilling. She continuously challenged conventional wisdom, with other plays like the San Juan sub-volcanics and tight gas exploration in Ireland. More importantly, Robbie demonstrated through sheer competence and leadership that "things were going to change in the oil patch." The days of this industry being dominated only by men were rapidly dying.

I have always found Robbie's enthusiasm and leadership inspirational. She invited me into geological study groups in Denver (where prior to her inclusion women had been blackballed from participation) and when working with her on RMAG or AAPG committees, she always sought long-term change and saw a future where others often saw an end. Her passion for the profession was infectious. She convinced many young geologists to volunteer and expand their own careers.

Robbie's accomplishments are many and varied but share a common theme-- a deep and abiding love for the science and the people who work in it. Most remarkably, perhaps, is the trust and confidence she imparts to, and instills, in others.

In the late 1990s, while I was living and working for Amoco in Cairo, Egypt, and serving as AAPG's Egypt Team Leader, Robbie contacted me about bringing the international convention to Cairo. Aside from a small Hedberg conference on rifts we had organized in 1998, AAPG had virtually no presence in Egypt. She began the conference discussions during a visit as AAPG President-Elect, starting two student chapters in the process. I still remember the "thinking out of the box" presentation she made to students at Cairo and Ain Shams Universities and the throngs of students bombarding her with questions after the talk. It is a scene that would be repeated many times across many countries.

Like most Americans, we all remember where we were on September 11, 2011. For me, it was in Cairo during a technical review when the announcement came that the Twin Towers had been destroyed by a terror attack. For Robbie, it was in the SEG convention in San Antonio, where, as AAPG president she, along with representatives of SEG, EPEX, EAGE and EGS were meeting to finalize agreement for a joint conference in Cairo in 2002. Both meetings, separated by thousands of miles, abruptly ended. It would have been easy to simply cancel plans and relocate AAPG's 2002 convention to a less controversial part of the world. In addition, this was another first for all societies: a large joint session shared by five organizations. But Robbie placed her trust in her colleagues. All she asked was commitment and a decision. Her trust and quiet leadership proved inspirational. The 2002 AAPG/SEG/EAGE/EPEX/EGS Cairo conference, against many odds, was a technical and financial success. Today hundreds of Egyptian students and teachers are active members of AAPG, culminating last year in a team competing for the Barrel Award as the winner of the Africa section IBA.

While I worked in Russia for TNK-BP, my wife and I had a chance to tour Robbie around Moscow to talk at local universities. I was particularly impressed with the large numbers of young women who flocked around her, inspired by the first woman president of AAPG. She was literally mobbed with students, over 60% of who were women. Many of those young women are now firmly entrenched in companies around the world, or finishing their doctorates and entering the teaching profession in the field of geology. She gave them a clear vision of what they could aspire to as professionals. Chuck Caughey experienced a similar horde of students driving across

Indonesia to hear her talk in Jakarta. Kunle Adesida twice experienced up to 900 students vying to hear and meet the AAPG president in her two visits to Nigeria.

The rare qualities of confidence and trust that Robbie places in people challenges many to "rise above their expectations." This is the reason she has been successful as an independent oil and gas operator, AAPG president, mother, and colleague. Her awards are too many to cite, but include AAPG's Honorary Membership, Distinguished Service, and the Levorsen award. She is a long-time AAPG Trustee Associate, HOD delegate, and has served on and chaired a large number of AAPG committees.

Recognizing the need to retain and recruit young women, Robbie was instrumental in forming the Prowess Committee a few years after her memorable mini summit on ethnic and gender diversity. She organized a "Summit on Section Meetings," which was the first time section leadership had a chance to meet collectively and share ideas and experiences. She greatly expanded the International Distinguished Lecture effort for AAPG and later established the Distinguished Ethics Lecturer. With Sharon Mosher, president of GSA, she helped to found GeoScience World, an Internet resource of critical publications for geoscientists. Robbie championed, and helped to finance and create, the International Pavilion which permanently added a global component to the AAPG Annual meeting. The first two years after AAPG inaugurated its International Regions, Robbie traveled to each region to solidify relationships and advise on the mechanics and rewards of volunteering for AAPG. Peter Lloyd inspired this travel when he organized a tour for her throughout the Asia Pacific region. Walter Grun accompanied her through a nine-country tour of Eastern Europe. She went on to Western Europe, to the Middle East with Ibrahim Al-Ghamdi and then included central and South America in her travels as well as a couple of trips to Canada.

I could continue to list and extoll Robbie's numerous awards and accomplishments, but that does little to really tell about her as a person and role model. It is Robbie's unabashed enthusiasm for geology and the people in it that will be her lasting legacy. Robbie has that rare talent of waking up every day believing the world can be a better place if you just want to make it so. She inspires others. She places trust in people. She make them to think "out of the box," both as individuals and professionals.

The rare gifts of optimism, boundless energy, and faith in others are the reasons Robbie is so deserving of the AAPG Michel Halbouty Leadership Award.

John Dolson

Response

Geology did not just open the door to an exciting and challenging career. Geology has been the source of countless friendships both close to home and around the world. I look back at the landscape of wonderful people in my life and see that most of them were derived from our shared love of geology.

Volunteering never seemed to add as much "work" as it added gratification and wonderful interactions with other geologists. One of my first volunteer efforts was as the program chair for our weekly RMAG luncheon meetings. I was blown away by the special opportunity it afforded me to meet hundreds of learned and respected geologists. What a great job that was! That feeling of being so rewarded has underpinned all of my excitement and enthusiasm for organizing meetings, committees, and other working groups.

Even with my highly accomplished surgeon daughter, we share many conversations about rocks encountered on trips and hikes, about life and evolution. What fun geology can be. I get so much pleasure out of other people enjoying the earth too! What a wonderful career this has been and still is!

Thank you, Hugh Doney! For introducing me to geology at Del Mar Junior College. Thank you Mac McCallum, at Colorado State, for challenging me to do my best. Thank you Charlie Bell, at UT Austin, for seeing my future as a professional before I did. And thank you to Denver mentors early in my career, Jim Uhrlaub, George Lewis, Lou Bortz, Norm Foster, and Jack Parker. Special thanks John Mason, who gave the best of advice in my consulting and independent days...he has been my smartest and most exacting colleague and friend.

And for over thirty years of sustained love and support, I thank the "Good Ole Girls" (our duplication of a "Good Ole Boys" camaraderie!), which included Randi Martinsen, Susan Landon, Penny Frush, Anny Coury, Cindy Stewart, Nancy Darnell, Jeanne Harris, and Christine Turner. Along with Jane Woodward of Palo Alto who was alternately both a protégé and mentor and always a friend, I owe massive appreciation. Susan Morrice and Sharon Mosher

pushed me and conspired with me to wonderful innovations in our profession. I thank you all. And, to David Bailey, my loving spouse, who tolerates the continued volunteering with patience and a smile (or is that a grimace?), special thanks.

Robbie Gries

ADEKUNLE ADEGBOYE ADESIDA
Honorary Member Award

Citation—To Kunle Adesida for his total commitment to AAPG ideals in mentoring the next generations of AAPG members and competent petroleum geologists.

Kunle Adesida was born in Akure, Ondo State, Nigeria to the Royal family of the Adesida dynasty. With about 31 years of cognitive and industry experience, Adekunle A. Adesida retired from Shell Nigeria in 2008 and set up a consulting company for Basin analysis and environmental geological studies.

He earned a B.Sc. (Hons) degree in geology from the University of Ibadan in 1978, an M.Sc. degree in applied geology from the University of Ife (now Obafemi Awolowo University, Ife), and a Ph.D. degree in geology (environmental geology) from University of Benin, Nigeria. He was a German government and French government Scholar while in the graduate school in 1979. He is a recognized expert in the fields of sedimentary depositional environments, basin evaluation and modeling. He worked extensively on environmental issues in the Niger Delta.

Kunle spent 28 years in the service of Shell Nigeria and worked in several parts of Nigeria and in several countries in which the Shell Group operates in various petroleum basins of the world. He worked in Warri, Port Harcourt and Lagos in Nigeria, Den Hague and Rijswijk in The Netherlands, Aberdeen in Scotland, Seria in the Emirate of Brunei Dar-u-Salam, South-East Asia. He worked in various responsible capacities in these places.

Adesida's entire career was principally in exploration geology with emphasis on petroleum exploration processes. His last assignment before retiring was as Business Manager-Commercial Crude and Gas Handling for the entire African continent.

Some of the notable milestones in Kunle's career include his understudy of the research nerve center of the Shell Group and his success in leading Asset Teams in locating new hydrocarbon deposits in Western Niger Delta. At one point, he was head of the Waste and Oil Spills Management Team for the entire Western division for Shell—an experience that puts him in a unique experience in environmental and Government issues. Kunle, at the time of his retirement in 2008, was the Business Manager, Commercial Crude and Gas Handling Africa Region for Shell. He also handled the unitization of straddled fields for Shell in the early phase of his job as Commercial Manager.

Since his retirement, Adesida has gained experience in evaluating open acreages offshore Ghana. He has carried out regional geology work including basins evaluation and modeling for some marginal field operators in Nigeria. He worked with others on the application of nonintrusive geophysical tools including ground penetrating radar (GPR) and vertical electrical sounding (VES). These techniques have yielded positive results in the identification and delineation of crude oil contamination plumes within the shallow subsurface sediments of the Niger Delta.

Adesida has served AAPG in many capacities since he joined as an active member in 1985. He was elected President–AAPG Africa Region in 2003 and was a member of the House of Delegates from 1997 to 2000.

He was Chairman, DEG Hydrogeology Committee from 1999 to 2002. He served as Vice Chairman Membership Recruitment committee from 2010 to 2011. He is a member of the Publication Pipeline subcommittee, Visiting Geoscientist Program committee, DEG Environmental Issues committee, Membership Enhancement and Development Ad Hoc committee. In 2008 Kunle vied unsuccessfully for the position of the AAPG Vice President–Regions. The campaign process exposed him to some AAPG Sections and Region (Cape Town, South Africa) and enhanced his firm believe in AAPG objectives as a truly International Geological Association of choice.

Kunle and his colleagues set-up over 25 AAPG Student Chapters in Nigeria Universities out of which more than 12 are fully registered with AAPG. He coordinated the first AAPG-IBA Competition in Africa Region.

Kunle received the AAPG Certificate of Merit in 2005 and in 2007 he received the AAPG Distinguished Service Award in Long Beach, California. Kunle and his colleagues including the Past President of AAPG, Scott Tinker, encouraged and nurtured the current close relationship between AAPG and NAPE. In 2009 Kunle coordinated the Nigerian student participation in the Indiana University-organized Field Immersion Program. He was widely acclaimed for his effort in this regard.

Kunle is currently chairman of AAPG's International Region Committee (2010–2012) working together with the Vice President–Regions and the Regions Presidents to oversee the development and growth of AAPG in the five AAPG Regions in Africa, Asia Pacific, Canada, Europe, Middle East, and South America.

He has published numerous (Shell in-house) scientific papers including over 24 technical papers, and received many professional accolades. He is a Fellow of the Obafemi Awolowo University, Federal University of Technology, Akure, Fellow of Nigerian Association of Petroleum Explorationists (NAPE), Distinguished Service Awards of AAPG etc. in his name.

He is an active member of Nigerian Association of Petroleum Explorationists (NAPE), Kunle was the pioneer Chairman, NAPE University Assistant Program (NAPE-UAP) from 2000 to 2005, Chairman, NAPE Election Committee (2010/2011), Chairman, NAPE Young Professional Committee (2011), Chairman, NAPE Advisory Council (2011–2013). As an active member of Nigerian Mining and Geosciences Society (NMGS), Kunle is the current chairman of the Technical committee for the 2012 NMGS "EKO 2012 International Conference and Exhibition."

After retirement from Shell, he proceeded to the Department of Geology, University of Benin, Nigeria from 2008 to 2011, to pursue his academic interest with the conclusion and award of his Ph.D. degree.

Currently, he is the Managing Director and Chief Executive Officer of Geoterrain, Nigeria Limited, providing added-value in the exploration and development consulting as well as in environmental studies. He has also been involved in oceanographic and marine studies. In addition, he carried out some prospects and asset management services to the Government, some international oil and gas companies, and marginal field operators in Nigeria.

Kunle is a strong believer in partnering and collaboration with seasoned consultants, companies, and hard-working individuals. Thus, he continues to lead his company through the "walk the talk" concept in in his company, Geoterrain Limited.

He is married to his lovely wife, Oyinlade, and blessed with children.

Adebayo Akinpelu

Response

As I walk through time of life with members of my family, friends and colleagues, I continue to praise God Almighty for His guidance and blessing. One aspect of such a walk, is being translated to an unexpected reward by AAPG, a geological association of first choice, for me and all my collaborators in these various walks of life. I sincerely thank AAPG and her technical, operational, and management bodies for deeming it necessary to honor my humble self and my colleagues with the AAPG great award of honorary member, the third highest Award of AAPG instituted in 1919 .

When I joined AAPG in 1985, while on Shell employment in Seria, Brunei, South East Asia, hardly did I know that I will be bestowed with this prestigious Award–Wahoo, Dr Pete Jean and Mr Fox Holmes were right-they were then, my Chief Geologist and Exploration Manager respectively. Many thanks to them for their individual foresight and encouragement. To my former company Shell Nigeria, whom its resources were placed at all staff disposal to explore, exploit, and professionally manage her hydrocarbon resources from different sedimentary basins, I say thank you. When I joined Shell in Lagos Nigeria in 1980, as a young man, I was fortunate to have worked for and with astute professionals, my exploration managers, chief geologists, chief geophysicists, surveyors, geoscientists, engineers , among whom were Chief Edmund Iyamo (the first Nigerian Exploration Manager), Dr. Edmund Daukoru (former Petroleum Ministry,)
Dr Ebi Omatsola,
Rev. Precious Omuku,
Dr. Layi Fatona,
Mrs. Folu Ogunsanmi,
Dr. Herman Sedieono,
Dr. Peter Stacher, Dr. Mario Warner,
Dr. Rudi Echert, Dr. Geerlings,

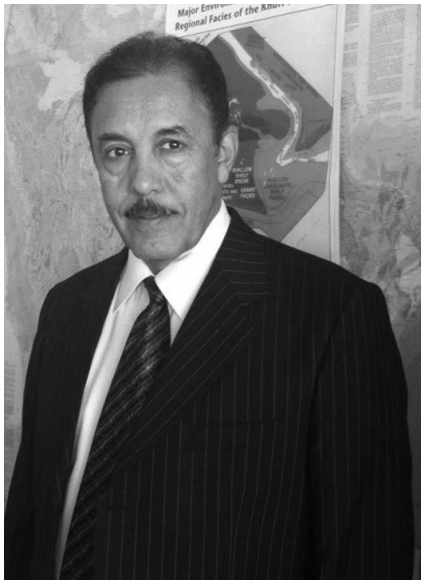
Dr. Agu Kansler and numerous professional geologists, seasoned engineers and administrators, Chief Femi Adesanya, Engineer Albert Aramabi, Engineer (Dr.) Dapo Oguntoyinbo, Dr. Femi Okuseinde, etc. These are great mentors of repute, whom I say thanks for mentoring me at different stages of my career in Shell. To my numerous colleagues and friends in Shell, whom we worked together, as I passed through the various technical functions of the Shell system: exploration, environmental, venture relations (with government, regulators, Shell third parties, international oil company, marginal field operators,) and commercial functions, I say thank you for being there to share your professional knowledge for our common company aspiration. It was a fulfilled work life in Shell. One of my key learning points in life is to always give professional consideration to any official job offer to you by your employer. These postings at different times of my work life, exposed and built my professional understanding of the various aspects of the job requirement and key professional values, i.e., interpersonal skills, portfolio management, and mastery of some of the necessary management acts. Thanks to my friends and colleagues in Shell Nigeria, Chevron, ExxonMobil, AGIP, TOTAL–ELF, Panocean, ConOil, Nigeria National Petroleum Company, Department of Petroleum Resources, Marginal Field Operators for their support and positive attitudes to challenges.

AAPG is an organization that places a lot of emphasis on continuing education and development of Young Professional-a program that is being resonated by many associations and societies today. When I was in college and subsequently gained admission to the prestigious University of Ibadan, Nigeria in the Department of Geology, I was opportune to have been taught and guided both in the classroom and geological field trips by dedicated and hard working geologists among whom are Prof. Oyawoye, Prof. E. Fayose, Prof. Badejoko, Prof. A. Adeleye, Prof.A. Elueze, Prof. G. Imokpharia, Prof. S. Molomo, Dr. S. Agagu and rapidly followed too, in my postgraduate schools at the University of Ife and University of Benin, Nigeria with Prof. O.S. Adegoke (then the youngest professor), Prof. O. Rahaman, Prof. Dash, Prof. B.D Ako, Prof. T.R Ajayi, Dr. E. Enu, Prof. F. Okieimen and many lecturers. They, at different times, have continue to act as an effective platform for my personal development through interactive networking and at the same time positively touched my academic build-up. I am indeed grateful.

AAPG has being a great professional association that many geoscientists are eager to join as a member because of its objectives and achievements. Through these objectives, it promotes and foster challenging and successful career development in the energy and academic business environment while enhancing competence in professionalism, career guidance and learning through her various programs. I have benefited from these various program through networking and support. I seized this opportunity to express my unreserved thanks to my friends and colleagues in AAPG, NAPE, NMGS etc. for their encouragement while being a member of committees. To AAPG past presidents, Mrs. Robbie Gries, the first woman president of AAPG, Dr. Richard Bishop, Dr. W. Lee, Dr. Scott W. Tinker, Mr. David Rensink and their cabinet executive members for their foresight in propagating the ideas of AAPG beyond the shore of the Americas to other Regions of the world. I have traveled through the length and breadth of the USA, Africa, Europe etc. attending AAPG Annual, International, Region and Sections Conferences, and Leadership meetings, a process that increased my knowledge base. Thanks indeed to all my friends and colleagues in the many committees that I am or was a member or chairman at different times. I am grateful to AAPG HQ in Tulsa, Mr. Rick Fritz, Mrs. Carol McGowen, and the Nigerian Association of Petroleum Explorations was instrumental to all my success in the Association. I have great appreciation for her support with recognition of the members and executive members. I will like to thanks Chief (Dr.) Tunde Afolabi, Chief Femi Akinmade, Rev. Precious Omuku, Dr. Lambert Aikhonbare, my biographer Mr. Bayo Akinpelu, Mr. Nosa Omorodion, Mr. James Agbenorto, Mrs. Doja Ojelabi, Mr. Jide Ojo, Mr. Afe Mayowa, Dr. Kehinde Ladipo, and numerous friends and colleagues. My apologies to numerous friends and colleagues that I cannot mentioned. I indeed appreciate you all.

To my family members, my lovely wife, Oyinlade, and my children for their patience and encouragement in my day-to day-work for AAPG and humanity. To God be the glory.

Adekunle Adegboye Adesida



IBRAHIM AL-JALLAL
Honorary Member Award

Citation—To Ibrahim Al-Jallal, for his twenty-five years working with Saudi Aramco, his study on Khuff Formation and for his initiation and organization of the first GEO in the Middle East.

Ibrahim received his Ph.D. from Imperial College, University of London, and his M.Sc. in geology from Western Michigan University, USA and a B.Sc. in geology/chemistry from King Saud University, Riyadh, Saudi Arabia.

He has served 25 years in Saudi Aramco in petroleum geology related work, worked as a geologist in several areas including well site operations, fields' development, mapping, and reservoir predictions. This work involves the reservoirs of the Khuff, Arab, Fadhili, Hanifa, Unayzah and Jauf. Ibrahim has a strong background in the geology of Saudi Arabia, its reservoirs and fields, reservoir characteristics and development. He worked for about a year with the Eprco Exxon research center in Houston as a training assignment in carbonate cores, thin sections, reservoir characterization and mapping of the Arab Formation.

Ibrahim's Ph.D. dissertation was in the Khuff Formation depositional environments, digenesis, reservoir characteristics, development, log characteristics of Khuff facies and reservoir prediction in Ghawar Field. In that work, he described about two kilometers of carbonate cores from the Khuff and more than 3000 thin sections, integrated them with logs and zoned the Khuff into depositional beds that conformed with the reservoir flow layers. He later extended the reservoir prediction studies of the Khuff to include all Saudi Arabia and the Gulf countries. He has been keen in digitizing technology and worked since 1999 in core description digitizing and was awarded a patent in 2008 for a core-voice recognition digitizing device along with his colleagues, T. Dhubaib and D. Cantrell of Saudi Aramco.

For approximately two years, he lead a team of sedimentologists, palynologists, stratigraphers, and geophysicists to develop the first subsurface integrated geological study of the Jauf Formation North of Ghawar area. He was the principal author of the Aramco report titled "Jauf Formation subsurface mapping, integrated depositional model and reservoir quality, guided by seismic and gravity, a regional overview, north of Ghawar area," presented at GEO 2000.

He has held several management positions, the last two positions were the Chief Geologist of Southern fields, including Ghawar field, and the Chief Geologist of Geological Research & Development at Saudi Aramco. He has presented and published several papers in the Saudi oil and gas fields, attached is a list of these presentations and publications.

Ibrahim has organized (as the general secretariat) the first Geosciences Conference in the Gulf (GEO 1994). He has initiated the GEO 94 while he was the president of the Dhahran Geosciences Society (DGS) in 1991. He initiated the first joint symposium between DGS and SPE (local chapter) in 1990 and represented the DGS. He represented Saudi Aramco in the ADIPEC for several years. He organized the panel on the challenges of current and future reservoir management in ADIPEC 2002. He initiated and organized the carbonate porosity prediction forum and called for its consortium research in the Gulf (GEO-2004). He organized the first focused regional Khuff workshop in the region in 2007 and organized in 2009 the Paleozoic clastic gas reservoirs workshop addressing the challenges of their predictions and tight gas in the Gulf, both workshops had core displays, posters and oral presentations. He has worked with the Executive Committee board of directors of MEPEX from 2009 to date. For the first time, this business is now being developed in the Gulf where more than half of the world's petroleum reserves reside. In 2010, Ibrahim became the managing director of a new E&P company called Hoqool Peroleum International. The propose of this company is to introduce and promote the Gulf and Middle East to oil and gas business culture as it is lacking the special attention from the investment side, while the Gulf storage owns very huge reserves of the petroleum.

Ibrahim was involved in organizing many geological field trips in Saudi

Aramco, including the Phanerozoic outcrops; he also organized a Paleozoic special field trip to solve the Permian sands bodies' nomenclature in Saudi Arabia.

Reports/Presentations/Publications

1. "Integration of depositional, diagenetic and seismic tools to predict reservoir quality of Khuff Formation in eastern Saudi Arabia., GEO 2004, Bahrain, March, 2004."
2. "Integration of depositional, diagenetic and seismic tools to predict reservoir quality of Khuff Formation in eastern Saudi Arabia, SPE Forum, December, 2003, Dubai."
3. Co-author in "Accurate reservoir characterization to reduce drilling risk in Khuff-C Carbonate, Ghawar field, Saudi Arabia, GeoArabia, Vol.7, No. 1, 2000."
4. "Effective use of depositional and diagenetic tools to predict good reservoir quality of Khuff Formation in eastern Saudi Arabia, and the Gulf Countries", AAPG, Cairo, October, 2002."
5. "Jauf Formation subsurface mapping, integrated depositional model and reservoir quality, guided by seismic and gravity, a regional overview, north of Ghawar area, in Press 2000", presented in GEO 2000."
6. "The regional Khuff reservoir potential in Saudi Arabia", 1996, presented at the first Saudi Earth Science Society Meeting, University of King Saud, Riyadh.
7. "Depositional Environments, Lithofacies Types and Reservoir Development of the Permian Khuff Formation" in Eastern Saudi Arabia", extracted from my Ph.D. presented at the AAPG International Convention, London, September, 1991.
8. "Sedimentation of the Khuff Formation and time significance in stratigraphic correlation". Presented at the SPE/DGS Symposium.
9. Ph.D. dissertation, "Depositional Environments, Diagenesis and Reservoir Characteristics of the Permian Khuff Formation in Eastern Saudi Arabia, August 1989".
10. As a co-author, in "Lithofacies, Diagenesis, and Depositional Sequence; Arab-D Member, Ghawar Field, Saudi Arabia". SEPM core Workshop No. 12 March 1988.
11. Was involved in core workshop Ghawar Arab-D Reservoir display between EPRCO and ARAMCO, AAPG Convention 1987, Houston.
12. "Sedimentary Features of the Permian Khuff Formation: A Fossil Analog to Quaternary Arabian Gulf", presented at a conference on "Quaternary sediments in the Arabian Gulf and Mesopotamian Region", February 1987, Kuwait.
13. "Diagenetic Effects on Reservoir Properties of the Permian Khuff Formation in Eastern Saudi Arabia", the Middle East Oil Show, March 1987.
14. "Uthmaniyah Khuff-B Reservoir Study", Progress Report, September 1985.
15. "Preliminary report on Khuff-B zonation, deposition, diagenesis and reservoir properties, Shedgum-'Uthmaniyah", May 1984.
16. "Petrography part" in the "Core Analysis Report, Qatif well-58 Arab-C Reservoir", May 1984 done by EPRCO. EXXON.
17. "The Khuff Formation, its Deposition and Reservoir Development in some selected wells, Ghawar Field", presented at the First Geological Technical Meeting held in Dhahran, December 1984.
18. "Petrographic description, lithofacies, and a discussion on the depositional and diagenetic environments", Qatif-67, Arab-D reservoir, May 1983, later incorporated with EPRCO Core Analysis Report June 1985.
19. "Petrographic description and lithofacies, Qatif-59 Arab-C reservoir", May 1983, later incorporated with EPRCO Core Analysis Report, May 1985.

Hussain M. Otaibi

Response

I am really honored to be nominated by my friend Hussain Otaibi, for the AAPG 2012 Honorary Member Award. He recently told me to get prepared to receive the Award, this is not the first time he surprised me. I never forget his reception when I finished my Khuff studies, 1990. I want to thank him very much, not only as my best friend personally but also as a talented peer at work. My contribution to the DGS has started with Hussain, when he asked me to do the first DGS symposium in 1990, I replied: let us make a joint venture with the SPE, and we made it with a proceeding (the First Saudi Aramco joint SPE/DGS Symposium).

My interest in geology started in high school; I was fascinated by the complex names of fossils such as *Archaeopteryx*, the extinct primitive bird of the Jurassic. I received a B.Sc. degree from King Saud University, an M.Sc. at Western Michigan University, USA, 1979, then joined Aramco and worked for eight years, then I went for a Ph.D. at Imperial College, University of London in 1990.

My contribution to the geosciences communities started with DGS. I was lucky to be the first one who paid my dues to the Dhahran Geological Society (DGS). The treasurer, Rami Kamal,

suggested to start with the number 300, so my number was 301 in the DGS membership, 1987. I was elected in 1990/1991 as the president of the Dhahran Geological Society during this time; (1) we applied for the AAPG affiliation, and have been accepted 1991; (2) I have initiated the idea of the GEO and approached AAPG to do it jointly in 1992; (3) established the "Oil Drop" name for the DGS newsletter; and (4) established a board of directors for the society and special fund from various contributors.

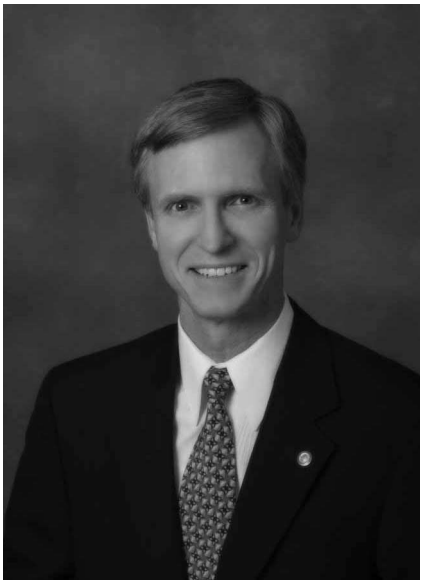
My story of initiating the first GEO was challenging and interesting; it started in DGS monthly meeting when I decided to announce the creation of GEO Event Campaign in the fall of 1990. One of the obstacles was from E&P management concerning the data confidentiality, disappointed, but with the belief that it was the best thing for the Gulf, I was able to proceed. Moujahed Husseini retired in 1991 from Aramco and immediately supported me, consequently Mahmoud Abdul-Baqi, vice president of exploration supported the idea, and transferring data was not an issue any more! Mohammed Al-Dandany, (DGS president 1991/1992) and I asked M. Abdula-Baqi to chair the GEO94. I organized the event and program, his secretary Ann McGrath helped me in typing and faxing (no Internet at that time), M. Hussaini helped in organizing the Geophysical side and editing the GEO 94 book which later became the *GeoArabia Journal* of the GEO through his firm (Gulfpetrolink).

During my campaign for the GEO, I wrote a letter to Fred A. Dix, Jr. the executive director of AAPG in May 22, 1991, and asked him for a joint AAPG-DGS conference. Fred sent me a very encouraging letter, here, a quotation from his letter in July 25, 1991: "The Executive Committee was pleased that newly affiliated society would come to us with a conference proposal so quickly."

We discussed the conference details during the AAPG International, London, in September 1991. Gary Hall represented AAPG at the GEO94. The success of AAPG internally in the U.S. and internationally to organize such conferences, courses, coordinate field trips, update professionals through the *AAPG Bulletin* and conventions and the AAPG overall organization kept me attached to AAPG for my career.

Other activities for oil industry: I represented Saudi Aramco in the ADIPEC (1992-2004). I organized a panel on the challenges of current and future reservoir management in ADIPEC 2002. I initiated and organized the carbonate porosity prediction forum and called for its research consortium in the Gulf (GEO-2004). During 2004, I was elected to be a member at–large in DGS during Ali Hawaj's term, I contacted several societies of the Gulf to come together and start sharing monthly meetings with the idea of establishing an Arab Society for all the geoscientists in the Arab world, we even suggested AGS (Arab Geosciences Society), but it did not materialize. After my early retirement from Aramco, I organized the first focused regional Khuff workshop in the region in 2007 and organized the Paleozoic clastic gas reservoirs workshop in 2009 addressing the challenges of their predictions and tight gas in the Gulf, both workshops had core displays, posters, and oral presentations with books of abstracts. I have worked on the Executive Committee board of directors of MEPEX since 2009 to date. MEPEX, the Middle East Prospect Exhibition is the place for concession exhibitors, investors, businessmen, bankers, geoscientists, and legal firms to get together, display their products, study joint ventures, and make E&P deals in the Gulf, thanks to Faisal Al-Mahrous who initiated the MEPEX. In 2009, Faisal Al-Mahrous, CEO, BAPCO, Bahrain suggested the Arab Society again, I fully supported the idea, we gave them the name APA (Arab Petroleum Association), and we reserved the name for a website building. We even discussed the idea recently during the MEPEX with Jordanian and Egyptians geologists, all supportive, hoping it becomes true Arab professionals springs, following the recent political springs. The APA can play a major role in the Middle East Region and add value to AAPG in organizing such conferences and workshops. In 2005, I have established Sandroses Geological & Petroleum Consultancies. In 2010, I have been appointed as a director of a new E&P Company "Hoqool Petroleum International." The propose of these firms is to introduce and promote the Gulf and Middle East to oil and gas business culture to investors, businessmen, and bankers as there is an apparent lack of petroleum investment culture and knowledge. My career with Saudi Aramco includes 25 years of work in petroleum geology related work including carbonates and clastics including some management positions, this is all covered by my biographer.

Ibrahim A. Al-Jallal



LEE TRAVIS BILLINGSLEY
Honorary Member Award

Citation—To Lee Billingsley, superb leader, distinguished petroleum scientist, inspired and tireless volunteer, dedicated mentor and teacher, whose selfless dedication has benefited our profession and AAPG.

An article in Fortune Magazine stated that the manager administers, the leader innovates; the manager maintains, the leader develops; the manager relies on systems, the leader relies on people; the manager counts on controls, the leader counts on trust. Lee has shown these leadership skills in his professional career and in working with professional societies and as a result is consistently offered leadership roles. Lee is currently vice president of Abraxas Petroleum Corporation in San Antonio, Texas, and in 2006-2007 he was AAPG president—AAPG's ultimate leadership role. He is currently chair of the key AAPG/SEG Geo-Integration Committee, which is charged with designing the future course and opportunities between SEG and AAPG.

When asked why he chose a career in geology Lee said, "I liked science and I liked being outdoors so geology was a perfect fit!" A native of Albuquerque, New Mexico, Lee attended Texas A&M University, graduating in 1975 with a B.S. in geology. He then enrolled in the Colorado School of Mines and completed his M.S. in geology in 1977. During these years at Texas A&M and the Colorado School of Mines his professors encouraged him to become active in AAPG. He quickly realized that volunteer work was not only very enjoyable, but also supported development of his professional career. Lee has been a consistent volunteer since that time, filling leadership roles for local, regional, and national societies. In addition to his leadership accomplishments listed above, Billingsley has been president of the South Texas Geological Society, AAPG treasurer, GCAGS convention chairman, and chairman of numerous convention committees.

One key to Lee's character is he never is satisfied to do things halfway. He is in constant search for knowledge and data to develop a high level of expertise in any project he tackles. After two years in industry with Tenneco Oil and later American Quasar Petroleum, Lee decided he might want to teach so he went back to Texas A&M in 1979 and obtained his doctorate in 1983. Teaching has been one of Dr. Billingsley's passions throughout his life—whether to students, young professionals, or his peers. Lee remembers how his teachers helped him and credits Robert Berg and Robert Weimer as key mentors while he was a student; Ed Roy and Don Tobin in his early professional career, and Pete Rose, Pat Gratton, and Steve Sonnenberg for support during his later professional career and volunteer service.

While Lee was working on his doctorate, he worked for Monterrey Petroleum Corp. as a consultant and later as an employee. Upon degree completion, he decided he enjoyed the petroleum business too much to begin a full-time academic career. In 1983 he started his own business as an independent prospect generator, which evolved into the formation of Sandia Oil and Gas Corporation in San Antonio in 1985. Although it was a tough time throughout the industry, Lee enjoyed building business contacts and successfully navigating the business world. He especially appreciated his repeat investors as he built his reputation. In 1998, Lee sold his company to Abraxas Petroleum Corporation and became vice president/exploration at that company.

The enjoyment of science and thrill of discovery in petroleum geology have been the constants through Lee's career. In the latest stage of his career, he has been focused on applying horizontal drilling with an assist from 3D seismic interpretation to areas with marginal vertical well production. The areas have varied from the Rockies to West Texas to South Texas. Some of the projects have provided material for technical papers and presentations to students.

Even while busy with work, Dr. Billingsley found time to pay-it-forward though volunteer work in the South Texas Geological Society and the AAPG. As AAPG Treasurer he initiated and organized the E&P Notes series in the Bulletin. Lee's volunteer record shows a willingness to take on the most

difficult jobs. One of the key characteristics in his volunteer profile is the ability to build consensus. During a critical time in AAPG's history, Lee chaired the Committee on Constitution and Bylaws Amendment Process, or COCBAP. At that time, AAPG's process for changing amendments and bylaws caused a polarization among its leaders. Lee led the committee to unanimous recommendations that were implemented and are still in place today. As AAPG president-elect in 2005 and the next year as president, Lee was directly involved in governance change to create AAPG Regions and Sections vice presidents, the approval of graduated dues, and the revision of AAPG's global climate change policy. Lee felt that establishing a concrete and credible global climate change policy was critical to encouraging and retaining students and young professionals in AAPG.

Anyone who knows Lee knows he has a great sense of humor. This has served him well in his leadership roles and makes him especially popular with students. Lee continues to be a great champion of student programs and works as an AAPG Visiting Geoscientist and also serves as an adjunct professor in the Geology Department at the University of Texas at San Antonio. He was instrumental in working with Ernie Mancini in developing the Robert R. Berg Research Award in 2008 to recognize the relationship between professors and students and the importance of excellence in research.

Although Lee has had many great accomplishments he is most proud of his family. Joanne Billingsley is a great teacher in her own right and has written a key book on children's education. Joanne was an excellent first lady for AAPG and promoted science education around the world. Lee and Joanne were married in 1975 and have three children—Anne Williams, Michael Billingsley and Matthew Billingsley.

Lee is very supportive of the AAPG Foundation and as AAPG president developed programs for Foundation support. He and Joanne are members of the AAPG Foundation's Trustee Associates.

In simplest terms, a leader is one who knows where he wants to go, gets up and goes (Erskine). Lee knows where he is going and continues to lead AAPG into the future.

Richard D. Fritz

Response

First, thank you to all my mentors, supporters, colleagues, and students who have made my association with AAPG so meaningful and fun. Even the few antagonists over the years have added to the challenges and spiced the situations. I appreciate the honor and recognition of Honorary Membership.

I could not have actively participated in AAPG activities without the support of my wife, Joanne, who I think is the "most interesting woman in the world." She not only encouraged my AAPG activities, she can now attend with me because she retired from full-time teaching and child rearing. During our travels she compiled a music video on the subject of geosciences as a career, and presented it to AAPG. It is now available to the public on the AAPG website under the title "Why Geoscience?" The first time our youngest son viewed the video, he announced he wanted to change his career path and become a geologist. Four years later he will graduate with his MS in geology. Thanks Joanne. I encourage members to use the video when speaking to students of all ages and to anyone that might be interested in geology as a career.

My primary mentors are listed by my citationist, Rick Fritz, but I would like to pass along some specific advice from some of them in hopes that others may also benefit. Pat Gratton and Pete Rose served as AAPG presidents prior to my term, and they both provided me with appropriate advice and modeling. Pat demonstrated to a group of AAPG leaders gathered around a campfire that all of us were in our current positions because someone asked us to serve in some capacity. Our charge was to do the same to those that we expected to follow us. Good advice that many of us use to this day. Pete entrusted me with responsibility as president-elect, which really helped when my term as president began. But the main advice I use from Pete comes from a Legends talk he gave in Houston. Each speaker listed three traits of great geologists, and I will always remember one of Pete's, "Give a damn." Pete exemplifies his own advice and I strive for the same. Finally, Steve Sonnenberg asked me to agree to consider nomination for president-elect, even though I thought I might be too busy with a full-time job and could wait until later. He responded, "Do it now, you never know what will happen in the future. You can adjust your schedule and your term will be busy but fun." He was right. Potential officer candidates and

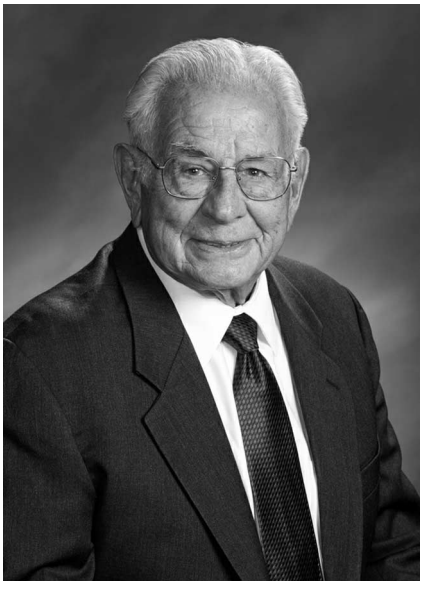
anyone else postponing active involvement, please take note.

Thanks to Rick Fritz for serving as citationist and for being the consummate AAPG volunteer and leader. Rick served as executive director during my term as president. He effectively negotiated the fine line between being the paid leader for all AAPG employees and an enthusiastic petroleum geologist in his own right. During our travels on behalf of AAPG, Rick and I had many brainstorming sessions on new ideas and programs for AAPG, and that meant Rick had to write an implementation plan (after we finished the Drambouie). Support from Rick and AAPG staff allowed me to fulfill both my "day job" and AAPG duties.

Honorary Membership is an award bestowed on its recipients by AAPG to recognize service and dedication to petroleum geology and the Association. I am most appreciative of the honor and recognition, but I have always felt I received more from AAPG than I contributed. AAPG has provided lifelong friendships, scientific growth, and professional connections. My current activities with AAPG focus on communicating these benefits to students and young professionals, in hopes they will enjoy the Association as much as I have. The message is "You have to give of yourself before you get anything back." I encourage younger members to be active in the Association and veteran members to mentor the newcomers. All of us will be enriched by your efforts.

In closing, thank you to the Advisory Council, Executive Committee, and those that nominated me for this award. The award serves as additional encouragement for me to continue my efforts on behalf of AAPG. I will see you at the next convention or committee meeting.

Lee Billingsley



DUDLEY WOOD BOLYARD
Honorary Member Award

Citation—To Dudley W. Bolyard, for his devotion to the science and profession of petroleum geology, and for his consummate skills as a professional geologist.

Dudley joined AAPG in 1957 at the onset of his career. He was working for Sunray Mid-Continent Oil Company. Dudley recognized that AAPG membership offered the widest source of information concurrent geologic thought and new developments. He felt a need to keep abreast of advances in his profession. In turn, he contributed his time by serving not only the Association, but also his local society, the Rocky Mountain Association of Geologists. These activities began with membership on the AAPG Business Committee (1965–1966), and the Committee on Stratigraphic Correlations (1967–1968). Concurrently, he was second vice President of RMAG (1965) and associate editor of the *Mountain Geologist* (1964–1967). He was road log chair for the Piceance Basin Field Conference (1974); symposium chair for the RMAG guidebook, *The Geology of the Cordilleran Hingeline* (1976); chair for field trips and long range planning (1978–79)—all RMAG activities. He also was secretary of the AAPG House of Delegates (1977) and a candidate for AAPG vice president (1979). Dudley was president of RMAG in 1981. He served on the AAPG Education Committee (1996–2010); served as treasurer (1996–97) of the Society of Independent Earth Scientists, Denver Chapter; and vice president (1998) and president (1999) of the Denver International Petroleum Society. He was field trip chair, Geologic History of the Front Range (1997) at the AAPG Rocky Section Meeting.

Dudley was director of the Sierra Madre Foundation for Geologic Research, (1981– 2010), a joint venture of Yale, Harvard, and Cornell universities, providing an undergraduate summer course in field geology. He was the first president of the Denver Earth Resources Library Board of Directors. His efforts in the early formation of the Library were invaluable to making it one of the major sources of petroleum geologic information in the country.

He was the recipient of several awards that recognized his contributions and professional abilities: the Best Paper Award presented by the Rocky Mountain Section of AAPG (1965); Distinguished Service Award

RMAG (1976); RMAG Honorary Member (1986); RMAG's Distinguished Public Service to Earth Science Award (1988); and the Best Luncheon Speaker Award (1994). In 1991 he received the AAPG Distinguished Service Award.

Dudley was born in Tyler, Texas on May 26, 1932, were his father worked for Barnsdall Oil Company. The family moved around, but lived in Oklahoma City when he finished high school. Early in life Dudley demonstrated a curiosity about the world around him. No doubt this has served him well throughout his life. He became involved in scouting, rising to the rank of Eagle Scout and was on the staff as a trail guide at Philmont Boy Scout Camp in New Mexico. Here he developed a lifelong love of mountain climbing, resulting in his summiting all of Colorado's 54 highest mountains.

Yale University offered him a scholarship providing an enticement to enroll at Yale. His decision to major in geology reflected his father's influence, though not entirely. He made the decision to make geology his career after taking an introductory course. At Yale he had the good fortune to study under some of the prominent geologists of the day—authors of geology texts then in widespread use across the country. Dudley said that Professor John Rodgers had a greater impact on his life than any other person he had ever met. Rodgers encouraged Dudley to pursue his interest in Arctic exploration. The Geological Survey of Canada had asked Dudley to be a part of a team to investigate some circular features seen on aerial photographs in an area never explored by geologists. These features turned out to be salt domes; an exciting cutting edge experience for an undergraduate geology student. Dudley graduated in 1954 with High Honors in geology.

While in the Arctic he was accepted into the graduate school at the University of Colorado. His thesis problem concerned Pennsylvanian and Permian stratigraphy of the Sangre de Cristo Mountains of Colorado. He finished his master's in 1956. While writing his thesis he took a job with the Boston University Physical Research Laboratory.

It was during this time at Boston University in 1955 he met Marion Mulholland, whom he married on June 13, 1956. He and Marion started family life and he started his career in Abilene, Texas. They raised three daughters: Nancy, Sandra, and Joyce.

He was transferred to Casper, Wyoming. A year later he was transferred to the Western Division Office in Denver, as regional geologist and division staff stratigrapher. In October of 1962 Dudley resigned from his position at Sunray and joined Clark Oil and Refining Corporation as division manager of Exploration and Production. Despite several discoveries in the Denver Basin, and a large position in Barrel Springs in SW Wyoming, Clark moved the Denver office to Midland. Dudley elected to remain in Denver.

His first major client was Jerry Chambers. Dudley generated, or found, drilling ventures spread from Louisiana to British Columbia. The most significant venture he was involved with for Chambers was the discovery of the Norge and Varden fields in Oklahoma. Combined, these two fields are reported to have an ultimate recovery in excess of 100,000,000 barrels of oil.

Dudley was operating his oil and gas interests under his company Resources Exploration, Ltd. The company found production at several fields in the Powder River Basin. REL also acquired a position, and did some of the early development at Beecher Island Field, in Eastern Colorado. Using innovative frac technology resulting in significant gas reserves in the Niobrara Shale. He now operates as Bolyard Land and Exploration.

Dudley has participated, either with his own companies, or on behalf of clients, or an employer, in over 30 oil and gas field discoveries or extension wells located in 10 states and British Columbia. He has documented his exciting career in a personal review of his life in *Living on the Brink*. In addition, Dudley has published 12 papers in geologic and scientific publications.

He has had a career that personified AAPG's standard for ethical conduct and professional excellence. Many of his peers consider him a "geologist's geologist".

Robert T. Sellars, Jr.

Response

Imagine what I thought when our president, Paul Weimer, informed me that I would receive the Honorary Member award at AAPG's 2012 Annual Meeting! It was disbelief, for I knew there are many members more deserving than I to receive such a prestigious award. It had never occurred to me that I might receive such high honor.

Reflecting on my life, it is important to acknowledge that I am not a self-made person. My parents, who rose from the ashes of the Great Depression, were loving, caring, and encouraging, while meting out much needed discipline at times. My father was a geologist who found many oil and gas fields

for his company. Perhaps it was my desire to please him that drew me to geology. As a boy of about 9 years, I remember sitting on a well in the Atchafalaya Bay of Louisiana, virtually out of sight of land, and staring with concealed fright at the black water beneath me as I walked the 14-inch wide plank from the geologist's barge to the rig floor. A few years later, Dad took me to a wildcat in southern Oklahoma. I hunted squirrels while he examined the cuttings. As I entered his domain, proudly announcing my success in procuring dinner, he announced, with exuberance that I had never seen before, that the well had found oil in the Bromide. We went to town and celebrated with a steak dinner. I don't remember what happened to the squirrels. My father was a perfectionist, and when I mapped Woodward Park in Tulsa for a Boy Scout badge, using pace and compass, he made me do it over again and again until the error of closure was less than 50 feet. My mother taught me perseverance, persistence, and patience. She encouraged me to go to Yale, which gave me a full scholarship based on need. Perhaps I was too proud of my accomplishments in geology there; so, when I returned home for Christmas, Dad decided we should discuss fluid contacts in the Morrow. Humiliated, I vowed to learn more.

At Yale I had some wonderful teachers. John Rodgers, whose work on Appalachian structure is legendary, encouraged everything I wanted to do, including expeditions to the Mackenzie Mountains and the Canadian Arctic Islands. Later, at the University of Colorado, Professors John Chronic and Warren Thompson supported my work on Pennsylvanian and Permian strata in the Sangre de Cristo Mountains of Colorado, which provided a fundamental understanding of Late Paleozoic rocks that I rely upon to this day. J. P. D. Hull, editor of the *AAPG Bulletin*, accepted my paper for publication.

In 1956, while working at Boston University, I met Marion Mulholland. Unaware of what geologists do, she consented to marry me! After finding work with Sunray D-X Oil Corporation, we moved to Abilene, Texas, and then to Casper, Wyoming, and to Denver, Colorado, in 1959. Without the support of Marion and my three daughters (Sandy, Nancy, and Joyce), I would never have achieved anything. Petroleum economics have always been cyclical. When times became so difficult that prospects could not be sold and there were no wells to supervise, she took on the dual responsibilities of homemaker and working at the office without pay.

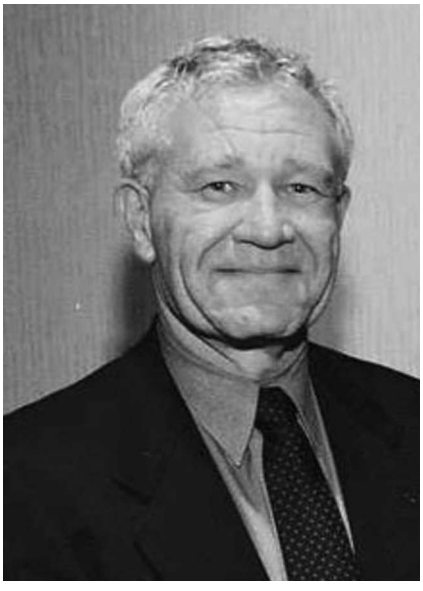
AAPG is recognized worldwide for its excellence in advancing petroleum geology, and it has been a significant part of my professional life. I have been a member for about 55 years. Serving on various committees and the House of Delegates was interesting and challenging, but the most rewarding part of my AAPG experience has been the opportunity to associate with fellow geologists and to learn from AAPG's many excellent publications, conventions, field trips, short courses, and Distinguished Lectures. Our science has advanced so rapidly that failure to avail ourselves of these resources would be an invitation to obsolescence.
I have not been a prolific writer, but I was deeply appreciative of the opportunity to publish papers concerning Late Paleozoic and Early Cretaceous stratigraphy and petroleum potential in the prestigious *AAPG Bulletin*.

Working with the Rocky Mountain Association of Geologists also has been a rewarding experience. Although the offices I held required considerable effort, the benefits from working with RMAG greatly exceeded my input. RMAG always had a large pool of talented volunteers, and these are the people who deserve recognition for producing the symposia and guidebooks, running field trips, conducting courses, and establishing the Denver Earth Resources Library.

I have been an independent geologist for about 45 years. There never was a shortage of ideas for finding petroleum. The problem was convincing others to risk money drilling for it. During my six years at Sunray, only one of my prospects was drilled. It would have been a major discovery if a drill stem test had been run. My experience at Clark Oil & Refining was much better, but gasoline price wars eliminated most of the drilling budget. Our biggest success was finding gas in tight Cretaceous sands in Wyoming, but management lacked the perseverance to benefit from it. As a consultant I found many fields for clients and several for my own companies. We drilled more than 100 tight gas wells in Appalachia, but cash flow was insufficient to carry us through the crash of the late 1980s, and we lost everything. In time it became clear that our tight gas wells in Wyoming and Colorado were not draining their spacing units; and down-spacing, coupled with improved prices, eventually solved the cash flow problem.

I wish to thank AAPG for bestowing this high honor on me. I also wish to thank all of the individuals and organizations without whose contributions and encouragement I might never have been considered for this award.

Dudley Bolyard



PAUL M. "MITCH" HARRIS
Honorary Member Award

Citation—Dr. Paul M. "Mitch" Harris – mentor, scientific leader, teacher, colleague, and friend – for his lifelong commitment to advancing geoscience and his tireless dedication to the rocks.

Honorary Membership in AAPG is limited to those few who have so distinguished themselves in science, service, and leadership that they honor the association by committing to a lifelong affiliation. AAPG is honored by connection with such unique individuals. It is altogether fitting that AAPG bestow upon Dr. Paul M. "Mitch" Harris lifelong Honorary Membership.

One cannot think about carbonate sediments and rocks without thinking about Mitch Harris. He pervades the discipline: from research to publishing to teaching to service; Mitch is a man of the rocks, and he has been so for more than three decades.

Dr. Harris received B. S. (1971) and M. S. (1973) degrees from West Virginia University, where he studied Holocene sediments and stratigraphy of marshes at Chincoteague Inlet, Virginia, under the supervision of A. C. Donaldson. He received a Ph.D. (1977) from the University of Miami, Florida, where he studied sedimentology of the Joulters Cays ooid sand shoal, Great Bahama Bank, under the supervision of the great Robert Ginsburg. Mitch is currently a senior research consultant and Chevron Fellow at Chevron Energy Technology Company in San Ramon, California, where he performs carbonate research, technical service projects, consulting, and training for various operating units of Chevron. He has been a Certified Petroleum Geologist since 1995.

Mitch began his career in the mid 1970s with Getty Oil Company in Houston, as a research associate in exploration and production research. He provided carbonate technical service and served as lab supervisor, conducting core and petrographic studies supporting development and exploration programs in the Permian Basin, U.S. Gulf Coast, and offshore Spain. Always near the rocks…

From 1978 through 1985, Dr. Harris worked for Gulf Research & Development Company in Houston, as Project Geologist and Senior Project Geologist in the Technology Center and Senior Project Geologist in the Exploration Research Division. Mitch focused on carbonate technical service and training, expanding his geographic horizons to include the Mesozoic of the Middle East and the U. S. Gulf Coast. It was at Gulf that he began to develop the carbonate training programs that are a hallmark of his career.

In the mid 1980s, Chevron acquired Gulf, and Mitch joined the Chevron Oil Field Research Company (now Chevron Energy Technology Company) and its divisions in San Ramon and La Habra, California, and Houston, Texas. Mitch served as a senior research geologist, senior research associate, staff research scientist, senior staff research scientist, carbonate reservoir consultant, and most recently senior research consultant. Mitch has performed carbonate core, petrographic, and seismic studies aiding development and exploration programs in the Permian Basin, U. S. Gulf Coast, Wyoming and Montana Thrust Belt, Alberta Basin, Middle East, Kazakhstan, Russia, Spain, India, the Philippines, and China. He has conducted research in carbonate stratigraphy, facies, diagenesis, play types, and reservoir modeling; led carbonate training programs for his company and overseas affiliates; and now heads Chevron's Internal Technical Group on Carbonate Geology. Always near the rocks…

Dr. Harris goes out of his way to interact with students. He has lectured at countless universities, including Rice, University of Houston, Miami University, The University of Texas at Austin and the Bureau of Economic Geology, University of Kansas, University of South Carolina, Colorado School of Mines, University of Colorado, and several California universities (Stanford, California State Fullerton, Caltech, and California

at Davis and Riverside). Abroad he has lectured at Trinity College (Dublin), Free University (Amsterdam), Ain Shams University (Cairo), King Fahd University (Dhahran), and Royal Holloway (University of London). Dr. Harris has also served on many graduate committees and/or has been adjunct professor at four universities. For these efforts he was nominated to the University of Miami's Iron Arrow Honor Society, and he received West Virginia University's Alumni Recognition Award from the Department of Geology and Geography.

Mitch serves the profession broadly as a member and leader of several professional societies. For AAPG, he served on the Publication Committee; as technical program chairman for the GCAGS Convention; Advisory Board for Treatise of Petroleum Geology; Research Committee; co-chairman of the Technical Program for the AAPG International Meeting; and Editorial Board member for Search and Discovery. Mitch has been co-chairman of AAPG Oral Sessions and Poster Sessions at the AAPG International Meeting; vice chairman for AAPG/SEPM Annual Meeting; Headquarters and Business Committee; chair of Shepard Medal Selection Committee; and chair of the Twenhofel Medal Selection Committee.

For SEPM Mitch has served on the Research Council; Carbonate Research Group; Continuing Education Committee; Core Data and Lending Ad Hoc Committee; New Programs Committee; Publications Committee; Research Concepts Committee; and Annual Meeting Committee. The capstone of Mitch's SEPM service was his presidency in 2010–2011.

Mitch is widely known for his outstanding leadership in workshops and seminars. He began three decades ago as convener of the SEPM Core Workshop, co-convener of the SEPM Research Symposium, Chairman of the SEPM Technical Sessions, and co-leader of the SEPM Field Trip at the 1983 AAPG/SEPM Annual Meeting. Since then he has convened or co-convened 10 core workshops, short courses and conferences; led or co-led dozens of field trips; and chaired/co-chaired dozens more technical sessions. These are always high-quality, thought-inspiring, and well- attended events that often result in a special publication. Remarkably, for 2012 he is co-organizing an SEPM Research Symposium for the AAPG/SEPM Annual Meeting; a SEPM Research Conference; and an AAPG Hedberg Conference Core Workshop.

Mitch has been a Distinguished Lecturer and International Distinguished Lecturer for AAPG; received the Wallace E. Pratt Memorial Award for best original article published in the *AAPG Bulletin* (1998); received the Robert H. Dott, Sr. Memorial Award, twice, for best Memoirs published by AAPG (2004, 2006); received the John W. Shelton Search and Discovery Award for best contribution to the AAPG Search and Discovery website (2009); was awarded Honorary Membership from SEPM in 2002; and received an Honorary Life Award from the Permian Basin Section of SEPM (2011).

Dr. Mitch Harris is a mentor, scientific leader, teacher, colleague, and friend. I was truly honored when he asked me to serve as his biographer. On behalf of AAPG and our profession, thank you for your lifelong commitment to advancing our science. Many generations, around the globe, have benefited, and will continue to benefit, from your tireless and unique contributions.

Scott W. Tinker

Response

AAPG Honorary Membership "is bestowed upon persons who have distinguished themselves by their service and devotion to the science and profession of petroleum geology and to the Association". As such, I am truly honored for this recognition and especially to be joining a list of recipients that includes many prestigious petroleum geologists. Thank you AAPG, to those who championed my Honorary Membership, and to Scott Tinker for his warm biographical comments.

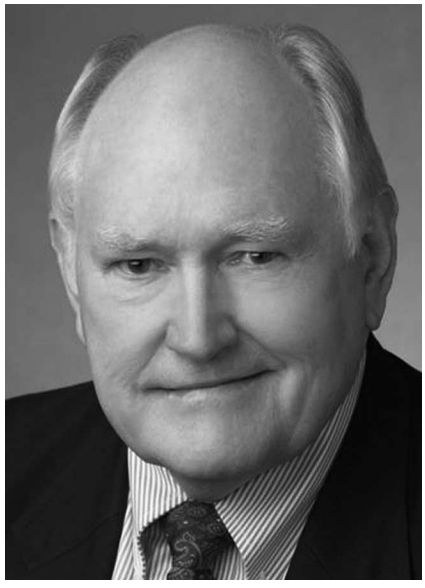
Were it not for my university training and strong support from my employer, I would not be receiving this award. I would like to thank West Virginia University and the University of Miami for preparing me for life in the world of carbonates. My management and co-workers at Gulf, ChevronTexaco, and Chevron have been extremely supportive of my AAPG activities throughout my career. I value and am grateful for this support, which still continues unabated at Chevron Energy Technology Company. Thank you so much!

I joined AAPG and SEPM in 1974 while I was a Ph.D. student. I was attracted to AAPG by the annual meetings and conferences, journals and other publications, and especially the quality of its membership—seeing all of these as the perfect opportunity for

potential scientific interaction and personal growth. Now, as I look back and reflect, I find myself still attracted for the same reasons, but realize that it was the interaction with other AAPG members that provided me with the most enjoyment and personal growth. I have thrived from this interaction, whether it was gained from collaborating on papers for the *AAPG Bulletin*, editing and writing papers for an AAPG Memoir, organizing and participating in technical sessions at the annual and international meetings, contributing to the Search and Discovery website, participating in lecture tours, or running field trips and short courses.

I close by reminding the younger members of AAPG that you are an important part of the society right now and you will be the AAPG of the future. I hope that you find the same attractions to AAPG that I did; it will be worth your effort to stay involved with and be active in this great society. I suppose receiving this award is AAPG saying they value what I have contributed to science and to the society; in return I would like to express my sincere thanks again to all AAPG members and AAPG Headquarters for maintaining such a vibrant society and an enjoyable learning environment that I value.

Paul M. (Mitch) Harris



PHILIP HERALD STARK
Honorary Member Award

Citation—To Pete Stark for his high-energy work ethic and life-long passion for learning, sharing and teaching that has delivered a broad spectrum of information "geo-tools" and insights about petroleum industry trends for the benefit of petroleum geologists and the AAPG. Pete's professionalism and contributions are certainly deserving of this award.

An industry veteran of almost six decades, Pete Stark landed his first oil-patch job as a summer roustabout for Magnolia Petroleum in 1956. Before earning his bachelor's degree in geology (1958) at the University of Oklahoma, Pete joined AAPG and launched what has been a truly remarkable career encompassing two distinct parts, one driven by technology and data, and the second by using those resources to assess information and deliver insight about petroleum industry trends.

The early years of Pete's career were dedicated to harnessing the power of computer geology and data management to help drive many of the well and production data standards used by industry today.

During 1962, Pete completed his doctorate in geology at the University of Wisconsin and joined Mobil as exploration geologist in Wichita, Kansas. There, he developed a strong interest in leveraging the computer as an exploration tool and represented Mobil on Petroleum Information's (PI, now IHS) well database advisory committees and worked with Mobil Field Research to develop computer applications for geology. After developing a computer-facies mapping analysis of Morrow sands in the Hugoton Embayment, Mobil promoted Pete to regional geological computer coordinator in Denver.

When Mobil closed its Denver office in 1969, Pete joined Jim Forgotson and John Stout to establish E&P computer applications services at PI. Jim and Pete summarized their early accomplishments in a June 1972 *AAPG Bulletin* paper, "Well data files and the computer: A case history from the northern Rocky Mountains." In addition to creating hydrocarbon show mapping techniques used in dozens of E&P projects, Pete also designed a prototype process that the USGS adopted to use PI well databases in its U.S. petroleum resource assessments.

During the 1970s, Pete's AAPG activities included the AAPG Geological Computing Committee (1973–1998). Pete contributed papers for computer applications sessions at AAPG annual meetings and also participated in enhancements to industry standards that persist today. From 1978 through 1985, Pete lectured on computer applications for petroleum geologists as part of the AAPG Continuing Education Program.

This program included corporate sessions, regional AAPG affiliates, and international organizations in Europe, North Africa, Middle East, South America and Asia.

Pete's later career focused on using his knowledge of geology and databases to enhance the understanding of hydrocarbon shows, horizontal drilling, oil and gas resources, heavy oil, significant discoveries, natural gas productivity and unconventional plays. A prolific writer and lecturer, Pete has authored and presented dozens of papers and bylined articles, in addition to delivering client research projects.

PI's acquisition of ERICO, a UK company specializing in geological studies and geoscience databases, enabled Pete to work with Paul McDaniel, John Shelton, and Peter Wigley, and marked the transition to the second phase of Pete's career. As PI's International VP, Pete was involved with the expansion of ERICO's geological studies and also managed E&P data projects in Argentina, Egypt, Tunisia and Saudi Arabia. In collaboration with a Masera study, Pete tracked global horizontal drilling activity and presented papers on "Geologic Aspects of Horizontal Drilling" at the 1999 Hedberg Research Conference and the 2001 ACE in Denver.

The 1998 IHS acquisition of PI/Dwights led to a renaissance in Stark's evaluations of international E&P trends through affiliation with Petroconsultants' experts, including Dr. Ken Chew, a master of international oil and gas resources. Pete collaborated with Ken to track and report global oil and gas resources until Ken's retirement in 2010.

Pete recounts this as "an exciting time, during which we shared ideas and presented insights on global resources and E&P trends at numerous industry meetings." Their collaboration included papers on

- World E&P Trends (AAPG Bali, 2000)
- African Exploration Outlook, WPC Johannesburg (2005)
- "Understanding World Resources" AAPG Hedberg Conference (2006)
- Joint AAPG – SPE Reserves Conference (2007)
- Circum-Mediterranean Oil and Gas Resources (AAPG Athens, 2007)
- Global Oil Resources, International Geological Conference-Oslo (2008)
- Heavy Oil Resources, IPTC Dubai (2007) and WPC Madrid (2008)
- Overview of World Gas Developments, World Gas Conference BA (2009)

I first met Pete in the early 80's when he came to Hess to help us build summaries for our play analysis. His insight into how to interpret the data was second to none. Moreover, he showed us how to use show-mapping concepts that he fathered. Twenty-five years later, we were reunited as colleagues together at IHS.

I recall that Pete already was enthused about unconventional oil and gas, and was eager to apply his unique "geo solutions" to demonstrating their potential. We teamed on a comprehensive assessment of unconventional gas that substantiated the huge increase in U.S. shale gas resources.

During the last decade, Pete also expanded his AAPG activities. He was a co-organizer of the International Pavilion LLC and served on the IP Board of Directors from 2006 to present. He was an organizer and speaker at the Houston APPEX E&P Forums (2003–2004, and continues these services today under the Summer NAPE banner). In addition, he also led the London APPEX E&P Forum (2003–2007), and was session co-chair for AAPG ICE events in Cancun, Cape Town, and a Significant Discoveries session at the 2009 ACE in Denver. Pete also has served on the AAPG Corporate Advisory Board (2008–2011) and became a Trustee Associate in 2011.

During his career, Pete did not discover billions of barrels, but he shared oil-finding ideas and methods that thousands of other geologists could apply in their careers. A tireless advocate of AAPG and the industry, Pete possesses an energy level, work ethic, and lifelong passion for learning, sharing and teaching that his colleagues describe as "both amazing and infectious."

Congratulations, Pete.

Bob Fryklund

Response

My mind raced upon learning from AAPG President Paul Weimer that I was to receive an award. What did this mean? What did I do to qualify for an award? The AAPG website provided part of the answer. "An Honorary Member is bestowed upon members who have distinguished themselves by their service and devotion to the science and profession of petroleum geology and to the Association." The importance, though, did not sink in until I reviewed the list of prior recipients, many of whom I was honored to know or to work with and all of whom were distinguished professionals. Through the years it became clear that petroleum geologists are unusually passionate about the science, dedicated and excited about their profession, notable for integrity and blessed with creativity. It always has been an honor to work among professionals who believed that 110 percent effort on

behalf of the profession, their employer, their colleagues and stakeholders that they served was the norm. What an honor to be recognized among a profession filled with dedicated high achievers.

This response is about recognizing those who opened doors or provided guidance that were building blocks to a challenging and rewarding career that moves toward 60 years. Today I awoke with fresh ideas about how to characterize fascinating new tight oil plays and was energized to share them with my colleagues. In addition, there was a draft for a petroleum journal to edit and a session to hear Dr. Dan Yergin discuss his new best-selling book, *The Quest*. Every day in the petroleum industry brings new and exciting adventures. It is absolutely fantastic to be part of a profession that is responsible to find and deliver almost 60% of the world's energy supplies that are critical to sustain the world's economies and to enhance the well being of mankind.

This is for my parents, both musicians who must have wondered if babies were switched at the hospital to explain a son with absolutely no musical talent. They never wavered in supporting my education through nine years of university. There was Owen Blexrud, our neighbor's son-in-law, who stimulated my interest in petroleum geology and who provided opportunities for summer trainee jobs with Mobil Oil. Professor Lewis Cline, my thesis advisor, along with Professors Stan Tyler and Lowell Louden at the University of Wisconsin, molded the geological principles and "geo-logic" approaches that have been the foundation for essentially all of the oil finding ideas that I have pursued. At Mobil Oil, Norman Knapp patiently whacked the edges from a brash Ph.D. know-it-all. John Lockridge and Lou Castelli provided opportunities for me to explore how to leverage computer geology and databases as part of Mobil's exploration tool kits.

Many, including me, are indebted to the Goodin brothers—Maury, Bill, George and Ed—who perfected commercial well reporting services and digital well and production databases at Petroleum Information (PI, now IHS). My desire was to leverage computer databases to explore for oil but in 1969 only the majors had the computers and IT staff to manage large databases. Maury Goodin invited me to join Jim Forgotson and John Stout at PI to develop E&P computing services that everyone in the industry could use. We defined E&P data standards that are the framework of today's IHS well and production databases and developed a spectrum of "geo-tools" including hydrocarbon shows mapping that were used in dozens of E&P projects. The Goodins also gave me the opportunity to expand PI's international services and we acquired ERICO, a UK-based company that created digital geological data and conducted international geological studies. Working with incredible talents like Paul McDaniel, John Shelton, and Peter Wigley on international geological studies was career highlight while getting me in touch with my geology roots.

John Butler and Bob Hodgson, partners at Geoquest International, acquired PI during the late 1980's and provided another career boost at a time when the industry was struggling to emerge from a collapse in oil and gas prices. We worked hard and had fun. Working with John to analyze U.S. natural gas productivity became a career milestone. The study predicted the end of the gas bubble and this stimulated me to continue analyzing North American and global gas through the balance of my career.

The IHS acquisition of PI/Dwights in late 1997 provided a wonderful renaissance to my career through the professional interface with Petroconsultants experts. I am especially indebted to Dr. Ken Chew who was a mentor and partner as we teamed to expand insights on global oil and gas resources. Ken is a great geo-scientist who became a wonderful friend. The same can be said for my association with Bob Fryklund as part of the IHS Industry Relations and CERA teams. We collaborated in organizing APPEX, NAPE and IHS E&P events, partnered to develop and present insights on global E&P trends at numerous AAPG and industry meetings and also teamed on the IHS study that substantiated a huge uplift in U.S. natural gas resources. These were life- and career-enriching experiences.

Kudos for my colleagues throughout the IHS organization. IHS is fortunate to have a fantastic chairman, Jerre Stead, who created a stimulating work environment in which ideas can flourish and even septuagenarians are welcome to contribute. And I never would have been able to contribute an average of 20 or more presentations and publications per year over the past decade while organizing events without the incredible support of Lezlee Dunham, Jenny Bruce, and Melissa Manning, and the IHS marketing team.

Dedication to one's profession, unfortunately, puts a crimp in one's family time. This response would not be possible without the patience and understanding of my wife, Chris, and son Johnathon.

Thanks to the many persons who have influenced my career, it is a treat beyond words to continue to contribute to the world's energy solutions.

Philip H. "Pete" Stark

DAN ALLEN HUGHES
Norman H. Foster Outstanding Explorer Award

Citation—To Dan A. Hughes, whose intuitive exploration talent and application of technological advances have resulted in significant petroleum discoveries around the world by him and by the many who have honored his attentive leadership by following his example for success.

Dan A. Hughes, has been involved in the oil and gas industry since birth. His father worked as superintendent of the United Gas Pipeline operation in Palestine, Texas, where he and his twin brother, Dudley, grew up. While in high school, Dan worked summers on a roustabout maintenance crew on hundreds of miles of United Gas' natural gas pipelines throughout East Texas. Dan gained valuable experience from challenging jobs even though he was a teenager because of the World War II labor shortages. In college, he spent his summer vacations working in the Oklahoma oil fields as a roustabout and other field jobs for Magnolia Oil Company.

He and his brother transferred from North Texas Agricultural College (now The University of Texas at Arlington) to Texas A&M College in the spring semester of 1949. He originally majored in petroleum engineering, but after taking a required course in geology found it so interesting that he changed his major to geology. Dan and his brother graduated from Texas A&M in 1951 with bachelor's degrees in geology. They were soon called into the Army as artillery officers, where they served in the Korean Conflict on the front lines and were both awarded Bronze Stars.

Before going overseas, he was assigned to active duty at Fort Bliss near El Paso, Texas, where he spent many off-duty hours mapping the geology of southeastern New Mexico. He purchased a federal lease in 1952 for 50 cents an acre while serving as a lieutenant in the Army and then sold the prospect to a Carlsbad, New Mexico oil operator named George Riggs for an overriding royalty. Riggs later drilled the discovery well for the shallow 650-foot deep Saladar Oil Field on this lease, which is still producing today.

After receiving his Army discharge, Dan joined Union Producing Company and went to work in New Orleans as a geological scout. This was the company-training program for geologists. A year later he was transferred to the Beeville, Texas office and continued his geological scouting. This enabled him to travel throughout South Texas, meeting all of the oil operators and drilling contractors and becoming very familiar with the South Texas oil fields.

In 1961, Dan resigned from Union Producing Company to become an independent geologist and accepted a retainer from Caddo Oil Company in Shreveport, Louisiana, to consult in South Texas. He realized there were several "old" shallow oil fields in the San Antonio area that had only been partially developed. Operating from Beeville, he picked locations, directed the development, and did the field well evaluations on a massive field extension program. Approximately 450 shallow oil wells were drilled and completed based on this program. Newly developed sand fracing techniques made this profitable. Dan received an overriding royalty for this work, which provided the funds needed to expand his operation by acquiring larger tracts of acreage to explore for prospects. Following this, he generated a number of prospects in the Frio Trend of the Gulf Coast, which resulted in several oil and gas discoveries.

In 1965, the Hughes & Hughes Oil and Gas Partnership was formed with his twin brother Dudley, who lived in Jackson, Mississippi and worked primarily in the Mississippi and Alabama areas, whereas Dan lived in South Texas and worked the South Texas areas. They combined their resources and began drilling deeper wells, earning a larger share of the working interest.

The first significant South Texas strike for the company came in 1967 with the drilling of the Hughes & Hughes No. 1 Beasley-Connevey in Webb County, Texas. This well, located in a remote area

north of Laredo, was the discovery well for the Las Tiendas Gas Field. This 11,000-acre field was large enough to entice Houston Natural Gas to build a 114-mile pipeline from George West in Live Oak County to the Las Tiendas Field north of Laredo. The Las Tiendas Field served as the basis for continued funding to increase the company's exploration program. Following this discovery, the company had a continuous series of oil and gas discoveries in South Texas, Louisiana, Mississippi and Alabama.

In 1970 the company participated in a series of wildcat wells in western Canada with Anderson Exploration Company that resulted in several discoveries of relatively shallow oil and gas fields. The most significant of these was the Dunvegan Field, which turned out to have a 1.6-trillion cubic-foot reserve.

In the mid 1970s, the partnership joined George Crocker in forming an English company to build and operate chemical plants in Europe that were associated with the petroleum industry. The plants were built in England, Italy, and Switzerland and proved to be very successful. This company was sold to British China Clay Company in the early 1980s at a nice profit and luckily before the oil business crashed.

With the success in Canada, Dan started looking at the possibilities for other global ventures and acquired a 2,800,000-acre exploration permit in Western Australia in 1978. After doing some seismic work and drilling a well, the Hugheses discovered the Woodada Gas Field located about 175 miles north of Perth. Even though it wasn't a large field by international standards, it was at the right place at the right time, and Hughes was able to sell gas to Perth. The project turned out to be a very lucrative venture.

Searching for continued success globally, in 1996 the company assessed the possibility of prospects in South America. Investigating Bolivia, Peru, and Colombia, the company settled on the Llanos Basin of Colombia as an area with significant potential as a result of having great reservoir, source and seal rocks. Dan recognized that 3D seismic was needed to locate more accurately well locations on subtle structural closures; and by shooting large surveys, unexpected additional closures appeared. Operating as HUPECOL, L.L.C. (Hughes Petroleos De Colombia, L.L.C.), the company has made several significant oil discoveries. In 2008 while oil prices were high, HUPECOL sold one of its producing concessions for a ten-figure price. The investors were very pleased with this success.

Following this, other concessions were obtained in Colombia and more discoveries have been made. Some of those were sold on very favorable terms in 2010. The company has drilled 123 wells in Colombia and is continuing to drill there.

In 2000, Dan drilled the Mansker #A-1, in Bee County Texas, targeting deep (11,000–12,000 ft) Wilcox sands by using seismic attribute technology. The well was located off the crest of the structure and penetrated the targeted gas bearing sands. It was the discovery well for the Causey Field.

At this time, it was unconventional to expect AVO to be effective in locating gas in over-pressed, moderate porosity sands. Analogies were made along the deep Wilcox trends, and Dan and his staff observed that older wells with gas bearing sands did have strong far reflections compared to near reflections. Previous wells without sand development or very low porosity did not exhibit this characteristic.

Due to the attributes of these middle and lower Wilcox channel sands, the company found that it was important to be able to encounter sufficient sand development to be commercially productive. The application of these seismic attributes has been a significant advancement in deep exploration for gas, particularly through mature areas of shallower production.

With the development of horizontal drilling and fracing, the company assembled a block of leases in the Barnett Shale around the city of Denton, Texas in 2002. Twenty horizontal gas wells were drilled on this lease block. The wells and leases were then sold to a public company with another good return on the initial investment.

With the success in the Barnett Shale, Dan A. Hughes Company, LP began searching for other areas in which horizontal drilling might be effective. In 2006, a lease block of approximately 50,000 acres was assembled in South Texas. After drilling 18 prolific Eagle Ford oil wells, the project was sold to a large public company for a very substantial sum.

Dan A. Hughes, Sr., along with his son Dan A. Hughes, Jr., plans to continue exploring and wildcatting for hydrocarbons in South Texas and worldwide. A long history of good partners, timing, excellent and loyal employees, some luck, and an Aggie education has led to his continued success.

Dan and the Hughes Family are thankful for their success in the petroleum industry and have shared the results of their

achievements and accomplishments with others. They have made many generous contributions to local charities, including treatment equipment to the local hospitals in Beeville and Corpus Christi. Texas A&M University, in particular, continues to benefit from Dan's generosity and active participation. Among his major contributions includes restoring the Military Walk and endowing the Berg-Hughes Center for Petroleum and Sedimentary Systems. This endowment supports integrative geology, geophysics and petroleum engineering education and research programs in this Center. Dan is especially committed to ensure that future Aggies have the same geological education and learning opportunities that he had at Texas A&M so that they are prepared to achieve success in the petroleum industry.

John A. Humston
Ernest A. Mancini

Response

What more could a person want, after pursuing a geological career for 60 years, than to be given this Norman H. Foster Outstanding Explorer Award. I was surprised and humbled to receive this great honor and have my name listed among the other outstanding wildcatters and explorers in this profession. I wish to extend my deepest gratitude to John Humston, Ernie Mancini, and all of those who contributed on my behalf for this award.

Geological exploration is the most satisfying and rewarding profession in the world. I look forward to everyday to just going to the office or traveling around the world unlocking the earth's secrets.

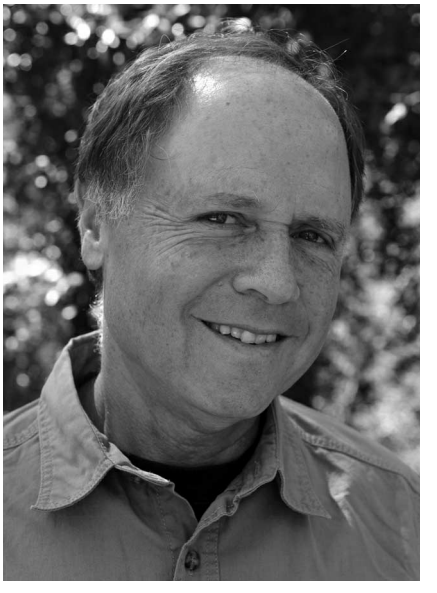
After a lifetime of being an exploration geologist and independent operator, I thought I might discuss a couple of the more exciting projects and discoveries that I have been involved in. These are not necessarily large fields but each is unique in its own way.

While mapping on a very remote area north of Laredo, Texas in the late 1960s, I noticed that John C. Beasley, one of my local attorney friends, owned a ranch right in the center of a large low relief structure that I had mapped. I discussed a possible mineral lease with him and he invited me to go to the ranch quail hunting. As we were hunting, we came to an old well that had been drilled and plugged on his ranch. He said "watch this" and then lit a match and threw it in the old surface casing. A two-foot flare blazed out of the old eight-inch pipe. I knew I had found a good prospect. After acquiring some very cheap leases on about 15,000 acres, I drilled a discovery well to a depth of 3,710 ft. While drilling, drill stem tests were performed that flowed gas out of about five different sands. This was the discovery well of the Las Tiendas Wilcox Field, which eventually covered 11,000 acres.

At a later time, one of my investors from New York invited me to go to England shooting driven birds, which was a great social sport in that area. I continued to go on these shoots every year and on one of these visits, encountered a geologist that had been in Australia 10 years and he presented to me several Australian prospects. One was a large concession north of Perth, Australia and was located along the pipeline that supplied that city with gas. A deal was made to farm out this permit from some small Australian operators and after doing seismic, we began drilling a well on what I thought was one of the better prospects. Meanwhile, I was offered a free trip to Japan to visit the Mitsubishi aircraft factory since we had ordered one of its new airplanes. After the Japan tour, I took a flight to Perth, which is due south of Japan, and on the way down, read a recent Perth newspaper on the plane. The headlines read "New Gas Discovery in the Perth Basin". It turned out to be our well, which was quite a thrilling surprise. This field was named the Woodada Field and was the first Permian Reef Limestone discovery in Australia.

It has been a great ballgame and I am going to play it as long as I can.

Dan Hughes



HENRY WILLIAM POSAMENTIER
Robert R. Berg Outstanding Research Award

Citation—To Henry W. Posamentier for his leadership in the development of sequence stratigraphic concepts

and seismic geomorphology, both of which have changed the way our community thinks about petroleum geology and exploration.

Of the many thousands of earth scientists whose well received published works over the decades have contributed greatly to our understanding of geological principals, only a few can claim to have changed the way the geologic community thinks. With his contributions to our understanding of sequence stratigraphy and seismic geomorphology, Henry Posamentier is one of those rare individuals.

Henry is clearly an ambassador for New York having graduated from the City College of New York for his bachelor's followed by a doctorate from Syracuse University. After a brief stint teaching at Rider University in New Jersey, he joined Exxon Production Research Co. in 1979, a move that was to prove extremely fertile ground for his creative juices. Working closely with Peter Vail and many Exxon friends and colleagues, Henry proved very quick to learn and gain expertise in the emerging field of seismic stratigraphy. This experience served him well as the seeds were planted for the first thoughts of sequence stratigraphy that later emerged. Henry's leadership role in developing these concepts led to the seminal 1988 publication of SEPM Memoir No. 42 of which he was co-editor. Within Memoir No. 42, Henry was lead author on the groundbreaking papers that established and unleashed sequence stratigraphy upon the greater geologic community. This publication was just the start of his career as a research geoscientist and explorationist. Since that time, Henry has produced a staggering number of award winning papers, edited memoirs and books. One of those papers introduced the notion of forced regressions and their importance to the petroleum industry, in itself a major contribution to our understanding of lowstand and shelfal systems. He has served as an invited distinguished lecturer in many parts of the world, conducted numerous seminars or workshops and perhaps most importantly has lectured and influenced students at well over 40 Universities around the world.

In more recent years, Henry was quick to recognize another opportunity to further his understanding of how depositional systems originate and evolve through time. He took advantage of the improvement in high quality 3D seismic imaging to embark in a new direction. By carefully analyzing depositional geometries on seismic data from the near surface as well as from exploration depths, Henry was able to recognize geomorphic features that changed our thinking for a second time with respect to lithologic prediction. This field is now known as seismic geomorphology. But his thinking didn't stop with these developments. By combining and integrating sequence stratigraphic concepts with the new insights obtained from seismic, he created a powerful tool for explorationists that is enjoying success today. In particular, this has changed our general understanding of the increasingly economically important deep-water play.

Given Henry's stellar technical track record, his career in the Oil Industry has been similarly outstanding. He spent a total of 12 years within the Exxon organization, the last 4 years being located in Calgary. In 1991 Henry joined Atlantic Richfield as a Senior technical Advisor and spent 6 years working in various exploration projects world wide before being transferred to Indonesia for a three year expatriate assignment. He moved back to Calgary in 2000 joining Veritas before returning to an exploration role at Anadarko Canada where he rapidly rose from general manager geology and technology, to chief geologist (worldwide) and finally distinguished adviser. In 2007 he joined Chevron as a senior consultant geologist and global advisor.

It is also no surprise, given such a track record, that Henry has been the recipient of numerous awards recognizing his contributions to Earth Science and Exploration. Perhaps the most prestigious of these awards have been the Pettijohn Award for Excellence in Sedimentology (SEPM) and the William Smith Award (The Geological Society) for excellence in applied geology. Their mention here does not diminish his other awards, which are too numerous to list.

Collectively, the prolific ongoing contributions to geology and the Petroleum Industry and his record of changing the way many of us think about geology, makes Henry Posamentier a most worthy recipient of the Robert. R. Berg Award for Outstanding Research.

David P. James

Response

When I received a voice message from President Paul Weimer a few days ago asking me to call him back, I just assumed that it was another "let's catch up" phone call about some technical issue, similar to many such phone calls we've had in the past. To my great surprise, this was not the case, but rather he called to inform me

that I would be awarded the Robert R. Berg Award from the AAPG. It was totally unexpected and deeply humbling. To receive such an award from one's peers stands as a singular honor, for which I am most grateful.

My voyage to this point has been somewhat unorthodox. It is a voyage I could never have done alone; I have had much help and support along the way. This has been an amazing journey for me, starting from my early days growing up in New York City, my parents being new immigrants to the United States from Austria. To this day, people ask me how and why a chose a path of geology, given my upbringing in that urban jungle. It began for me much as it began for many a geologist—with a love of nature and love of the outdoors. It began simply, with geology field trips in the heart of New York City and continued on to Alaska and many other parts of the globe. My formal university training was in glacial geology, a discipline not quite within the oil and gas mainstream. However, it provided me with strong background in geomorphology, which has surprisingly served me very well in my oil and gas career. I joined the oil patch from academia thinking that I would take a leave of absence from my academic position and return there after a year. Now, 32 years later, I have not had a moment's regret that I never returned to academia.

My career has spanned several oil companies and I have benefitted uniquely from each experience. At Exxon, I learned to ropes with respect to exploration. On my first day in the office, I was assigned to the seismic stratigraphy group; that was the first time I had ever seen a seismic section. Little did I know at the time to what this would lead. I then moved on to ARCO and then Anadarko and finally Chevron, each time shifting my focus, enriching my experience base and meeting great people. I have had the incredible opportunity of mingling with the best and the brightest at each company. I have had access to data from countless sedimentary basins around the world. I could not have wished for a more amazing career.

I have had many mentors, friends, and family to thank and acknowledge for all that they have taught me through the years. It all began with my first geology teacher, Simon Schaffel, to whom I will be eternally grateful for inspiring me with the thrill of geology. His unabashed love of geology was contagious and has never left me. Many years later I had the good fortune of working with and being mentored by one of the giants in stratigraphy, Peter Vail. He was a role model for me in many ways, not the least of which was the way he encouraged and supported those with whom he worked, how he brought the best out of us all, and the way in which he created a climate of applied imagination and creativity. There were many others in virtually every country I've lived and worked, who freely shared their insights and enthusiasm with me, but there is one other person to whom I owe an extra debt of gratitude. I could not have traveled the road I chose nearly as effectively had I not had the good fortune of having worked with David James, both a mentor and a lifelong friend who with his patience and willingness to share his expertise in clastic facies depositional systems and stratigraphy, opened new worlds for me. Others from whom I have learned through the years include Ven Kolla, Ole Martinsen, Janok Bhattacharya, George Allen, Dale Leckie, John Nieto, Bill Morris, Paul Weimer, Roger Walker, Bob Mitchum, and Morgan Sullivan.

Lastly and most importantly, I thank my family for sharing this journey with me; it hasn't always been easy for them. My wife, Ceri, also a geologist, has provided me with unwavering support and honest feedback through the years, as well as a strong family foundation, and has always kept me grounded while providing unconditional love and support. My children, Joshua, Jordan, Michelle, Emma, and Rebecca, my true pillars of reality, I thank each of them for their unique brand of love and support.

Henry Posamentier

EDITH C. ALLISON
Distinguished Service Award

Citation— To Edith C. Allison, For exemplary and enthusiastic leadership, ability to focus on what

needs to be accomplished, sound fiscal skills, and her broad knowledge of energy and energy policy.

Edith Allison, known as Edie to her friends, has served AAPG in many capacities since becoming a member 30 years ago. She has been a leader of committees, served in the House of Delegates, and been a participant in the Visiting Geologist program.

Edie received a B.S. in geology from West Texas State University and an M.S. in geology from the University of Utah. In between degrees, Edie worked as a geophysical technician for two years and a paleontologist's field/lab assistant for three years.

After completing her M.S., Edie worked in Amarillo, Texas, for Argonaut Energy for two years, where she developed exploration proposals for investors with a 90% success ratio. She then spent two years working as a development geologist for Mesa Petroleum, also in Amarillo. After another two years working as a consulting geologist in Amarillo, Edie moved to the U.S. Department of Energy (DOE) in Bartlesville, Oklahoma, where she served as a project manager for 10 years. It was during this period that I first met Edie. Edie was the DOE project manager for a reservoir heterogeneity study I was working on. In addition to the project I was working on, Edie also managed a variety of multi-disciplinary, enhanced oil recovery and mature field development projects in partnership with industry, state agencies, universities, DOE National Labs and research institutes.

In 1996, Edie moved to the Eastern Section of AAPG and DOE headquarters in Washington, DC. During her 14 years at DOE headquarters, Edie managed over $20 million worth of unconventional petroleum research with industry and academia. She was involved in strategic planning, budgeting and cost-benefit analysis. She also communicated scientific and technical concepts to energy policy makers in government and scientific institutions and negotiated formal agreements and coordinated research with foreign governments and scientific institutions.

Edie has made presentations to the United Nations, the National Research Council, the Society of Petroleum Engineers, (Capital Area Chapter and Western Region), Norway North American Petroleum Research workshop, U.S. House of Representatives Science Committee, Annual International Methane Hydrate Workshop, Indo-US Natural Gas Conference, Virginia Industry Energy Forum Beijing Oil and Gas Forum: New Areas and New Technologies of Oil-Gas Exploration, Canadian Unconventional Gas Conference, US-Korea Energy Consultation, Senate Energy and Natural Resources Committee Staff, and the US Environmental Protection Agency.

She is the author of the chapter on Methane Hydrates in *Future Energy*, edited by Trevor Letcher. She also was an author and speaker for Modern Marvels television program on "Gas Technology" on the History channel, and co-authored the overview of the DOE's Gas Hydrate Research Program in AAPG Memoir 89.

In all that she does, Edie is well-spoken, organized and insightful. Her record of service to AAPG is impressive. As a member of the House of Delegates since 2003, Edie has served on the Constitution and Bylaws Committee. She served on the Preservation of Cores and Sample Committee from 1996–2005 and was vice-chair from 1998–1999 and chair from 1999–2002. Edie also served on the Unconventional Petroleum Systems Group of the Research Committee. As a Visiting Geologist since 2003, Edie has spoken to numerous university groups during her visits.

Edie has been an integral part of the PROWESS (Professional Women in Earth Sciences) Committee since its inception as an Ad Hoc Committee in 2006. She has served as co-chair for two terms and has been instrumental in the Workforce Retention Survey as well as all other PROWESS activities.

Edie has served her local society (Geological Society of Washington) as a Councilor for two terms. She is also an officer in the Eastern Section, having just completed her term as treasurer. She currently serves as the Eastern Section secretary. Edie also served the Eastern Section as the general co-chair for the 2011 section meeting. Edie worked tirelessly, attending to the myriad of details associated with a successful section meeting. She was always quick to respond to my varied and numerous requests associated with the Student Job Quest.

Edie brings her well-organized, efficient manner to all that she becomes involved in. She is a tremendous asset to the AAPG and the geoscience profession.

Katharine Lee Avary

SUSAN M. CUNNINGHAM
Distinguished Service Award

Citation—To Susan Cunningham, for her outstanding service to AAPG, exceptionally successful leadership in exploration, and her encouragement of women in geology to follow their dreams.

Susan Cunningham recently completed her long and highly successful involvement with the Offshore Technology Conference (OTC) on behalf of AAPG: Susan was the AAPG representative to the OTC Board of Directors from 2003 to 2011. From 2009 to 2011 she was the chairman of the OTC Board, the first woman ever to hold this position in the 44-year history of OTC. The OTC (with its many AAPG volunteers) provides annually an excellent networking and learning platform for AAPG members and petroleum professionals interested in offshore activities and the newest technologies. During Susan's tenure, OTC attendance grew from about 45,000 participants (2003) to more than 78,000 (2011), exhibition space increased substantially, and OTC's contribution to AAPG's financial bottom line was a dollar amount well in the seven figures—at virtually no cost to AAPG. The Offshore Brasil Conference as well as the Arctic Technology Conference (ATC), were added to the OTC family of events during her time on the OTC Board. Because of Susan's outstanding leadership and good interactions with the AAPG Executive Committee, AAPG was chosen to be the operator of the ATC.

While this is impressive, there is so much more that makes Susan Cunningham special. Susan is an exceptionally talented explorer. She is senior vice president - exploration and business innovation for Noble Energy and a director of Cliffs Natural Resources. Noble Energy's spectacular successes in the Eastern Mediterranean—the giant Tamar and Leviathan discoveries alone amount to reserves of more than 25 Tcf—and elsewhere around the world would not have happened without Susan's outstanding geological skills and her savvy leadership. When asked what her secret is, she will tell you that in all her ventures she believes in, and plans for, success right from the beginning, while making sure that failure wouldn't break the company. This is a refreshing attitude in a time when too often exploration programs appear to be designed for failure: going through the motions of fullfilling a minimal committed work program without having secured necessary protective acreage and with no time, money, or options on rigs to properly follow-up on discoveries. It is to Susan's credit that she has freely shared her exploration experiences and philosophy at AAPG events.

Susan Cunningham was raised in Toronto. Coming from a family of Ph.D.s, she has always been eager to figure out the workings of the physical world—and from early on, she loves the outdoors, especially hiking, camping, skiing and sailing. Originally attracted to mining geology, she discovered her interest in sedimentology before graduating from McMaster University, Hamilton, Ontario with a B.A. in geology and physical geography in 1979. Encouraged by Michael ("Dusty") Rhodes of Amoco, she began her steep career in the petroleum industry as exploration geologist at Amoco Canada in Calgary. In 1981, she transferred to Amoco International in Houston where she excelled in successful exploration and delineation ventures in East Africa, Sharjah and Egypt. In 1992, she was named managing director for Amoco's Denmark and Sweden operations located in Copenhagen, the first woman in that role. Two years later, she returned to the U.S. as Amoco's Exploration Manager-Deepwater, Gulf of Mexico.

Susan joined Statoil in 1997 and served as vice president of Statoil Exploration (U.S.) in Houston, and later as West Africa exploration manager at Statoil's headquarters in Stavanger, Norway. Prior to joining Noble Energy in 2001 she was vice president of worldwide exploration for Texaco in Houston from 2000 to 2001.

Susan names Larry Luebke and Wolfgang Schollnberger (Amoco), Egil Endresen (Statoil) and Chuck Davidson (Noble Energy) as some of those, who helped her grow by challenging and guiding her, but above all, by believing in her.

The way Susan Cunningham conducts her work is truly impressive. She carries her executive responsibilities and her duties in professional societies with grace and with respect for the dignity of others.

She always maintains a deep and detailed understanding of the newest geological concepts and methods and applies them to build investment portfolios that add value.

Susan Cunningham has been married for almost 30 years to Paul Koeller, who in his own right is a successful vice president at Halliburton. In true and loving partnership, and applying superb time management skills, they are raising two promissing young men, Jason, age 19, attending the Colorado School of Mines and Jordan, age 14, attending high school in Houston.

Throughout her career, Susan has generously given to communities around her, and has actively encouraged women in geology to dare to dream, to follow their dreams and be the best geologists they can be. Susan Cunningham richly deserves this award, it won't be her last one.

Wolfgang E. Schollnberger

DAVID A. DOLPH
Distinguished Service Award

Citation—To David A. Dolph, for his long-term dedication to the growth of the Canada Region, the House of Delegates and International Leadership.

David's commitment to serve the AAPG began in 2001, after having spent several years working as a geologist on various international and frontier exploration projects with PanCanadian Petroleum. As projects evolved David realized that membership in AAPG provided a critical link in allowing him to do his job effectively and giving access to an amazing worldwide network of fellow geoscientists. In 2007, through encouragement from fellow AAPG members John Hogg and Marty Hewitt, David became an AAPG Canada Region Delegate where he served as secretary/foreman for a year following as the Canada Region President for three years.

During this period David became actively involved in numerous AAPG Canada Region activities, serving for four years as the regional coordinator for the highly successful Imperial Barrel Awards program, in which the Canadian teams placed very well. David also was involved with Calgary's successful (and Canada's first) 2010 ICE conference acting as co-general vice chair and vice chair of sponsorship. David, along with other Canada Region Delegates, also works with regional AAPG Affiliated Societies, ensuring AAPG's and the Affiliated Societies' needs and opportunities are communicated for the benefit of all Canadian geoscientists. David also takes great patriotic satisfaction in putting forward names of deserving Canadian geoscientists to be recognized on the international stage for AAPG awards!

After attending his first annual House of Delegates meeting, David was taken with the commitment and enthusiasm shown by all AAPG members for the betterment of the Association and the profession in general. Wanting to give back to the Association that had helped so much with his career, and unable to say "No", David was soon actively involved as Chair for a number of House of Delegate committees (Resolutions, Nominations and Elections, Credentials) and a member of other committees (Student Chapters, International Regions, Membership Recruitment and Retention). This year David has been asked to be a member of the Global Imperial Barrel Award committee, partly due to the success he has shown in running the Canada Regions competition.

David was born into an "oil business" family that resided in Edmonton, Alberta and then Calgary. David's father, Jim, also a geologist, spent his early career as a field geologist with the Geologic Survey of Canada following on as a carbonate specialist with Gulf Oil. With his father, David spent much of his childhood hiking, fishing and camping in the Alberta Rockies where Jim would often "interrupt" prime fishing time by pointing out interesting outcrops and describing the link to the subsurface geology in the oil and gas fields of the Western Canada Basin. This early introduction to geology must have sunk in for David received his geology degree from the University of Alberta soon after in 1985.

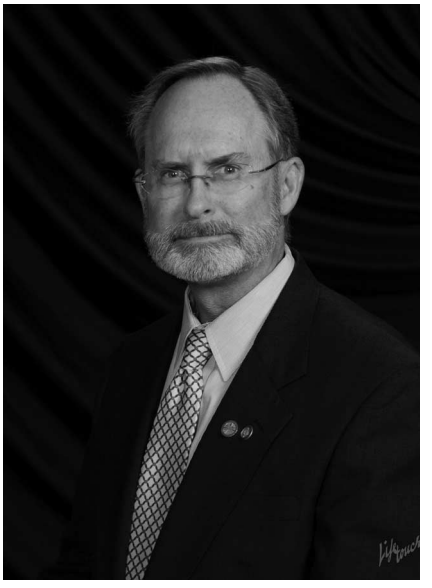
With a degree in hand, and oil prices plummeting, David was one of a lucky few who managed to land a job in Calgary where he has worked since. Early career projects in Alberta's oil sands, Devonian reef and Cretaceous fluvial channel plays soon gave way to international new venture work in 1994 within PanCanadian's newly formed International Division.

David has continued to work new venture projects around the world with PanCanadian, EnCana, Talisman Energy and currently with Nexen Petroleum International.

The link of a career in global exploration and AAPG involvement has been extremely beneficial for Dave. AAPG has introduced him to a great network of individuals worldwide who, through their service and willingness to help, have made a real difference in his career development. David's AAPG committee work has pushed him out of his comfort zone on numerous occasions, but always with positive results and always enriching his technical and leadership skills as well as overall career satisfaction. Looking back, the key individuals who have made a significant difference in his career development were AAPG members. Through mentorship with the next generation of geoscientists David tries to impress upon new grads that the geosciences are an amazing career in which there are so many different types of opportunities and interesting paths to follow and early involvement with societies, like AAPG, will give you back so much more than you put into it.

Searching the world for the next good place to make a discovery and AAPG involvement still are keeping David busy, but when time allows he still gets out to the old fishing holes west of Calgary and the unchanged outcrops that were so influential in sparking the interest in geology years ago.

John R. Hogg



PAUL F. HOFFMAN
Distinguished Service Award

Citation—To Paul F. Hoffman, who has distinguished himself in long, continuing and singular service to AAPG, filling leadership roles in AAPG Conventions, Committees, the House of Delegates, the APPEX Prospect and Property Expo and in the Houston Geological Society, AAPG's largest affiliated society.

Paul Hoffman joined AAPG in 1976 and as a leader, his contributions have been diverse and significant to both AAPG and to its largest affiliated society, the Houston Geological Society. He truly deserves to be honored with the AAPG Distinguished Service Award.

Paul officially began contributing to AAPG as chair of the Alumni Activities Committee during the 1988 ACE. At that convention, he presented a co-authored paper, "The Shanghai Delta Complex, A Glimpse of the Expanded Yegua Trend", which was selected as one of the "Best of AAPG" talks for presentation at the SEG annual convention. This early success and acknowledgement testifies to Paul's great communication skills and to his ability to integrate geology, geophysics and operational and business aspects of upstream projects—skills that contributed much to his successful career!

He served as a delegate to the AAPG House of Delegates for multiple terms beginning in 1984 and was elected foreman of the HGS Delegates group to the AAPG House of Delegates in 2005–2006. The HOD has honored Paul with both its 15-year Certificate of Service and its Long Service Award. In 2003–2005, he served on AAPG's ad hoc Committee on Advisory Council Representation. Not many AAPG Members have the skill and fortitude to take on one of the most demanding jobs in the House of Delegates, chair of the Constitution and Bylaws Committee. Paul had earlier tackled rewriting the HGS Constitution and Bylaws, chairing an ad hoc committee in 1997–1998, and used that experience to full effect when he led the AAPG CBL Committee as Vice Chair in 2006–2007 and as Chair in 2007–2008.

Paul distinguished himself as a leader in the Houston Geological Society, serving as secretary, director, and vice president in charge of the society's extensive technical program, president-elect and president in 2001–2002. I have known Paul for years, but one particularly fond memory is of the AAPG Annual Convention (ACE) in 2002 when Paul, as president of the hosting society, and I, as general chair of the Convention worked together to deliver our All-Convention Luncheon speaker, the Honorable Joe Barton, through Houston traffic and into the Brown Convention Center Grand Ball

Room by cell phone—just minutes before his talk was scheduled, with Michel Halbouty anxiously watching the clock! Paul has received the HGS President's Award and Distinguished Service Award and remains active as a member of the HGS Foundation Board and Chair of the Ballot Committee.

Paul was instrumental in the creation and evolution of AAPG's APPEX Prospect & Property Expo. He was Vice Chair of APPEX in 2001 and 2002 and General Co-Chair in 2003. The success of APPEX, of course, enabled AAPG to leverage it into equity ownership in both Summer NAPE and in the original NAPE. This has yielded very significant and continuing economic benefit for AAPG and was due to the fact that APPEX became recognized as a "growing force" in the new world of prospect and property expos. Paul deserves much credit for contributing to this achievement.

Paul began his professional career at Cities Service, doing exploitation and exploration. He next entered the consulting world at Intercomp Resource Development and Engineering, but returned to E&P, ultimately entering the ranks of management at Ladd Petroleum, progressing from geologist, manager of geology, general manager-exploration and vice president of the Gulf Coast region. Following the sale of Ladd, Paul opened a Gulf Coast office for Duncan Energy, serving as general manager–exploration & production, vice president exploration & production, and executive vice president and chief operating officer. Cox & Perkins Exploration brought Paul aboard where he served for five years, primarily as chief operating officer, and in 2008 Paul accepted his current position as president of Allen-Hoffman Exploration.

Paul earned a B.S. with Special Honors in geology from the University of Texas at Austin. He is a Certified Petroleum geologist (CPG #4002) and Licensed Professional Geologist in Texas. He has served also in leadership roles for various civic, church and educational organizations, and he is an avid sailor. Paul feels genuinely privileged to have contributed to AAPG, which serves tens of thousands of people, but this citation must also acknowledge Paul's gratitude for the years of patient support from his wife, Tina, and their three children.

Jeffrey Lund

ALAIN-YVES HUC
Distinguished Service Award

Citation—To Alain-Yves Huc for his exemplary service to American Association of Petroleum Geologists and for significant contributions to the advancement of organic geochemistry applied to the science of petroleum exploration and development.

Alain-Yves Huc became interested in geology at the age of eleven when bored by a standard seashore vacation, he ended up helping a neighbor, a Ph.D. student who was hunting for ammonites in the Jurassic outcrops of the west coast of France. Subsequently, for the rest of his formal education years, he kept working to become a geologist.

After defended his Ph.D. in 1978, he became devoted to the study of the organic geochemistry and paleogeography of the Toarcian in the Paris Basin. He conducted this work at Strasbourg University under the supervision of Guy Ourisson, Pierre Albrecht and Bernard Tissot, the latter being the acting head of the Geochemistry Department at the Institut Français du Pétrole (now IFP Energies nouvelles). From there he was awarded a postdoctoral fellowship at Woods Hole Oceanographic Institution, Massachusetts. When arriving in John M. Hunt's laboratory at Woods Hole, John asked him two questions. The first was "how was your trip", and his answer was "good". The second was "are you member of the AAPG?" and the answer was "no". The immediate reply by John was "we need to fix it up right now." This is how Alain became an active member in 1979. Alain would like to dedicate this award to the memory of John M. Hunt who on that fateful occasion introduced him into the AAPG family.

Since then, Alain has remained a relentless and dedicated member of AAPG. He has served as an associate editor of the *Bulletin* three times (he is currently starting his fourth), and was the scientific editor of two AAPG "Studies in Geology" volumes (Numbers 30 and 40). In 1992 he co-organized with Nahum Schneiderman an AAPG

International Hedberg Research Conference entitled: "Paleogeography, Paleoclimate and Source Rocks" and he was an educator in the short course program for the 2009 AAPG European Region Annual Conference, both in Paris. For the AAPG International Conference in Paris, September 9–11, 2005, Alain was a member of the conference organizing committee, and co-convener of the short course program.

Alain became involved in the formation of the first official elected European Region Board. In 2004 he acted as an interim vice president of the European Region board. Between 2006 and in 2009 Alain represented the European Region at the HoD, something he had done quite often as a regular alternate.

Professionally, after his postdoctoral work, Alain joined the Applied Geology Laboratory at Orléans University, France, as an associate and then as a senior scientist at the French National Research Center (CNRS). In 1981 he was hired by the Institut Français du Pétrole (now IFP Energies nouvelles). At the IFP Energies nouvelles, Alain was quite active and held various positions, including research scientist, project manager, head of the Geochemistry Department, and director of the Centre of Exploration at IFP School. Currently he is the expert director and associate director of the Geology-Geochemistry-Geophysics Direction.

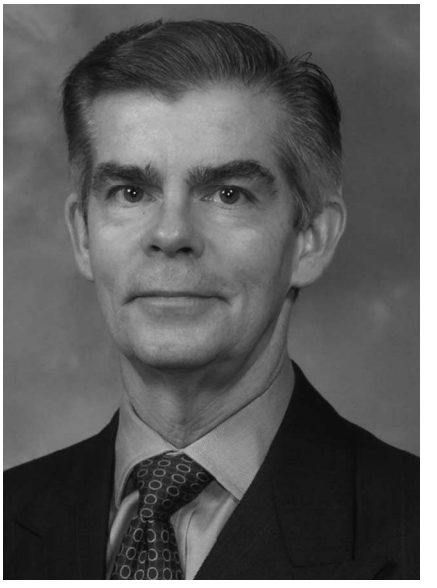
His expertise and research activity are mainly centered on reservoir geochemistry, alteration of accumulated oils, geochemistry of heavy crude oils, and biodegradation of oil and source rock geology, the latter rising again as a timely topic with the increasing interest in gas/oil shale. He is the author or co-author of 150 papers, scientific editor or author of 6 volumes, and within the IFPEN group, he is also deeply involved in international teaching and consulting activity.

He was a member of the Board of the European Association of Organic Geochemistry, EAGE (1989–1997), the president of the FFG (French Federation of Geology) (2007–2010), and currently its past president. Alain has been awarded by a special issue of the *Journal of Petroleum Geosciences and Engineering*, "Reservoir Geochemistry and Application" in September 2007; a European Association of Geoscientists and Engineers Honorable Recognition Award in 2008; and he was selected as a Student Tour Lecturer for EAGE 2005–2006 and Middle East Student Tour Lecturer for EAGE 2007. Further, in his work as a scientific editor, Alain has been recognized by other journals in his field of expertise as an associate editor of the *Organic Geochemistry* journal (1986–1993), and as a chief editor of the Journal of Petroleum Science and Engineering (1996–2003).

Alain has always been an energetic member of the AAPG and to the profession, advancing and transferring knowledge regarding organic geochemistry integrated within a wider scope that is geology.

For the sum of his expanse service and dedication to the AAPG and his work to promote the study of organic geochemistry, Alain is truly a prime example of person so deserving of the AAPG award for Distinguished Service.

Steven Veal



WILLIAM A. MORGAN
Distinguished Service Award

Citation—To William A. Morgan, a Man for All Seasons: In recognition of, and appreciation for, your pursuit of AAPG ideals through exceptional leadership, exemplary publications and being an example of professionalism for all to emulate.

There is a saying that if you want something done and done right, give it to the busiest person around. Bill Morgan is that guy. Distinguished Service recognizes meaningful service, with the intent to recognize value to the Association and, quite frankly, to the profession.

Bill's major long-term contributions have occurred over his 35-year career and the reader will recognize their significance. Perhaps most importantly, Bill is sought after because of his judgment and ability to accomplish things without needing a script. For example, Bill has served AAPG as

- Chair of Grants in Aid (guiding it through major expansion)
- Co-editor of 3 Memoirs: 74, *Petroleum Provinces of the 21st*

Century (and Dott award winner); 83, *Permo-Carboniferous Carbonate Platforms and Reefs;* and 98, *The Great American Carbonate Bank: Geology and Economic Resources of the Cambrian–Ordovician Sauk Megasequence of Laurentia*
- Co-chair of the first two AAPG 'Summits' (one on Sections the other on Committees)
- Candidate for AAPG Treasurer
- Hedberg co-convener (Microbial reservoirs)
- Associate Editor of *AAPG Bulletin*
- AAPG Committee Manager
- AAPG Field-Trip Leader
- Coordinator with SEPM on numerous technical sessions

Prior to the 1999 Annual Convention, Bill was also asked on very short notice to co-chair an effort to assist small oil producers. Oil was around $15/barrel and our members needed to see their Association visibly helping the members. Bill and Robbie Gries came through with all the help that was available. It was a difficult assignment and hard to find reward but they brought in short courses, a deal room, and even an interview room. Explorers are an inherently optimistic folk and they showed AAPG at its brightest in a dark time.

Bill obviously is a multi-talented guy and has earned his Texas 10 gallon hat—and AAPG has recognized his service with three Certificates of Merit. Beyond AAPG, Bill has served our profession as president of SEPM, president of the Mid Continent Section of SEPM, and has chaired the SEPM Education, Investments, and Honorary Membership committees. In 2009, he was awarded Honorary Membership in SEPM. Bill has also been treasurer of the Council of Scientific Society Presidents, a group that represents some one million scientists across a spectrum of scientific disciplines.

Bill has authored or co-authored 43 publications. Such breadth and range testify to, not just an ability to publish, but also an ability to get a team to publish. ConocoPhillips has long seen this wonderful skill and recognized him as a Geological Fellow along with numerous other "in house" citations of appreciation for his contributions.

Having the freedom to spend time on volunteer activities implies that there is someone handling responsibilities on the home front, and this is certainly true in Bill's case. Bill's service to AAPG and the geosciences would not have been possible without the considerable support of his wife, Lori Millet, whose love and understanding have been a constant source of inspiration throughout his career.

In closing, service can mean many things but I hope this sampling of Bill's contributions confirms his significant impact on both what AAPG is today and what our profession will become in the future. Bill Morgan is an example for us all.

Dick Bishop

ADEDOJA R. OJELABI
Distinguished Service Award

Citation—To Adedoja R. Ojelabi, for her outstanding leadership and dedicated service to the AAPG and the Africa Region and her passion for mentoring geoscientists.

Adedoja Ojelabi was born in Lagos, Nigeria with a love of nature and thirst for adventure that she believes led her to geology. With a B. Sc. in geology and mining (1988) and Best Graduating Geoscience Student Award from the University of Jos, she joined Chevron Nigeria in 1990. She received her master's in petroleum geology and sedimentology (1994) from the University of Ibadan, Nigeria. In 21 years with Chevron, Adedoja has worked as a seismic interpreter, processing geophysicist, operations and well-site geologist and regional geologist/sequence stratigrapher, working on various projects from shelf to deepwater in Nigeria and the U.S.

Currently, she's the Earth Science Immersion Training Coordinator for Chevron Nigeria, planning and executing on-boarding

programs, technical training and mentorship programs for new hire/early career earth scientists. She also helps to coordinate organizational capability programs for mature earth scientists and petroleum engineers.

A member since 1995, Adedoja has served AAPG and the Africa Region with distinction, enthusiastically promoting its ideals and recruiting new members. She was elected vice president of the Africa Region in 2010. Before this, she was secretary/treasurer (2008–2010) and a member of the AAPG House of Delegates (2004–2007). Adedoja was a PROWESS panelist at the 2010 AAPG ICE in Calgary and recently hosted "Women in Geosciences Roundtable", for female geoscientists in the Nigeria.

Through her energetic leadership as Africa Region Imperial Barrel Award (IBA) Program Coordinator in 2009 and 2010 and Advisor for 2011, the Program in the region has gone from little-known to one recognized globally for its best practices. From 4 university teams in 2008, the Africa Region IBA program grew to 15 teams in 2011 with participation from North, South, and West African universities. This occurred despite the serious logistics challenges that organizing such competitions in Africa present.

A gifted organizer, Adedoja has helped to raise over $176,000 in IBA sponsorships and Petrel software donations worth over $1.8 million and initiated an IBA Mentorship Program, pairing 38 experienced industry practitioners and technical coaches with IBA teams across Africa. The students learnt technical and problem-solving skills, teamwork, efficiency and work ethics; and mentors gained from an exchange of ideas and derived a sense of fulfillment from helping young geoscientists.

The mentoring program, which helped to increase industry awareness and generate financial support for IBA, has been recognized as a Best Practice and adopted by some other regions. Recognized for her innovation and passion in 2010, she is now a member of the AAPG IBA Committee.

Adedoja has also made outstanding contributions to her local association, the Nigerian Association of Petroleum Explorationists (NAPE), an affiliate of AAPG. A former financial secretary, she's served on numerous committees tasked with conference planning, editorial, conference themes, pre-conference workshops, and website campaigns. The Exhibition subcommittee which she chaired from 2003 to 2010 has in the last five years, been a major source of funding for NAPE's Annual International Conference and Exhibition and the Regional Deep-water Offshore West Africa (DOWAC) Conference. She also served on the Nigerian Stratigraphic Commission (StratCom) as secretary for the Structural/Stratigraphic Subcommittee and is an active member of the Nigerian Mining and Geosciences Society (NMGS).

A Distinguished Alumna awardee of the Geology Department of the University of lbadan, Adedoja devotes considerable time and resources to grooming geoscience undergraduates. She facilitated Chevron Nigeria's sponsorship to ship books and journals donated to 10 Nigerian universities by the AAPG Publications Pipeline in 2010. She was also on a Chevron team that provided 30 state-of-the-art computer workstations and other hardware to two Nigerian geoscience departments. In 2006, she helped to raise funds from alumni to purchase 22 high-end microscopes for the University of Ibadan Geology Department, and renovate the Petrology Laboratory.

She volunteers as lecturer and mentor at two Nigerian universities and awards an annual scholarship to the University of Jos through the NAPE University Assistance Program (UAP). She co-founded the Committee for the Development of the Geosciences (CDG), a body that donates equipment and services to Nigerian universities and she has been recognized many times by Chevron Nigeria for her outstanding contributions to the development of Nigeria Universities.

Adedoja has authored/co-authored and presented several award-winning technical papers at many conferences, including AAPG. She loves reading, live theatre, music, and writes articles in magazines, in-house bulletins, newspapers and on the web. She is married to Ayokunle and they have three children.

For these qualities and more, she is highly deserving of the AAPG Distinguished Service Award and I am really proud to be associated with her.

A. Oluwafemi Esan

VICTOR H. VEGA
Distinguished Service Award

Citation—To Victor H. Vega, In recognition of his leadership and dedication to the growth and development of the American Association of Petroleum Geologists in the Latin America Region.

Victor Vega was born in Bogotà, Colombia, where he grew up and obtained his B.S. degree in geology in 1989 from the Universidad Nacional de Colombia doing his thesis in the geochemical exploration for Cu, Pb and Zn, in the Villeta, Cundinamarca región of Colombia, through the use of multivariate computer techniques applied to geochemical exploration. In 1993 he received a master's degree in geophysics at the University of South Carolina, Columbia, South Carolina with the thesis: *Relative Plate Motions Determined by GPS Satellite Geodesy in Colombia, Costa Rica, Ecuador, Panama and Venezuela*.

Victor's professional career started in Bogotà, Colombia in 1984 having worked as an engineering supervisor with Restrepo y Uribe Ltd., and from 1985 to 1991 as a geological and geophysical technician with INGETEC S.A., for Occidental de Colombia Inc., ESSO Colombiana and INGEOMINAS. In 1992 he worked briefly for NASA's JPL in Pasadena, California. During 1991–1993 he was a graduate research assistant at the University of South Carolina, where he worked in a GPS data processor project in Central and South America.

From 1994–1999, Victor worked for Amoco Production Co. doing geophysical exploration in the Black and Caspian seas, Central Asia, Middle East, Colombia, and Ecuador. In 1996 he worked as an exploration geophysicist in Colombia, establishing strategies to improve Amoco's business position in Colombia. He was principal exploration geophysicist and interpreter in several projects in the Catatumbo basin, in the Cretaceous section of the Middle Magdalena Basin and in two offshore blocks. In 1999 after the BP–Amoco merger he worked as special assistant to corporate deputy directors of the Upstream Information Technology (UIT) and was a principal advisor to the global consultants.

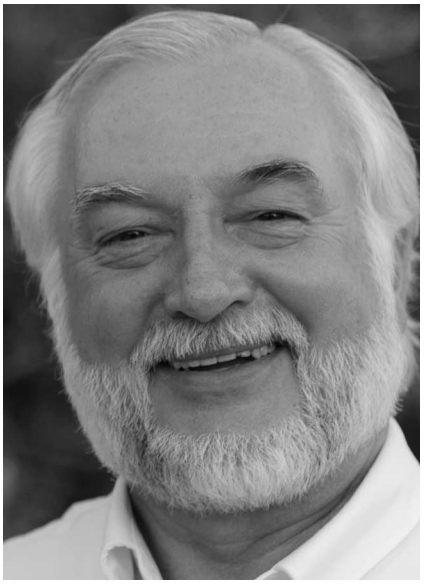
In 2000, Victor joined BP America as principal development geophysicist in the Rockies Business Unit, and then became Project Manager for the Jonah/Pinedale area. In 2004, he worked as resource manager in the Noel full field development Tight Gas team of Canada's Business Unit.

In 2005, Victor went to BP Andean, Inc. as reserves progression manager, in the Colombia Performance Unit, establishing drilling options, and was technical representative to Ecopetrol. In 2008 he moved to Venezuela as technical manager for the Venezuela Performance Unit, delivering depletion-decline management plans and overall field development strategies. In 2010 he became vice president of resources for the Andean Strategic Performance Unit responsible for subsurface, exploration and information technology (IT) teams for Colombia and Venezuela and from 2006 to 2010 he was a member of the extended subsurface global leadership team.

Starting in 2011, Victor joined Talisman Inc. and was appointed vice president for Subsurface and Exploration for Equion Energia in charge of the subsurface and exploration teams and the technology and IT groups.

Victor is married with two children and is a Member of AAPG (VP for Latin America Region 2009–2011, a member of Technology Advisory Committee and General Chair for 2013 ICE) and ACGGP (Colombian Association of Petroleum Geologists and Geophysicists). He is passionate about his AAPG role and has created an extensive network in Latin America.

Alfredo Guzman



MARK L. WILSON
Distinguished Service Award

Citation—To Mark L. Wilson, for his dedicated service to AAPG, and especially for his role in contributing to the growth and success of the AAPG Pacific Section.

Mark L. Wilson received his B.S. degree in geology from the University of Utah in 1970. He spent the first 12 years of his geologic career in mineral exploration searching for uranium, precious metals, coal and mineable oil sands throughout the western United States. This experience resulted in a career defining connection of subsurface data to outcrops. Mark discovered mineable uranium ore bodies in the South Park area of Colorado and the White Canyon district of Utah.

He transitioned to petroleum development geology in 1982 with a transfer to Gulf Oil in Bakersfield, California. He discovered a new pool in the Phacoides and a pool extension in the Tulare formation in the Cymric field. In 1985, Mark moved to Bechtel Petroleum Operations, Inc. at the Elk Hills oil field where for 12 years he was the principle geologist on the world class Main Body B water flood project. His definition of reservoir architecture and innovations in performance monitoring led to a revision of the water flood to management by layer. He also recommended projects that added reserves in the Monterey shale, Shallow Oil Zone and Dry Gas Zone. Mark then spent 6 1/2 years representing Chevron during the start-up of Occidental's management of Elk Hills providing guidance to both companies as Occidental dramatically accelerated reserves recovery.

From 2004 until 2009 Mark was an independent consultant providing evaluations of oil reservoirs in the Casmalia, Cymric, Yorba Linda, Kern River, Midway-Sunset, Coalinga, Edison, Mt. Poso, Chico Martinez, Oxnard, Edna, Orcutt, Lost Hills and Poso Creek fields in California for various clients. In 2009 Mark became the geology manager for Santa Maria Pacific, a startup oil producer with reserves in several Monterey pools and Sisquoc diatomites, in the Santa Maria Basin.

Throughout his petroleum career Mark has been a proactive member of AAPG. He joined in 1982 and was president of the Pacific Section in 1995–1996. In 1995, the Section was reeling from a period of fiscal difficulty and Mark started the transformation of the attitude of the Executive Committee to its current state of fiscal responsibility. Mark was president of the San Joaquin Geological Society from 1996–1997. In 1999, Mark became the founder of the Pacific Section AAPG Foundation and continues as its chair today. The PSAAPG Foundation has grown to a position of being able to perpetually fund both our TOTY awards and our Van Couvering awards which send university students to the Pacific Section conventions each year. At each of the Section conventions Mark can be found selling used geology books donated to the Foundation by its members in support of our scholarship programs.

Mark has served for 15 years as a delegate from the San Joaquin Geological Society and spent several years on the AAPG's Committee Oversight Committee. He has authored or co-authored more than a dozen papers presented at the San Joaquin Geological Society dinner meetings, Pacific Section Conventions, and at the AAPG annual meetings. Mark's volunteerism also extends beyond AAPG, in particular to being on the Board of Governors of the California Well Sample Repository on the CSUB campus in Bakersfield. Mark continues his involvement with the Pacific Section Executive Committee and provides his time and experience to AAPG's great advantage.

Mark has a remarkable ability to remember details of drilling, logging and coring wells. He frequently recalls the details of wells that I have drilled better than I do myself. More importantly he uses that ability to craft solutions to current problems. He rarely makes the same mistake twice or even makes the same mistake that his colleagues have made. He is forever trying to do the right thing and counsels others to do the same. Mark is an avid recycler and always returns the shopping cart to the store. If you ask him his opinion, you will get it even if you don't like it. He doesn't parse it to his advantage. Being forthright in today's corporate culture is not always advantageous, but that is of little concern to Mark.

By being attentive to detail has not lead to Mark's to be consumed by the complexity of many geologic situations. In fact, more noteworthy is his ability to simplify and reduce problems to critical elements. He often recounts an experience that he had as a twenty-something year old geologist working in SE Utah. He had the opportunity to visit the ridge on the flank of the Henry Mountains where Charles B. Hunt sketched the beds that demonstrated the deformation associated with the laccolithic intrusions. A photograph does not capture the geology nearly as well as Hunt's line drawings. Mark has spent his career producing "line drawings" and as a result has had a long, interesting and successful career.

Mark owes much of his success to his wife of 40 years, Pamela, who patiently moved with him all over the western U. S. while trying to construct a teaching career. They have two children. Jennifer spent nearly 10 years working in the former Soviet Union and is now a political consultant and web designer in Denver. Their son, Ryan, is an accountant in Portland, Oregon.

Larry C. Knauer

ANDREW HURST
Grover E. Murray Memorial Distinguished Educator Award

Citation—To Andrew Hurst, geologist, explorer, educator and mentor for his unwavering commitment to students and industrial-academic collaboration.

Andrew's love affair with geology started at the University of Aberdeen where he undertook a B.Sc. in geology and mineralogy (1973–1977). Following this, Andrew received his Ph.D. at the University of Reading in 1980 researching the clastic diagenesis and sedimentology of onshore and offshore Jurassic strata on in Northern Scotland. This area near Brora (that Andrew crawled all over for his Ph.D. research) quickly became a favorite stomping ground of his. Following four months as a research fellow at the University of Bergen, Andrew joined Statoil, Norway in 1981. A decade later Andrew joined Unocal UK in London where he was based until 1993 when he became the Shell Professor of Production Geoscience at the University of Aberdeen where he has been ever since.

Andrew's research interests are broad but underpinned by an interest in sedimentary rocks, their weathering, transport, deposition, preservation and diagenesis. Andrew also has an interest in the mineralogy of sediments, and the quantification of the physical characteristics of porous media. Most recently, Andrew has gained global recognition for his research on sand injectites. At first glance, this topic appears to have a potentially more academic than commercial slant, however Andrew's research was initiated by working with oil company subsurface data and led directly to the discovery of new oil and gas resources (for example, the Volund field in Norway). This research has integrated seismic, well log and core-based observations with outcrop analogues and modeling.

As a broad-based scientist and entrepreneur, Andrew has a long record of cross-disciplinary activity in oil industry-related research with patents for probe permeameters and non-destructive grain-size measuring equipment. Andrew was also the founding chief editor of the popular journal Petroleum Geoscience.

Over the years, Andrew has supervised 15 Ph.D. projects and has mentored over 60 M.Sc. projects and 6 M.Sc.'s by research. In addition to teaching and supervising with an inspiring style, he is thought provoking and brings out the very best in young enquiring minds. His M.Sc. course entitled "Prospect Evaluation" is well remembered by those that have participated in and benefitted from his engaging classes. He pushes students to think critically, creatively, and to extract the maximum value from data.

Aberdeen's best-known geological degree program is the M.Sc. in

integrated petroleum geoscience to which Andrew is a significant contributor. He teaches frontier exploration and geological risk analysis, and shoulders the role of integrated petroleum geoscience M.Sc. project coordinator. This role relies on his natural ability to marry academic with industrial goals and every year Andrew's extensive network of industrial contacts is used to great effect to deliver interesting and challenging projects year in year out. Not only are they academically sound but his flair for project design invariably makes them commercially valuable pieces of work too. If there is an industrial-academic win-win to be tapped into then he will find it.

In 1993, Andrew co-led an initiative to establish a petroleum geology M.Sc. in Brunei, based on the Aberdeen model. This was a tremendously successful venture and could be viewed as the pre-cursor to the globalization of education and the export of taught programs that is now so prevalent. Currently Andrew is leading and collaborating international research and educational interests in Ghana and Nigeria.

In addition to Andrew's credentials as a geology teacher and researcher he has a tremendous capacity to reach out to other disciplines, and to the general public. Andrew has effectively collaborated over the years with physicists, applied mathematicians, chemists, engineers and psychologists and has taught the fundamentals of geology and petroleum systems to lawyers, economists, business managers, accountants and engineers. Andrew sees the value in working with other skill sets.

Examples of his outreach activities include the Fabric of the Land, an art exhibition that is held annually in the Department of Geology and Petroleum Geology. Andrew co-founded the exhibition, which fuses geology and art and is displayed in a working geology department. More recently, Andrew has taken on the challenge of popular science outreach. He has developed his conceptual thinking and scenario modeling on the impact of global climate change on the sustainability of urban environs and has presented "Cities on Nature's Hit List" at the Aberdeen University Science Café.

Andrew has also been of great service to the AAPG over the years, serving as European representative on the Advisory Council (2002–2005) and was vice-chairman of the AAPG Publication Committee from 2005–2008. He is currently part of the AAPG 100th Anniversary Committee and one component of this role is that he is chief editor of *Outcrops that have changed the way we practice petroleum geology*. Andrew's long-standing involvement with AAPG led to him being awarded the Distinguished Service Award in 2007.

In closing, some of you may be asking 'what kind of man is Andrew Hurst?' He is an ideas man. Ideas are his currency, his source of intellectual wealth and his sustenance. He is ideas rich and good ideas have been the cornerstones of his career, enabling it to flourish. One of Andrew's most important recent ideas is exploHUB, the training center for excellence in regional hydrocarbon exploration. exploHUB is a vehicle for knowledge transfer from experienced industry professionals to the next generation of hydrocarbon explorers. As such, exploHUB will alleviate the impact of "the big crew change". A training center such as this could only be situated in a global oil capital and Aberdeen was chosen as its natural home. The program was launched in 2011 and six trainees from Mexico, Romania, Venezuela, and the UK are currently undertaking nine months of continuing professional development that centers around active exploration rather than undergraduate style classroom teaching.

Andrew is far more than just an effective educator, he provides mentorship, advice and guidance freely to those willing to listen. Hundreds of former B.Sc., M.Sc. and Ph.D. students and past and present colleagues will be delighted to hear that Andrew Hurst has been awarded the Grover E. Murray Memorial Distinguished Educator Award.

Stuart Archer

Response

To be a geologist is a wonderful thing. Many of us know the pleasure that we gain from sharing our passion for geology with peers, students or non-geologists. I have opportunity to do these things in abundance so I feel that I have more good fortune than I deserve.

Whether true or not I think of myself as a broad-based scientist and geology did not become part of my life until an undergraduate at University of Aberdeen. My meeting with geology followed a strong prompt from my chemistry teacher Alastair Fleming who clearly thought that my future lay in the hills and not in his lab. I have been running away from chemistry ever since! Interpreting his prompt less trivially, it would be nice to think that he saw in me qualities over and above those I exhibited in chemistry, math, and physics. Alastair provided an example of

how a wise gesture can have a significant affect on a young life. I learned from this and hope that "my door is always open" to students and colleagues alike and they feel that I can be approached in confidence and trust.

As a B.Sc. student who loved mineralogy, crystallography. and phase diagrams it was perhaps remarkable that the lasting undergraduate influences on my life came from sedimentologists Nigel Trewin and Gordon Walkden who guided, encouraged and befriended me, and told me to leave Aberdeen to do a Ph.D. (probably adding "and never come back!"). Nigel told me that my Ph.D. years would be the best of my life, he was correct. However on completing my Ph.D. at the Sedimentology Research Laboratory with the late Bruce Sellwood and Andrew Parker and under the influence of John (JRL) Allen, I discovered the post-Ph.D. years were even better! A foretaste of my future was provided by Knut Bjørlykke, at the University of Bergen, who shared with me ideas on quantitative clastic diagenesis that became fundamental to understanding so many aspects of porosity and permeability loss during burial. My time in Bergen introduced me to the importance of the alignment of science and technology with educational goals and its role in the discovery and recovery of hydrocarbons.

My professional career began in the oil industry with Statoil where I learned that one should not assume that "we know all we need to know" and that technology although vitally important will never give us all the answers we seek. I have a lifelong debt to Statoil and Norway for trimming back the arrogance of my youth and accommodating an immature professional. My abilities and limitations were exposed but my growth as a scientist was enhanced and I was given the opportunity to educate within the company and in various Norwegian universities, and to mentor research students. Combining this with Statoil's policy of encouraging scientific publication I was given a taste for what education offered. I left many terrific colleagues in Statoil to who I am indebted. Joining Unocal took me back to the UK where I explored the UK continental shelf with minor success. During this period I came face-to-face with the fact that many of our co-venturers did not embrace drilling wells as part of their exploration strategy; welcome to risk averse culture! All too often I heard that it was "good to have exploration opportunities in excess of those one was able to test" as a reason not to drill exploration wells. This did not fit well with my appreciation of wealth creation by applying geologically grounded concepts in exploration and in 1992 when invited by the University of Aberdeen to apply for the Shell Chair I was ready for a change.

University of Aberdeen is arguably a unique institution to practice petroleum geology in academia. Most of our B.Sc. students want to become professional geologists (many in the oil industry). Our globally popular M.Sc. courses are full to the brim with smart, motivated students all heading for oil industry careers and we have a large cosmopolitan Ph.D. program where oil-industry-related research predominates. In this educational environment how can one fail to be inspired! We punch above our weight and we aim to punch harder! Without the support and kindness of my excellent academic colleagues and many oil industry professionals my life would of course been much harder, thank you. Although most of my teaching is done at M.Sc. level I have been privileged to teach at all undergraduate levels and find it equally exciting to enthuse level 1 B.Sc.'s, as to tune the skills of highly-committed graduate students or, working with experienced oil industry personnel. University of Aberdeen's commitment to partnership internationally in petroleum geoscience research and education with universities in developing nations brings continued opportunities for outreach and influence where colleagues and I are always looking for opportunities to collaborate.

A recent departure from research and education is the focus on professional training with the exploHUB initiative under the directorship of my biographer Stuart Archer. Designed to invigorate the skills needed to explore for Earth's remaining hydrocarbon reserves we aim to support the need for creativity and a heightened awareness of the big picture. Academia cannot lead exploration but we can train leaders! Equally my involvement with visual arts and geology through the Fabric of the Land art exhibition has opened my eyes to new ways of observing geology.

As I enter the latter part of my career my learning curve remains steep. The painful realization is that there are a few specialist areas of geology where I have a reasonable level of knowledge but for the most part I am hopelessly ignorant. This should keep me on my toes for a few more years! Indeed along with my longtime friend Paul Nadeau I

plan to have fun educating students to question dogma and to shift paradigms in the study of petroleum systems. Fundamentally, history has shown us that can be the most effective way to advance science, knowledge and technology.

Any success that I have is largely a factor of the excellent colleagues and students that I work with, who are far too numerous to name, and my wonderful children, Kris and Elisabeth, who give me generous support and endless patience. With my Nowegian background, familiarity with "Janteloven" is inevitable, "I should not think that I am better than anyone else or that I am special"—I am absolutely not special! With that in mind I am indeed privileged to receive the Grover E. Murray Memorial Distinguished Educator Award.

Andrew Hurst

HOWARD DAVID JOHNSON
Grover E. Murray Memorial Distinguished Educator Award

Citation—To Howard David Johnson for his inspirational educational leadership, for always prioritising the needs of his students, and for his meticulous research into clastic reservoirs.

It is such a great pleasure to try to capture the essence of Howard for those who have not been fortunate to know him personally, and to celebrate his many and diverse achievements. Above all else, he is as decent and straight talking a person as you will ever come across in our business, in no small measure due to the county of his birth which is well known for these character traits, namely Yorkshire. These human qualities have led countless students to seek his help over the years, and although incredibly busy, I have never known him turn away a request for help: his door is truly always open.

One of my great personal memories of Howard is when we were jointly leading an undergraduate field trip to the south coast of England, when, on a rainy wind-lashed coastal path, the students murmured their dissent at getting a soaking, so being flexible and attentive to their needs, he duly led us into the nearest pub, where it just so happened that a major sporting event involving England was being televised! Flexibility in the face of adversity, and if ever there was a need for this approach it was on show that rainy day, and on many other occasions too when leading a diverse group of academics has demanded diplomacy and sound leadership.

Howard undertook his doctoral research under the supervision of Dr. Harold Reading, and spent a number of happy summers with a team of graduate and undergraduate students in Finnmark, northern Norway. Harold's influence is plain to see in his subsequent career, but particularly in Howard's own exemplary supervision of dozens of graduate students. After a couple of post-doctoral fellowships, Howard entered the Petroleum Industry, spending 15 years with Shell in postings in Holland, Malaysia and the UK, and rising to hold senior appointments in Sarawak (chief petroleum engineer), and the North Sea (exploration team leader). This duality in his industry background has imbued in him an ability to see details at the smallest scale, and blend these observations with a deeply grounded view of the basin scale, always thinking of process and response. This is of course a rare combination, so his students have benefited enormously from his unique approach to teaching sedimentology and basin evolution. His lecturing approach is meticulous and encouraging, fostering in his students the willingness to challenge perceived wisdom, but reassuring too, so that they can confidently master the basics. Howard comes into his own in the field, and it has been my personal privilege to see this at first hand, and to learn as much from him as many of our students.

Howard left Shell in 1993 to take up the Enterprise Oil (later Shell) Chair of Petroleum Geology at Imperial College. This Chair has subsequently been sponsored by Shell, and he continues to hold this distinguished position today. Imperial has a long tradition of excellence in petroleum geology, and Howard has done more than his share in keeping that alive. His contribution to the teaching and research effort at the Department of Earth Science and Engineering has been as remarkable as it has been broad, but perhaps he is most widely respected for his leadership of the master's course in petroleum

geoscience. He inspired a major overhaul of this long-running course to the extent that it can rightly be regarded now as one of the best of its kind in the world. Under his leadership, over 500 students have graduated from the master's and gone on to careers mainly in the Petroleum Industry. These former students value his contribution highly, and the course is now highly sought after as a result of his efforts. In addition, he took the highly successful Barrel Award onto an international stage such that it is now part and parcel of the AAPG Conference.

Howard also heads up the Petroleum Geoscience and Engineering Research section at Imperial, and is responsible for 17 academics and over 50 doctoral students. I am but one of a host of colleagues of Howard's who have been the beneficiaries of another of his outstanding qualities, namely his totally unselfish mentoring of those junior to him. This is such an unsung role, but plays a large part in the life of the department, and is a huge bonus to younger colleagues like myself, who needed guidance at critical times in their careers.

Much of his personal research contribution has been through supervision of doctoral students, working on a diverse range of topics under the broader theme of shallow siliciclastic reservoirs. From an early contribution to the Reading textbook classic, Sedimentary Facies Analysis, to his more recent work on shelf and slope systems of Borneo, his 50 or so publications are characterized by clarity of purpose and delivery, and the quietly confident style of someone who is comfortable with uncertainty in interpretation. Howard has been influential in shaping many young research careers, and his former students are successful sedimentary geologists in the petroleum industry or in academia.

Throughout his academic career, Howard has maintained close links with the petroleum industry, through giving short courses or leading field workshops, by managing a series of large industry-sponsored research projects, or through consulting. His efforts for the community are exemplary, serving on technical or conference committees for the Geological Society, the PESGB and the AAPG. He also took a two-year secondment to act as a senior technical advisor to Petronas Carigali, and has retained his extensive links to SE Asia, and regularly visits for field work or to act as an external examiner.

His diverse achievements stand proudly amongst all that could be hoped for in such a varied career, but as a truly modest person, he would not see himself as anything special, although he really is. His inspiring teaching through which hundreds of graduate students have been stimulated to further their careers in the petroleum industry, will certainly be his legacy along with all his dedicated backroom work to the furtherance of the subjects of sedimentology and reservoir geology in the wider community. I know I, and countless others who have worked with him over the years will be delighted and thrilled that he has been honored with the Grover E. Murray Distinguished Educator Award, so richly deserved.

Joe Cartwright

Response

I am deeply honored to receive this prestigious award and will remain indebted forever to those in AAPG who considered this appropriate, and to Joe Cartwright for his exceptionally kind words. As ever, good fortune played a big role, which allowed me to do my doctorate with Harold Reading at Oxford University, followed by a dual career in Shell and Imperial College (IC). This was my education and it has been a privilege, since joining IC in 1993, to share some this with countless undergraduate and graduate students. All this is a huge team effort and I have been blessed with the chance of working with an exceptional group of teachers and researchers.

I crossed the irreversible threshold into geology as a schoolboy taking a five-day field trip to the magical Isle of Arran in SW Scotland, which was led by John Pollard (Manchester University) and his enthusiastic Scottish assistant, a certain Ron Steel, who received this award last year! My links with Scottish geology continued as an undergraduate at Liverpool University, where the only rocks worth studying were the Dalradian (Late Precambrian-Cambrian) in the Scottish Highlands. I was hooked and joined Harold Reading at Oxford, who had sent a raft of students to Arctic Norway to study rocks of similar age, including Roger Walker, John Collinson, Nigel Banks, Marc Edwards and, after me, Bruce Levell and Kevin Pickering. There were few better places than Oxford in those days to learn about the rapidly expanding subject of sedimentary facies analysis. There was no better supervisor than Harold Reading (recipient of this award in 1997), who has guided me throughout my professional life. Words cannot express my gratitude to Harold for his wisdom, support and advice. One

of the highlights was working together on the three editions of the *Sedimentary Environments* textbook. Another was his suggestion to attend the first-ever conference on the Petroleum Geology of the North Sea (in 1974), when Sir Peter Kent, in his closing address, predicted: "…that never again will such a mass of new information be available to be released at such a meeting." It was electrifying stuff that, at a stroke, extended onshore British geology into the offshore and propelled me into Shell!

Integration of science and technology is at the heart of the petroleum industry and this was encapsulated in the Shell Research Laboratory (KSEPL). I started as a reservoir geologist and was asked to apply knowledge of depositional systems in order to better understand petroleum reservoirs. Thus started a raft of integrated studies from around the world, including building some of the very first 3D reservoir models using what was then the new "Cray Supercomputer". The mutual need of reservoir geologists and reservoir engineers had been irreversibly established. I was fortunate, again, to work alongside the likes of Koen Weber and Bob Sneider, who were my professional mentors in Shell. Applying their vision and motivation to the appraisal and early development of some of the giant North Sea oil fields was an inspirational period. Integration was also the watchword in Sarawak Shell in the 1980s, with all the names of the EP teams prefaced by the term "Integrated…Team", just in case anyone doubted its importance. Subsequently, I was leading Shell UK's Atlantic Margin Exploration Team where, alongside BP (and against all the odds!), we discovered the Foinaven Field. But it was time to move on!

When I took up the Enterprise Oil Chair in Petroleum Geology at IC in 1993 (the Shell Chair, since 2002), petroleum geology, exploration geophysics and petroleum engineering, were largely separate subjects, both in teaching and research, until we merged into a single department (Earth Science and Engineering) in 2001. In order to enhance the student learning experience, and to maximize relevance to the majority of careers, we developed more integrated courses, especially our three master's-level courses (petroleum geoscience, petroleum geophysics and petroleum engineering). Indeed, science and engineering is now so integrated throughout all our teaching and research that sometimes I could almost be back in Shell! This has also helped in my own research through collaboration with inspirational past and present colleagues and friends, such as Philip Allen, Peter Allison, Chris Baldwin, Joe Cartwright, Alastair Fraser, Sanjeev Gupta, Gary Hampson, Chris Jackson, Matthew Jackson, Cédric John, Lidia Lonergan, and Ann Muggeridge. This includes extensive work on the sedimentology and reservoir characterization of shallow marine sandstone reservoirs, including many integrated outcrop/subsurface reservoir studies from around the world. Shell has been an ever-present supporter of this work, which has helped maintain its subsurface relevance and is gratefully appreciated.

Looking back since that first North Sea conference, it is phenomenal to see how far we have come, not only in our geological understanding of this basin, but also in the degree of collaboration between academic institutions and industry. The petroleum industry has given IC tremendous support, not least in helping us deliver courses that are rich in subsurface science and technology. This is profoundly manifested in our two master's-level group projects. In the Field Development Project we create integrated teams of geoscientists, geophysicists, and petroleum engineers and give them a real subsurface dataset. They have three weeks to compile an initial field development plan, including estimates of STOIIP and Ultimate Recovery. Our Barrel Award Project has the same teaching concept, but an exploration focus. This is familiar to AAPG members through the highly successful Imperial Barrel Award (IBA), thanks to Steve Veal's vision and motivation. All these team projects share the same ingredients: hard work, tight deadlines, and practical application of geoscience and technology, all of which makes for a very powerful learning experience.

So this award is a reflection of a lot of good fortune and I thank, in equal measure, all my former Shell colleagues from around the world, IC staff and research associates in the Department of Earth Science and Engineering and all present and former IC students for their support, motivation and kindness over many years. Finally, none of this would have been possible without an exceptionally supportive family, with Ruth always present to run the family whenever fieldwork called.

Howard D. Johnson

JILL STEVENS
Harrison Schmitt Award

Citation—to Jill Stevens, for her contribution to the advancement of earth and environmental science teacher training in Australia as the driving force behind the inception and running of TESEP.

After being born in England and living most of her first eight years in Rhodesia (now Zimbabwe) Jill Stevens moved to Australia and grew up in Brisbane with an increasing appreciation of nature and science, fostered by her family's passion for camping and hiking.

Jill was very fortunate to attend one of the few Australian high schools that had an inspiring geology teacher, giving her the insight to pursue an education that combined career aspirations with her interest in the natural world. Despite being confined to a wheelchair after a hiking accident mid-way through high school, Jill took on and completed a Bachelor of Science (with First Class Honours) majoring in palynology at the University of Queensland in 1978.

She began her professional career as a specialist Palynologist with Esso Australia (now ExxonMobil) in Sydney in 1979—being both the first female geologist and the first wheelchair-bound employee in that office. Jill excelled in her specialization, contributing to and publishing several papers on aspects of Mesozoic palynology, including some work conducted at Exxon's Houston research center. After five years in the palynology group, Jill widened her expertise with Esso to become a stratigrapher, working on basin analysis projects across Australia.

When Esso moved Australian head office from Sydney to Melbourne, Victoria in 1992, Jill went along with her husband and two young children in tow. After the move, she continued to broaden her professional experience in multiple geoscience roles, spanning exploration, development and production in many basins throughout Australasia in a career with ExxonMobil that now spans 32 years.

As well as being a longstanding AAPG member, Jill is also a longtime member of PESA (Petroleum Exploration Society of Australia) which, at a much smaller scale, is like AAPG in that it is a not-for-profit organization of petroleum industry professionals which has, as one of its goals, the advancement of earth science education. Although PESA is a national society, run by a federal executive, it has independently-run state branches.

Jill volunteered on the state branch committee from 2004, participating in, among other things, the Education sub-committee. The branch encouraged members to present to schools about the role petroleum plays in our society. As any geoscientist asked to talk about their profession will be aware, a potential "barrier" is the time/effort it can take to collect "props" to accompany a presentation. To ease this task, Jill led the Education Sub-committee in producing kits of materials that members could borrow, containing rock samples, Perspex-encased oil samples and some geoscience information posters. The posters (www.tesep.org.au/workshopPD4.html) were made available to other PESA branches, and are provided free to schools throughout Australia upon request.

Even with these kits, getting greater awareness of petroleum geoscience into high schools was very ad hoc, particularly finding space in busy school timetables, especially if presentations were not clearly linked to the required curriculum. Jill's sub-committee began to consider how to achieve a more systematic program of delivering effective earth science content into high schools on a very limited budget.

During this period, increasingly driven by her belief in the worthiness of the task and her growing dedication to it, Jill's sub-committee role quickly expanded to include leadership of a push to widen this endeavor beyond the PESA Victorian state branch. Recognizing that the same paucity of effective high school earth science education existed in other Australian states, Jill took the initiative to organize an Education Forum at the next national petroleum geoscience conference.

As it happened, the next meeting was the first AAPG International meeting in Perth in November, 2006, co-organized with PESA Western Australia. A forum comprising 21 representatives of

PESA and other interested parties from various industry and education organizations (largely those contacted and invited by Jill) met and considered ways to improve the exposure of geoscience in Australian schools.

It was generally agreed, that the most effective (and cost effective) way to advance geoscience education was to work within the system (i.e., improving earth science knowledge in teachers). Better trained/resourced teachers could influence many more students to consider earth science issues and tertiary education pathways than external presenters ever could—especially when seeking the best outcome with limited funding. Hence, the imperative to "teach the teachers" became the key objective of a proposed national schools education initiative.

However, turning a worthy, but very ambitious idea into a functioning organization is no small task. Many of us can speak enthusiastically about what we believe should be done, but very few can then demonstrate their determination and commitment by translating that into a tangible outcome. Even fewer volunteers can manage to produce such an outcome in a short period of time—that is what Jill Stevens achieved.

With continued drive and direction from Jill, there was a follow up forum in April 2007, where the vision of Greg McNamara (now TESEP Executive Officer) was detailed. This became a reality with TESEP's inception in July 2007. To ensure it moved forward expeditiously, Jill became the founding chairperson, with ExxonMobil sponsoring a (notional) day per week of her time.

As well as fostering contacts with multiple earth science and education organizations across Australia to make TESEP a reality, Jill has worked tirelessly to coordinate the development and implementation of a series of Professional Development workshops ("The Challenging Earth" eight-part series, many with associated field excursions/site visits) for high school teachers—and their recognition by the Australian Science Teachers Association. This series addresses teacher requests for help in understanding and delivering some harder-to-teach Earth and Environmental Science topics, many related to resources industries and our energy future.

Of course the development and delivery of over 75 one-day workshops at over 20 locations across Australia since August 2008, has also involved the dedication and involvement of many others, both volunteers and paid workers, as well as industry and university in-kind support. However, it is Jill's constant oversight of the entire organization that has ensured the success it has achieved so far. In addition to this, Jill has been the primary pursuer of sponsorship for TESEP, spending countless hours chasing the funding, which has been so critical to its inception and its survival to date.

Without the personal dedication and initiative shown by Jill Stevens, TESEP would probably not have got up and running at all—and certainly not as quickly as it has.

While Jill's interest in, and commitment to geoscience education for school students has been evident ever since she joined the PESA Victorian branch committee, her overwhelming dedication to overseeing the initiation and development of TESEP has been inspirational. What she has achieved in just a few years of "part-time" effort is nothing short of exceptional.

As Jill and her dedicated group make plans for TESEP entering the second phase of its development, they can rightly be proud of the Professional Development workshop series they have produced and implemented. These one-day workshops have been delivered to close to 1,000 teachers across Australia since 2008. The "multiplier" effect of these is estimated to reach about 300,000 students. While demand for the workshops continues to grow—due, in no small part, to the positive messages spread by teachers who have experienced them—TESEP (www.tesep.org.au) continues to face the challenge of securing enough sponsorship funding to consolidate its program and secure its future.

However, with the passion, drive and commitment exemplified by Jill's leadership, TESEP could not be in better hands.

Kevin Lanigan

Response

Receiving the Harrison Schmitt Award for 2012 is a humbling experience. It's been a long journey and I'm pleased to formally recognize and thank the important people in my life who have helped make this possible. The journey brings me full circle, from being "hooked on geology" by an inspirational high school geology teacher to having the privilege to chair a fantastic group of dedicated and talented earth and environmental science educators. This team delivers professional

development workshops to hundreds of teachers across Australia, in a program with the potential to influence hundreds of thousands of students.

To reminisce, I was lovingly guided by my adventurous parents, Rosemary and Eric, who bold in their vision of creating a better life for their family, emigrated from England to Rhodesia when I was one year old. I grew up in a positive atmosphere, where anything is possible, and they set about giving my brother and me a stimulating life of exposure to various cultures and the passion to explore the natural world. I owe much of my personal strength and abilities to these fantastic parents. When adjusting to becoming a paraplegic, confined to a wheelchair at 15 years of age, they showed true love and guidance, teaching me to know my boundaries and be independent. My love of travel and exploring arose from camping trips around southern Africa, then around Australia, where we emigrated when I was eight.

Growing up in Brisbane, Queensland, I was fortunate to attend a progressive-thinking secondary education college, St Peter's; one of the few schools offering a Year 11 & 12 geology elective. The enthusiasm of my Geology teacher, Mr. Protheroe, "got me hooked" on geoscience. When I became a paraplegic in my middle school years, this wonderful teacher, among others, brought in reading and tutored me during my rehabilitation. A tray of rocks and minerals under the hospital bed reminded me of earth science–champion teachers.

In 1975, at the University of Queensland Orientation Day, an old professor advised me "women don't do geology, AND you're in a wheelchair." By second year, this man and most of the academic staff were my champions; looking at how they could modify parts of field trips so that I could camp and visit outcrops. Some of my fellow students took on the challenge to bump me up and down railway sleepers to see cuttings, and haul and push me over muddy ditches to outcrops—so that, by the end of each day, we'd all had a thorough, mud-splattered workout. In third year, along the Burdekin River in north Queensland, I was piggy-backed over sand to kayak (with others) mapping faults and dykes in granites and investigating Devonian coral assemblages in outcrops on the far bank. We'd done it as a team, and I thank them.

I graduated with First Class Honours (in palynology, mentored by Geoffrey Playford) and had to choose between a Ph.D. scholarship or a job as a specialist palynologist at Esso Australia in Sydney. I took the job, which only came about due to the open-mindedness of two far-thinking men—my early career champions. The first, Frank Jeffries (a wise counselor) gave me a job interview, knowing the Esso Exploration Department was (at that time) exclusively male. He believed in me. My other champion was the CEO of Esso Australia, Jim Kirk, who believed that if I was the best candidate for the job, then I should be employed there, and any wheelchair-access changes were quickly made.

At Esso, I was privileged to be mentored by extremely talented palynologists: Alan Partridge and consultant Robin Helby in Sydney, and Lew Stover at EPRCo, while I was on an assignment in Houston. I was under the watchful eyes of management champions Greg Short, Rod Limbert, Jorg Bein, Roger Thornton, Dave Maughan and Glen Nash, and mentored by Paul Hinton in production, and Dave Klepacki and Errol Johnstone in basin analysis and structural geology. In sequence stratigraphy I was largely self-taught, squeezing my way onto the theory part of local courses, but unable to attend the critical field components. Thus, I become an integrator (?) stratigrapher, via an alternative training route.

When Anne Reeckmann became a champion, I got on my first Exxon field trip, and got hauled into creek gullies and over sandy beaches and piggy-backed onto wave-cut platforms to see trace fossils. So much of a stratigrapher's perspective of the three-dimensional shape, size and sequence stratigraphic relationships of strata is drawn from seeing the big picture panorama view (essential in basin analysis) and the sedimentary details of the bedding and fossils (essential in paleogeographic reconstructions on regional and field scale). I stretched the imagination of Exxon (and later the ExxonMobil) course presenters on Rocky Mountain, Utah and other field trips. I thank them for also being champions. It's made all the difference to how I work as a stratigrapher and biostratigrapher, especially in mentoring younger geologists.

After 32 years of varied geology, working with skilled and creative geologists and having worked on several assignments in Houston, Texas, I haven't looked back. Esso and ExxonMobil have given me a challenging and rewarding career.

This brings me to the TESEP, the Australia-based, Teacher Earth Science Education Programme. In November 2006, at an Education

Forum at the AAPG International Conference in Perth, Western Australia, attendees voted to "teach-the-teachers". Earth Science WA (ESWA) and Queensland Resources Council had demonstrated that state-based Earth and Environmental Science (EES) programs for primary and secondary students and teachers, can be difficult to run with limited resources, but still have significant merit and success. To cope with the daunting task of taking geoscience secondary school education across Australia—a country almost as large as the U.S., with fewer schools scattered over vast distances—a different approach was sought.

TESEP's "The Challenging Earth" series of eight Earth and Environmental Science one-day professional development workshops was developed, following the vision of Greg McNamara (now TESEP Executive Officer) with input from myself, Executive Board members and state-representative teachers (now TESEP state coordinators). ExxonMobil supports the TESEP program by giving me a day each week for TESEP.

I have the privilege to chair a fantastic group of dedicated and talented Earth and Environmental Science educators, who take the wonders of geology and our planet's environment to hundreds of teachers nationwide, in a program that has the potential to influence hundreds of thousands of students. Anecdotally, across Australia, teachers have reported on the successes of their Earth Science students, and we are seeing increases in student numbers involved in secondary and tertiary Science and, ultimately, working in related industries, such as the petroleum industry.

Already, we have made some teaching material freely available on a geoscience teaching website. We plan for all TESEP teaching resource material to be freely available (see www.tesep.org.au).

TESEP has set the benchmark for Earth and Environmental Science professional learning for teachers in Australia. This program for teachers has the potential to be applied in other countries.

The TESEP team has "bent over backwards" to get the job done in developing, then traveling the country to give face-to-face presentations and demonstrations of activities to help teachers excite students. These experiences set off those "light-bulb moments" of clarity—to sow the seeds that can spark a young individual to pursue Earth and Environmental Science, just like me, with Mr. Protheroe, back in the seventies. These are the dedicated staff who make TESEP the overwhelming success that it is. The program would also not be possible without the generous sponsor support, whether financial or in-kind. Many sponsors are personal friends, who also "bent over backwards" to fund TESEP, especially in the early days of insufficient funds, when the program start and continuation was in doubt.

Finally, I couldn't have made this journey without the support of my loving husband Stephen, who has trailed my career through several relocations, and who has been the main home parent in our two children's early years.

I thank all of those, who have given so much, and had a hand in my journey going full circle. Thank you.

Jill Stevens

TIMOTHY T. SCHOWALTER
Pioneer Award

Citation—To Timothy T. Schowalter for your landmark contributions to petroleum geology to understand hydrocarbon migration, traps, and shows and for showing us how these concepts can be used to find new fields.

It is most appropriate that the AAPG recognizes the significant and meaningful contributions to petroleum geology of Tim Schowalter by awarding him the Pioneer Award. As a longtime colleague and friend, it is an honor to review and chronicle his accomplishments.

Tim authored or was senior author of two landmark papers published in the *AAPG Bulletin*: "The Mechanics of Secondary Hydrocarbon Migration and Entrapment" (1979) and "Interpretation of Subsurface Hydrocarbon Shows" (1982). These papers summarize extensive work he did while at Shell Development in Houston in the early '70s.

The "migration" paper was awarded the Sproule Award in

1980 for the best *AAPG Bulletin* paper for an author under the age of 35. It was also used in the Treatise Volume on "Traps and Seals II". The "show" paper was the basis for an AAPG Distinguished lecture tour (1981–82). Tim was also a co-organizer of the 1980 AAPG Hedberg research conference on seal, where he gave a talk on cap rocks seals.

These papers are as timely now as when they were published. They are cited in industry classes and publications, studied in university classes, and used by explorationists today to find new oil and gas fields. They are indeed industry standards.

Tim not only provided the industry with these useful tools and concepts, but he himself actively applies them to generate new opportunities that have resulted in a number of discoveries. He practices what he preaches! Between 1975 and 2011 he has been involved in several new field discoveries or extensions, mainly in the Williston Basin, but also in Colorado, Michigan, Utah, and Wyoming.

Tim started his career with Shell Oil Company (in Denver working the Rocky Mountain area) and at Shell Development. Later he was a geologist with Kirkwood Oil and Gas in Casper, and exploration manager for Mosbacher and Pruet in Denver, and an explorationist with BWAB and D.C. Dudley and Associates, both in Denver. Since 2004 he has been an independent and consultant.

Tim has presented the materials and concepts developed in his work at an AAPG conference, in various AAPG/RMAG schools, and in numerous in-house courses. He has been General Chairman of the WGA Big Horn Basin Field Conference and program chairman for the weekly meetings of the WGA conferences. He has served on the board of directors of the DERL (RMAG) library in Denver. Tim is currently a member of AAPG, RMAG, SPE, and the Wyoming Geology Association.

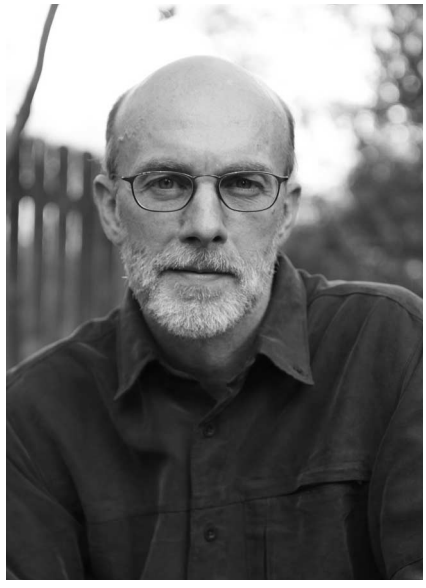
Tim was born in Cleveland, Ohio, and grew up in Texas and Missouri. He received his B.S. in Geology at Central Missouri State College where he was the very first graduate in their new program. He has a M.S. from the University of New Mexico. In 1967, in graduate school, he married Judy Shull who has been proud and supportive of all of Tim's professional and extracurricular pursuits. They have two daughters, Katie and Marie, and four grandsons.

Tim is a devoted outdoor enthusiast. He has climbed all the Colorado "Fourteeners" (54 peaks), is a World Loppet Master (finished 10 international cross-country ski marathons), and in 2001 biked 3500 miles across the U.S. from Seattle to the Atlantic Ocean in New Jersey.

Tim is a clear thinker who can sift through an enormous amount of data to focus only on the significant facts and their importance. He is a pro at making excellent, clear presentations. Additionally he has a keen sense of humor we have all appreciated.

The AAPG now acknowledges these accomplishments by awarding Tim Schowalter the 2012 Pioneer Award. As a friend and colleague for the many years, I salute you Tim.

Larry Meckel



ROBERT H. LANDER
Wallace E. Pratt Memorial Award

LINDA M. BONNELL
Wallace E. Pratt Memorial Award

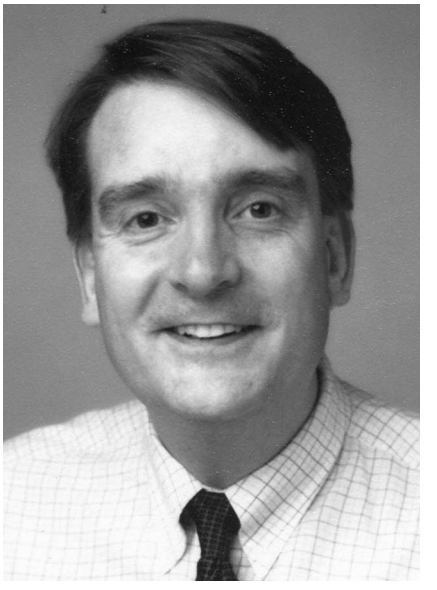
The Wallace E. Pratt Memorial Award for the best paper published in the *AAPG Bulletin* is presented to Robert H. Lander and Linda M. Bonnell for "A model for fibrous illite nucleation and growth in sandstones" (v. 94, p. 1161–1187).

Reservoir quality is becoming an increasingly important control on the economic viability of both conventional and unconventional reservoirs as we explore more deeply buried and older reservoirs. Nonetheless scientifically rigorous, predictive models are lacking for some of the key diagenetic processes that control reservoir quality. "A model for fibrous illite nucleation and growth in sandstones" represents one of the first attempts to develop such a model for the occurrence and properties of fibrous illite in sandstones. Fibrous illite can have a severe detrimental effect on reservoir properties by substantially reducing permeability while increasing capillary entry pressure and irreducible water saturation. The reaction leading to this type of illite in many cases appears to involve a kaolinite precursor but does not tend to include a succession of mixed-layer intermediate phases comparable to those associated with the more familiar process of smectite illitization. The model proposed in the paper departs from previous work on the topic by (1) providing a number of specific, testable predictions about fibrous illite occurrence and properties and (2) reproducing key observations from geologic datasets.

An important aspect of the model is that it is designed to provide a means to assess the potential impact of fibrous illite formation on reservoir quality away from well control and through geologic time. Consequently, it has the potential to improve the accuracy of pre-drill reservoir quality predictions in exploration areas. In such areas model predictions about the timing of illite formation also may provide insights into the impact that the illite could have on hydrocarbon migration into the reservoir when used in concert with petroleum systems models. Finally, the modeling approach may yield more realistic rock property predictions for interwell and flank reservoir locations that could lead to better production strategies in fields. The research in this paper was funded by The Consortium for the Quantitative Prediction of Reservoir Quality, a group of more than 20 industry and public institutions working together to develop tools to improve the accuracy of rock property predictions.

Rob Lander's primary research interest is in understanding the controls on diagenetic processes in clastic rocks and using this understanding to develop accurate models of rock properties away from well control and through geologic time. He was turned on to diagenesis and clay mineralogy as an undergraduate at Knox College under the tutelage of Dewey Moore. He carried his undergraduate Honors thesis through to a doctoral dissertation at the University of Illinois, under the supervision of Dick Hay. After receiving his Ph.D. in 1991 he joined Exxon Production Research in Houston, Texas. He then spent seven years in Stavanger, Norway working for Rogaland Research and Geologica AS (a spin-off company). Rob co-founded Geocosm LLC in 2000 where he is a scientific advisor and partner.

Linda Bonnell is a scientific advisor and partner at Geocosm LLC. Linda received her PhD from the University of Illinois in 1990. Following a postdoctoral appointment at Washington University, she moved to Houston where she worked as a research associate at Rice University and then on to Stavanger, Norway where she worked as a senior researcher in Rogaland Research and Geologica AS. In 2000, Linda returned to the United States from Norway and co-founded Geocosm LLC in Austin, Texas. In 2003–2004, Linda had the good fortune to be an AAPG Distinguished Lecturer. For the last 15 years, Linda's research interests have been focused on sandstone diagenesis and the prediction of reservoir properties. However, she started her geology career looking at shales for her PhD and at carbonate rocks during her postdoctoral research and while at Rogaland Research in Norway.



MICHAEL C. PÖPPELREITER
Robert H. Dott, Sr. Memorial Award

CARMEN GARCIA-CARBALLIDO
Robert H. Dott, Sr. Memorial Award

MARTIN KRAAIJVELD
Robert H. Dott, Sr. Memorial Award

The Robert H. Dott Sr. Memorial Award is presented to honor and reward the author/editor of the best special publication dealing with geology published by the Association. This year's award is presented to Michael Pöppelreiter, Carmen García-Carballido, and Martin Kraaijveld, for *AAPG Memoir 92: Dipmeter and Borehole Image Log Technology*.

Borehole Imaging is among the fastest and most accurate methods for collecting high-resolution subsurface data. Recent breakthroughs in acquisition, tool design and modeling software provide real time subsurface images of incredible detail from the drill bit straight to the workstation. Associate interpretation workflows offer the high level of detail that is needed to make operational decisions and to increase the predictability of subsurface models.

Many exploration and production companies have acquired a wealth of dipmeter and image log data. The data is readily available and provide, for example, the orientation of fractures and fluvial channels in space. Further applications of borehole image log technology include matrix and fracture characterzation pore-type partitioning geosteering and in-situ-stress determination. Exciting new applications are found in enhanced oil recovery, carbon dioxide sequestration and geothermal projects. In addition, borehole image data are paramount to unlocking unconventional plays such as shale gas and coal bed methane.

AAPG Memoir 92 portrays key applications of dipmeter and image log data across the exploration and production life cycle. It illustrates the value of integrating high-resolution dipmeter and borehole image data with seismic, well-log, and geological knowledge in order to construct integrated subsurface models. It provides the fundamentals of the technology for novice and specialist geoscientists and petroleum engineers alike, as well as introducing state-of-the-art applications.

Michael Pöppelreiter is principal geologist for Shell Kuwait E&P in Kuwait City, Kuwait. He is also honor professor for geology at the University of Tübingen, Germany. He holds a B.Sc. degree in coal exploration from Mining University in Freiberg, Germany, a M.Sc. degree in carbonate geology from University of Reading, UK; and a Ph.D. in carbonate geology from the University of Tübingen. Michael began working for Shell in 1999 and has held the positions of seismic interpreter and reservoir geologist in the Netherlands; carbonate geologist in Houston; and senior carbonate geologist, lead carbonate geologist, and team leader in Qatar.

Carmen Garcia-Carballido is a Spanish Geoscientist with 20 years experience, currently working as Subsurface Team Leader for EnQuest in Aberdeen (Scotland, UK). Graduated in Geological Sciences from Oviedo University (Spain) in 1991. Worked as Mining Geologist for three years and then moved to Germany and joined a team of scientists working at the KTB Continental Deep Drilling Program. In 1995, she moved to Aberdeen (Scotland) and started a new career in the oil industry. There she completed her MSc in Integrated Petroleum Geoscience and worked for Consultancies and Oil Companies including: Z&S Geology and Baker Atlas Geoscience (where she specialised on Dipmeter & Image Log Technology), Shell UK & International (where she met her AAPG Memoir co-editors) and Maersk. She also worked as Exploration Team Leader for CEPSA in Spain.

Martin Kraaijveld is the Global Discipline Head for Petrophysics and Geomechanics in Shell. He holds an M.Sc. in Electrical Engineering and a Ph.D. in Applied Physics, both from Delft University of Technology in the Netherlands. He joined Shell in Rijswijk, the Netherlands, in 1993 and worked in various areas of the KSEPL research organization. Between 1995 and 2000 he was heavily involved in the research program on quantitative borehole image analysis, eventually leading the research team as well as contributing his borehole imaging expertise to numerous field studies. Early 2001 he transferred to Shell Expro Lowestoft in the UK as the discipline head Petrophysics, followed by an assignment in Petroleum Development Oman, where he worked in a variety of technical and leadership jobs. In 2010 he returned to the Netherlands to take up the roles of Global Discipline Head Petrophysics/Geomechanics and General Manager Disciplines and Assurance. Through his early involvement in borehole imaging he continues to be engaged in several aspects of borehole imaging in Shell.

ALEXEI V. MILKOV
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 Alexei V. Milkov for "Methanogenic biodegradation of petroleum in the West Siberian basin (Russia): Significance for formation of giant Cenomanian gas pools" (*AAPG Bulletin*, v. 94, p. 1485–1541).

Cenomanian pools in the northern part of the West Siberian basin contain around 1700 tcf (~48 trillion m^3) of dry gas (>99% methane) reserves and resources basin. This dry gas constitutes ~11% of the world's conventional gas endowment and ~17% of annual gas production. The origin of the dry gas has been debated extensively over the last 45 years, but remains controversial. Widely discussed hypotheses on the origin include early mature thermogenic gas from coal, primary microbial gas from dispersed organic matter or coal, and thermogenic gas from deep source rocks. However, all these hypotheses are in some ways inconsistent with the molecular or isotopic composition of the gases or the results of basin and petroleum systems modeling.

The paper presented geochemical and geological evidence that a significant (although yet not quantified) portion of the shallow dry gas in the northern Western Siberia basin originated from methanogenic biodegradation of petroleum. Circumstantial evidence included the occurrence of heavily biodegraded oil legs and residual oil in many Cenomanian gas pools, as well as geochemical evidence of heavy to slight biodegradation in Albian-Jurassic reservoirs commonly underlying the Cenomanian pools. Direct evidence included, most importantly, ^{13}C-enriched CO_2 in pools with biodegraded oil (although data were limited), which indicated 40–70 wt.% conversion of oil-derived CO_2 to secondary microbial methane. Distinctive hydrocarbon molecular and isotopic compositions of most gases in Cenomanian pools (average dryness $C_1/(\text{Sum } C_1–C_5)$ was 0.9976, average $\delta^{13}C$ of methane was –51.8‰) suggested that they represented mixtures of biodegraded thermogenic gases from deep mainly Jurassic source rocks and secondary microbial methane with occasional and small addition of primary microbial methane.

Secondary microbial gas has been recognized worldwide and may (1) represent a volumetrically significant exploration target in shallow reservoirs (perhaps more significant than primary microbial gas) and (2) indicate effective thermogenic petroleum systems in

the deeper section. Large volumes (up to ~83,000 tcf or ~2,350 tcm) of secondary microbial methane could have been generated from biodegraded petroleum accumulations worldwide. Although a portion of that gas accumulated as oil-dissolved, free and hydrate-bound gas, most gas apparently escaped into the overburden, atmosphere, and ocean and could have affected global climate in the geologic past.

Alexei Milkov holds degrees in petroleum geology from Saint-Petersburg State University, Russia (B.Sc., 1996; M.Sc., 1998) and Texas A&M University (Ph.D., 2001). He joined BP in 2003 as a petroleum systems analyst and first worked in the Exploration and Production Technology Group in Houston on exploration, appraisal, development, production, and environmental projects around the world. Alexei moved to BP Russia SPU in 2007 and helped to explore offshore Sakhalin and in Russian Arctic. In 2011, he became manager of exploration assurance for BP Russia Region ensuring technical excellence and consistency of exploration deliverables in TNK-BP and advising senior management on exploration investment decisions in Russia and overseas. Currently, Alexei is working as exploration technical manager for Sasol Petroleum International. He has more than 120 publications (including 42 peer-reviewed articles) on gas hydrates, mud volcanoes, geological emissions of methane, reservoir geochemistry, and methanogenic biodegradation.

KATHERINE ANNE GILES
John W. Shelton Search and Discovery Award

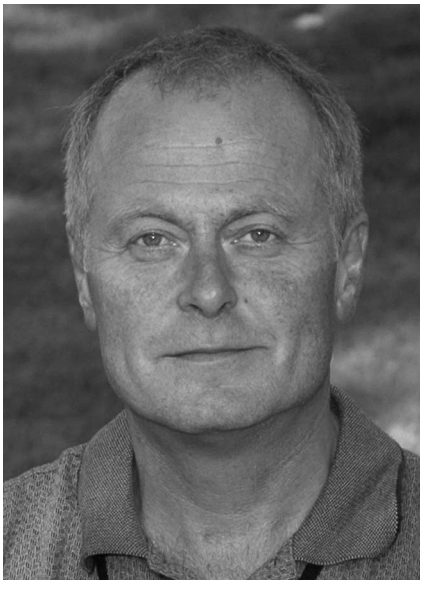
Katherine Anne Giles is recognized for her submission to Search and Discovery titled "Tracking the Migration of Salt Diapirs using Halokinetic Sequence Stratigraphy." This series of slides was presented as part of Kate's 2007–2008 AAPG Distinguished Lecturer tour.

The progressive migration of diapiric salt bodies can be interpreted using stratal and structural relationships present in the sedimentary packages that surround them. Diapir surrounding strata can be divided into halokinetic sequences, which are angular unconformity bounded, growth-stratal packages that form due to temporal variations in the rate in which relief is generated over passively rising diapirs relative to local sediment accumulations rates. These stratal packages document the dynamic interplay between salt movement and adjacent sedimentation.

Two end-member types of halokinetic sequences are recognized on outcrop and in subsurface datasets. The types differ in depositional facies and width of the zone of halokinetic deformation. Both styles of halokinetic sequences are seen on seismic lines and can be used to "fingerprint" the fluctuating conditions present near the diapir during migration. The characteristics of the two types of sequences and their stratal arrangement into composite sequences have important implications for reservoir quality, geometry, continuity, and charge potential in diapir-related traps.

Kate Giles recently joined the faculty in the Department of Geological Sciences at The University of Texas at El Paso. Prior to joining UTEP she was a faculty member and director of the Institute of Tectonic Studies at New Mexico State University. She received a B.S. degree from University of Wisconsin, a M.S. degree from the University of Iowa, and a Ph.D. from the University of Arizona. Before pursuing an academic career she was a senior research scientist at Exxon Production Research in Houston, Texas. Kate's research interests lie in the study of carbonate rocks (in particular fossil reefs) and the tectonic evolution of sedimentary basins. She oversees an industry-sponsored research consortium that studies the sedimentologic, stratigraphic, and structural interplay between passively rising salt diapirs and their surrounding sediments. Kate's research utilizes outcropping salt diapirs in the United States, Mexico, Australia, and Spain. She has been an AAPG Distinguished Lecturer, a Fulbright Scholar, a Fellow in the Geological Society of America, a Honorary Member and

Past-President of the New Mexico Geological Society, and a NMSU Distinguished Career Award recipient. Kate has served AAPG as co-chair of the Distinguished Lecturer Committee, Annual Meeting Technical Session Organizer and Session Chair, and PROWESS Committee Member. Kate is the mother of three very active children and enjoys traveling all over the world as a scientist and with her family.



LARS WENSAAS
George C. Matson Award

The George C. Matson Memorial Award for the best paper presented during an AAPG oral technical session is presented to Lars Wensaas for "Source Rock Prediction from Seismic Part I: Links between Rock Properties and Seismic Attributes." The co-authors are Marita Gading, Helge Løseth and Michael Springer.

The ability to identify a source rock in the subsurface and quantify its parameters has a significant impact on petroleum play analyses and prospect. Traditionally, the approach to identify and qualify these rocks has been to use well data, including geochemical analyses of hydrocarbons or source rock samples. But well data are often sparse or non-existing and if present, analyses only give local information. Back in 2003 former chief geologist in Statoil, Knut Georg Røssland, took initiative to a research project aiming at identifying and interpreting organic-rich source rocks, based on seismic data only. A new methodology is the results of detailed laboratory experiments and rock property studies in well logs, outcrops and seismic data.

The new workflow for source rock identification on seismic data has been applied successfully in-house in worldwide studies. The 'Source Rocks from Seismic Methodology' was presented externally for the first time in the December 2009 issue of AAPG Explorer. The award-winning paper was the first of three-in-a-row presentations given at the AAPG ICE 2011 in Houston. In this paper we demonstrate how conventional seismic data can be used to risk source rock presence in petroleum system analyses by establishing links between the smallest building blocks of a source rock to its seismic expression.

The relationships between organic content and rock properties of shale source rocks have been studied in fully cored scientific boreholes and in numerous exploration wells. Low densities, low velocities and strong anisotropy give the top and the base of organic-rich claystone layers a characteristic seismic expression. We demonstrate that bulk density (Rhob) is linearly reduced, while the compression velocity (Vp) and shear velocity (Vs) are non-linearly reduced with increasing organic content. As a consequence, acoustic impedance (Zp) is reduced non-linearly while the Vp/Vs-ratio increases with increasing organic content.

Forward modelling of reflectivity and amplitude versus offset (AVO) behaviour demonstrates that the top of a source rock interval on zero-phase data with normal polarity is characterized by a drop in impedance that produces a negative reflection coefficient or a 'soft' response. This negative normal incident reflection decreases from near to far offset, i.e., a class 4 AVO response. The seismic responses at the top and base of source rock intervals will depend upon factors such as layer thickness, variations in richness and 'TOC profile', which is a smoothed TOC % curve. Our models suggest that source rock shale intervals can be identified on seismic data if their total organic content (TOC) is larger than 3-4 wt. % and their thickness is more than 20 m. From rock property analyses we conclude that organic-rich shales have characteristic acoustic properties that allow for robust identification and characterization on seismic data.

As a result, the presence, thickness and basin wide spatial distribution of a source rock can be mapped based on seismic data. This method may reduce the exploration uncertainty in areas with no well data and only sparse seismic data and thereby improve ranking of basins and prospects.

Statoil has applied for a patent for the technology and a paper was published in December 2011 in *Geology*.

Lars Wensaas received his M.Sc. degree in sedimentology from the University of Oslo, Norway, in 1987. From 1987 to 1993 he

worked as a research associate at the Department of Geology, University of Oslo where he was engaged in two industry sponsored shale research projects; Overpressuring in Shales (funded by Statoil) and Tertiary Claystones on the Norwegian Shelf (funded by Conoco). In 1994 he joined Statoil, where he is currently working as a principal researcher at Statoil Research Centre in Trondheim. His research efforts have focused on rock physics, pore fluid pressure and sealing properties of argillaceous rocks in petroleum exploration.

ROGER M. SLATT
Jules Braunstein Award

YOUNANE ABOUSLEIMAN
Jules Braunstein Award

The Jules Braunstein Memorial Award for the best AAPG poster presentation is presented to Roger M. Slatt and Younane Abousleiman for their poster "Multi-scale, brittle-ductile couplets in unconventional gas shales: Merging sequence stratigraphy and geomechanics."

Traditionally, the focus of shale studies within the petroleum industry has been toward their *hydrocarbon source rock potential*, with geochemistry being a dominant driver of technology. The recent revelation of potentially vast global quantities of *gas- and oil-productive shale reservoir rocks* has provided new impetus to understand their fracturability, wellbore stability, and distribution of geomechanical sweet spots. Sequence stratigraphy provides a powerful tool for mapping subsurface features, but is only now being applied to shales. Understanding the geomechanical properties of shale strata provides a means to identify and map the distribution of important geomechanical properties. Our poster is the culmination of the first phase of merging the disciplines of sequence stratigraphy and geomechanics. Results of laboratory- to-field scale measurements are shown to provide a link toward ultimately being able to understand and map important geomechanical properties within shale reservoirs to optimize production.

Roger M. Slatt is the Gungoll Family Chair Professor in Petroleum Geology and Geophysics at University of Oklahoma and Director of the Institute of Reservoir Characterization in the Sarkeys Energy Center at OU. He was director of the School of Geology and Geophysics and Eberly Family Chair Professor at University of Oklahoma from 2000–2006, and the Gungoll Chair Professor of Petroleum Geology and Geophysics in 2006-2007. He formerly was head of the Department of Geology and Geological Engineering at Colorado School of Mines (1992–2000) and director of the Rocky Mountain Region Petroleum Technology Transfer Council (1995–2000). He has published more than 100 articles and abstracts on petroleum geology, reservoir geology, sequence stratigraphy, clastic depositional systems, and geology of shale. He is author/co-author/editor of six books, including *The Argillaceous Rock Atlas* (1990), a catalog of shales and their hand-sample-to-scanning electron microscopy scale written with colleague Neal O'Brien. He teaches an online course on reservoir characterization for AAPG, has been an AAPG and Society of Petroleum Engineers Distinguished Lecturer, and

presents courses internationally for industry organizations, in addition to OU. He is the recipient of the AAPG Distinguished Service Award, the Esso Australia Distinguished Lecturer in Petroleum Geology, AAPG Honorary Membership, AAPG Grover Murray Distinguished Educator Award, and the Society of Exploration Geophysicists (SEG) Special Commendation Award.

Younane N. Abousleiman is the director of the integrated PoroMechanics Institute in the College of Earth and Energy at the University of Oklahoma, and the Larry W. Brummett/ONEOK Chair in Poromechanics in the Mewbourne School of Petroleum and Geological Engineering, the ConocoPhillips School of Geology and Geophysics, and the School of Civil Engineering and Environmental Science.
Dr. Abousleiman was appointed as director of the integrated PoroMechanics Institute in 1998 and has since successfully generated more than $15 million in research funding and is principal investigator for two industry-sponsored consortia: the Geomechanics Gas Shale Consortium and the Rock Mechanics Consortium, with research foci on upstream oil and gas industry problems; in particular, related to shale mechanics. He has authored or coauthored more than 200 technical papers and has two patents. He is the recipient of the University of Oklahoma Innovator Award (2011), the "Excellent Paper" award from the International Association for Computer Methods and Advances in Geomechanics (2008), the Walter L. Huber Civil Engineering Research Prize from the American Society of Civil Engineers (2003), and the award for "Most Significant Paper in Fundamental Research" from the International Association for Computer Methods and Advances in Geomechanics (1997).

JONNY HESTHAMMER
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 Jonny Hesthammer for "CSEM efficiency–evaluation of recent drilling results."

The paper views the CSEM technology in light of 6 exploration wells drilled in 2011. Whereas previous published statistics have indicated a very high exploration discovery rate (70%) for wells drilled on prospects with a significant CSEM anomaly, only 2 out of the 6 wells drilled in 2011 were discoveries. This provide a discovery rate of 33% which stands in contrast to the previously published data. However, a closer evaluation of the drilled wells shows that 1 of the wells was drilled on a prospect with only a very weak CSEM anomaly whereas 2 others were drilled outside the main anomaly. As such, five out of the six "CSEM wells" drilled in 2011 came in as predicted from previously published statistics. This provides an 83% technical success rate. For those wells drilled in a location associated with a significant CSEM anomaly, the discovery rate is 67% which is very close to the number from prior statistics. For those wells drilled in a location without a significant CSEM anomaly, the discovery rate is 0%.

Jonny Hesthammer is CEO of Emergy Exploration, a Norwegian oil company that focuses on the exploration phase. He is an expert in integrated analyses of geological and geophysical data. He finished his M.Sc. degree in 1991 at the University of British Columbia. He then joined Husky Oil in Calgary where he participated in exploration for gas in the foothills of the Rocky Mountains. In the period from 1992–2002, he worked with Statoil, Norway, where he was involved in the development of several North Sea oil and gas fields. His key focus during this period was on the integration of seismic interpretation and structural analyses.

In 2002, after completing a Ph.D. at the University of Bergen, Norway, Hesthammer left Statoil and started as a full-time professor at the University of Bergen. In parallel with his job at the university, he worked part-time for ElectroMagnetic GeoServices AS. In 2004, Hesthammer became a co-founder of Rocksource where he subsequently became responsible for the company's development of tools and processes for integrated

analyses of CSEM data. He left Rocksource early 2011 to participate in the build-up of a new oil company, Emergy Exploration. He still has a part-time professorship at the University of Bergen.

STAN ABELE
Ziad Beydoun Memorial Award

ROCKY RODEN
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 Stan Abele and Rocky Roden for "Fracture Detection Interpretation Beyond Conventional Seismic Approaches."

In unconventional resource plays it is important to identify fractures and fracture trends, whether naturally occurring or hydraulically induced. It is the delineation of these fractures that is critical for production and the positioning of drilling locations. In an effort to identify fracture trends the industry routinely employs various seismic techniques such as processing of seismic attributes (geometric attributes), defining azimuthal variation of amplitude, running microseismic surveys, etc. What is not routinely applied to interpret fracture trends is combing seismic approaches. Spectral decomposition analysis can be employed to determine the optimal frequency bands that define fracture lineations. These optimally defined frequency volumes can then be processed for geometric seismic attributes to significantly improve the interpretation of fracture trends. Interpreting the optimal frequency band for seismic attribute processing requires a systematic methodology of frequency analysis and amplitude normalization. This combining of spectral decomposition and geometric seismic attributes has shown to not only improve fracture identification, but also more clearly define stratigraphic variations in most geologic settings.

Stan Abele has 30 years of industry experience, including over 20 years in the geoscience technology solutions industry. He has held a number of management positions in R&D and product management, primarily focused on developing corporate product strategy and the development and delivery of technology roadmaps, at solution providers Landmark Graphics and Seismic Micro-Technology/IHS. He currently holds the position of vice president of product management at LMKR, a leading technology provider of software and services for the oil and gas industry. His professional interests lie in working with E&P professionals to understand their technology needs and designing solutions to address their business problems. Stan has a B.S. in geology from the University of Texas at Austin, and has E&P industry experience in development geology and seismic interpretation at Pennzoil Exploration and Production Co.

Rocky R. Roden owns his own consulting company, Rocky Ridge Resources Inc., and works with several oil companies on technical and prospect evaluation issues. He also is a principal in the industry-wide Rose and Associates DHI Risk Analysis Consortium and is Chief Consulting Geoscientist with Seismic Micro-technology. He is a proven oil finder (37 years in the industry) with extensive knowledge of modern geoscience technical approaches (past Chairman-The Leading Edge Editorial Board). As chief geophysicist and director of applied technology for Repsol-YPF, his role comprised advising corporate officers, geoscientists, and managers on interpretation, strategy and technical analysis for exploration and development in offices in U.S., Argentina, Spain, Egypt, Bolivia, Ecuador, Peru, Brazil, Venezuela, Malaysia, and Indonesia. He has

been involved in the technical and economic evaluation of Gulf of Mexico lease sales, farmouts worldwide, and bid rounds in South America, Europe, and the Far East. Previous work experience includes exploration and development at Maxus Energy, Pogo Producing, Decca Survey, and Texaco.

NICK EYLES
Geosciences in the Media Award

Nick Eyles is professor of geology at the University of Toronto where he has enjoyed teaching for the last 30 years. He was inspired at the age of 16 in London, UK by field trips run by a high school geology teacher which opened up new worlds past and present and a career which has taken him around the world from the Arctic to the Antarctic and back in time through Earth history. His academic research focuses on the comings and goings of past supercontinents and the feedbacks between tectonics, paleogeography and cold climates. He also works on many environmental issues involving the interplay between geology and public decision making and is a frequent public speaker. His introductory geology course (Planet Earth) attracts more than 700 students.

Nick is passionate about using fieldwork as a tool for expanding the horizons of students and the public. In a resource hungry, increasingly populated, tectonically dangerous and climatically challenged world we desperately need more geoscientists. We face the related challenges of recruiting a new generation of professionals and communicating to the broader public the importance of geology to our collective well being and prosperity.

Outside the classroom, Nick is well known as the prolific award-winning author of best-selling books such as *Ontario Rocks* and *Canada Rocks* (with Andrew Miall) and *Canadian Shield: The Rocks that made Canada*. A road guide to the geology of Ontario (*Road Rocks of Ontario*) is to appear in 2012.

Television is the ultimate teaching tool and Nick has been chief scientific advisor to the Canadian Broadcasting Corporation's highly successful five-part television series '"Geologic Journey-Canada," which aired in 2007 and which introduced the public to exhilarating images of the country's landscapes and the role that plate tectonics has played in building the North American landmass. Most recently he hosted the five-part "Geologic Journey-World" broadcast on CBC's flagship science series "The Nature of Things" in 2010. This series tells the story of how the planet works by illustrating the life cycles of oceans and supercontinents, and the peoples and nations that inhabit tectonically active areas. It took 7 months to shoot in 23 different countries often using high-definition aerial photography. During that time Nick had several near misses with earthquakes and volcanic eruptions and gained a new appreciation of the role of geology in human history. GJ-World is CBC's most widely viewed documentary series to date and has been watched by seven million Canadians and was rebroadcast in the U.S. Teachers' guides for both Geologic Journey series will ensure a lasting impact in high schools, helping teachers to inspire their students to make their own explorations of planet Earth and travel back in time.

AAPG FOUNDATION

WILLIAM J. BARRETT
L. Austin Weeks Memorial Medal

The L. Austin Weeks Memorial Medal is given in recognition of extraordinary philanthropy and service directed to advance the mission of the AAPG Foundation. The premier award honors the late

L. Austin Weeks, whose philanthropic legacy set an exemplary standard. The award was established in 2008 and is the Foundation's highest award. This year's recipient is William J. Barrett.

William J. (Bill) Barrett has covered a lot of ground in a storied half century as a geologist and an entrepreneur. His vision, risk taking and successes have earned him awards beginning with the Outstanding Explorer Award from Rocky Mountain Association of Geologists in 1989 and the Independent Petroleum Association of Mountain States' top honor, the Wildcatter of the Year (1993), to his peers in the AAPG presenting him their Explorer of the Year Award (2003).

That recognition and respect stems from his leadership in the growth and success of several exploration and production companies that found and developed ten giant- or near-giant-size oil and gas fields and a number of smaller fields throughout the Rockies.

The legendary oil and gas finder embarked on the ultimate exploration program on January 9, 1929, when he was born to Myrtle Anna (Huss) Barrett, a loving mother, teacher and woman of faith, and William Valentine Barrett, a hard-working farmer and devoted father. Bill's parents raised 10 sons and daughters.

Bill married Louise Kuhn on October 5, 1950. Shortly thereafter, he was drafted and spent two years in the Army in Fort Hood. He received his bachelor's degree in 1956 and master's in 1958, both in geology and both from Kansas State University. His first post-graduate employment was with El Paso Natural Gas Company in Salt Lake City, Utah, as a stratigrapher in their research lab. A transfer to Farmington, New Mexico, led to a new job with Pan American (later Amoco) in Casper, Wyoming, before finally settling down in Denver, Colorado.

In 1967, Bill accepted a job with a Denver independent, Wolf Exploration, as their chief geologist. Here he achieved two major discoveries, one, a 200-million-plus barrel Hilite Oil field in Powder River Basin of Wyoming, as well as the multi-trillion cubic foot (TCF) Madden Gas Field in the Wind River Basin, also in Wyoming. When Wolf went to Houston, Bill and Landman Chuck Shear partnered to go out on their own in 1970 to form B&C Exploration, which later merged with Rainbow Resources, Inc. Bill then funded a new private sole proprietorship, Aeon Energy, a precursor to the privately held Barrett Energy Company, which went public in 1983.

Barrett Resources quickly became one of Colorado's largest independent oil and gas companies. A merger with Plains Petroleum created the sixth largest natural gas operator/producer in the giant Hugoton Gas Field in southwest Kansas. Williams Companies purchased Barrett Resources Corporation for $2.8 billion, receiving 2.1 trillion cubic feet of proven natural gas reserves, plus an additional several trillion cubic feet of probable/possible natural gas reserves, which they are continuing to develop to this day.

In 2002, Bill was coaxed out of retirement by his sons Fred and Terry to form Bill Barrett Corporation, which went public in 2004. In 2007, Bill retired for the third and final time at age 78.

Bill is a member of the Advisory Council to the Kansas State University Geology Department and a member of their President's Club. He also received the Distinguished Service Award from the College of Arts and Sciences at KSU in 1992. Bill is a member of the Enhancement Committee for the Colorado School of Mines Geology Department where he was awarded an honorary doctorate in Engineering in 2004. Also that year, Bill was named to the Independent Petroleum Association of Mountain States Hall of Fame and then received the Lifetime Achievement Award from Southwestern Utah Energy Producers Association 2006. His achievements are not limited to the petroleum industry. He was awarded Father of the Year in 2006 by the Father's Day Council benefiting the American Diabetes Association. His list of achievements, memberships, and charitable activities are too numerous to list and continue to grow.

The AAPG Foundation is pleased to have benefited from Bill's expertise during his term on the Board of Trustees and the Financial Campaign Committee (2006–2011). He was recognized as a member of the AAPG Foundation Legacy Society in 2011.

Bill and some fellow investors are currently wildcatting in the Alberta Basin of Canada.

HERBERT G. DAVIS
Chairman's Award

The Chairman's Award is given to recognize extraordinary contributions (either monetary or service) to the AAPG Foundation, and also to call attention to the role and value of the Foundation. This year's recipient is Herbert G. Davis.

Herbert George Davis was born in Buffalo, New York in June 1930. He has been a member of AAPG since 1956 and became Certified Petroleum Geologist No. 940 in 1967.

He has served in numerous AAPG roles: Chairman, House of Delegates (1972–73), President, Division of Professional Affairs (1978–80), Charter Member, Trustee Associates (1978), Trustee Associate Chairman (1983), Member of the Corporation (1986–99), Foundation Trustee (1986–99), and Trustee Emeritus (1999). He was awarded the Distinguished Service Award in 1982, Honorary Life Membership in 1986, and D.P.A. Life Membership in 1995. He was a 55-year member in 2011.

Davis and his wife, Shirley, established a Grants-In-Aid Named Grant with the AAPG Foundation in 2006 that is restricted to geology students at Oklahoma State University.

Davis was Certified Professional Geologist No. 1573 in the American Institute of Professional Geologists and served as Chairman of several committees of the Oklahoma Section from 1968 to 1977, and National Committees from 1970 to 1986. Davis has also been a member of the Society of Independent Professional Earth Scientists No. 797 since 1978.

He was President of the Oklahoma City Geological Society (1970–71), and was awarded Honorary Membership in 1985. The Oklahoma City Geological Foundation honored him with the "Legend Award" in 2009.

Davis graduated from Oklahoma Agricultural & Mechanical College (Oklahoma State University) in 1953 with a degree in geology, served as a Military Geologist and Intelligence Officer with the U.S. Army Corps of Engineers in Heidelberg, Germany from 1953–55.

Davis married Shirley Ann Etheredge in June 1953 in Fort Belvoir, Virginia. They lived in Germany before returning to the USA to begin his career as an Exploration Geologist with Stanolind Oil and Gas Company in 1955. They lived in Wichita and Liberal, Kansas for nine years before returning to Oklahoma City, OK in 1963. Stanolind became Pan American Petroleum Corporation in 1957.

His professional experience was primarily in the Mid-Continent and concentrated in the Hugoton Embayment and Anadarko Basin. His publications are on the Morrow/Springer Sandstones; Morrow/Springer High Pressure regimes and the Anadarko Basin reserves and economics.

Davis became an Independent Geologist in 1967, forming Davis and Northcutt Consulting Geologists and D.N.C. Exploration. He and Shirley owned Herbert G. Davis, Inc., an oil and gas exploration company from 1973–1988, with production in Oklahoma, Texas, Kansas, Louisiana, Mississippi, and Kentucky.

Davis' commitment to service goes beyond his geological expertise and memberships in professional societies. He has donated his knowledge and time to the Oklahoma State University Department of Geology, serving as an adjunct professor from 198–2008. He has sponsored both undergraduate and graduate students, part-time and full-time employment, as a means to break into oil and gas company employment.

Davis served as a member of the Board of Governors (1980–1992), and as a Trustee of the Oklahoma State University Foundation (1981–1992), Chairman (1984–1985) and (1991–1992). The OSU Foundation established the Herbert G. and Shirley A. Davis President's Distinguished Scholarship in 1980 for a geology student at OSU. Davis was named a Distinguished Alumni and Distinguished Arts and Sciences Alumni in 1990. He is a Life Member of the Geology Alumni Board.

Herb and Shirley reside in Edmond, Oklahoma, and have two daughters and four grandchildren: Teresa (Cobb) Pope and her husband Don of Norman, OK; Joe and George Cobb of Oklahoma

City, OK; Linda Dorfman and her husband, Jan; Jason and Karen Dorman of Littleton, CO.

JONNA GENTRY
Teacher of the Year Award

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

I have always wanted to be a teacher. One of my friends from my hometown once told me that she knew I was going to be a teacher in second grade because I was "the only one who made sure that everyone saw the pictures" when it was my turn to read to the class. I was also the one who was "teaching" her dolls when I was five years old. I graduated from Sterling High School after playing sports and participating in many extracurricular activities such as volleyball, basketball, Spanish Club, and Future Homemakers of America. Attending Northeastern Junior College allowed me more opportunities to explore my other talents. I took classes in theater and choir in addition to my math and science courses, participated as a Senator in Student Government, and served as an Ambassador for people interested in attending NJC. Colorado State University was my next destination in the pursuit of a degree and teaching certification. I graduated with a Bachelor of Science degree in physical science with a double minor in chemistry and biochemistry. While at CSU, I again served as an Ambassador and participated in many church functions as well as being involved in a Music, Art, and Drama Camp in the summertime. MAD Camp offered me a chance to hone my teaching skills as I "graduated" from a position of leader to camp coordinator. I participated in this camp for approximately twelve years, which enriched my life in more ways than I can count. My time at each educational facility gave me an opportunity to meet people who enriched my life as well.

After graduating from CSU, I pursued an 8th grade Physical Science teaching position in many parts of Colorado. Little did I know that a position teaching 9th grade Earth Science at Green Mountain High School would be a good fit for me. A friend of mine who graduated from CSU at the same time I did encouraged me to apply for the position which I had little hope of getting. I received the call offering me the post about two weeks before the start of the school year. I am forever grateful to my family, friends, and colleagues both past and present who have helped me become the teacher that I want to be. It has been a difficult journey with many ups and downs, and I plan on continuing to improve my teaching in a variety of ways.

Since this is not my field of study, I am continually taking classes and learning the material as I go. I have been blessed to work with amazing people who have taught me how to teach, and have helped clarify the content that leaves me befuddled. Sometimes I believe that this helps me be a better teacher since I have experienced first-hand how it feels to encounter content that can be daunting to students who see it as unnecessary and boring.

In addition to teaching Earth Science to freshman both at a regular and an honors level, I have been fortunate to be able to volunteer as a Science Olympiad Assistant Coach, and help with the BEST Robotics team competition at Green Mountain High School. I now teach a section of Beginning Robotics the first semester of the school year. This class has helped me see the world from an engineer's perspective and I have been able to apply some of the content from the earth sciences in relation to the growing field of robotics. My hope is that some of my students will pursue one, if not more, of these vocations as the need to be increasingly more diversified in their pursuit of a career becomes a reality.

Being recognized for the time and energy that teaching requires is a great honor. The challenges are immense both personally and professionally, but the rewards are infinite as well. I hope to continue to be known as a teacher who is "tough, but fair." This award is an encouragement that my hard work and passion for my career have been well worth the time.