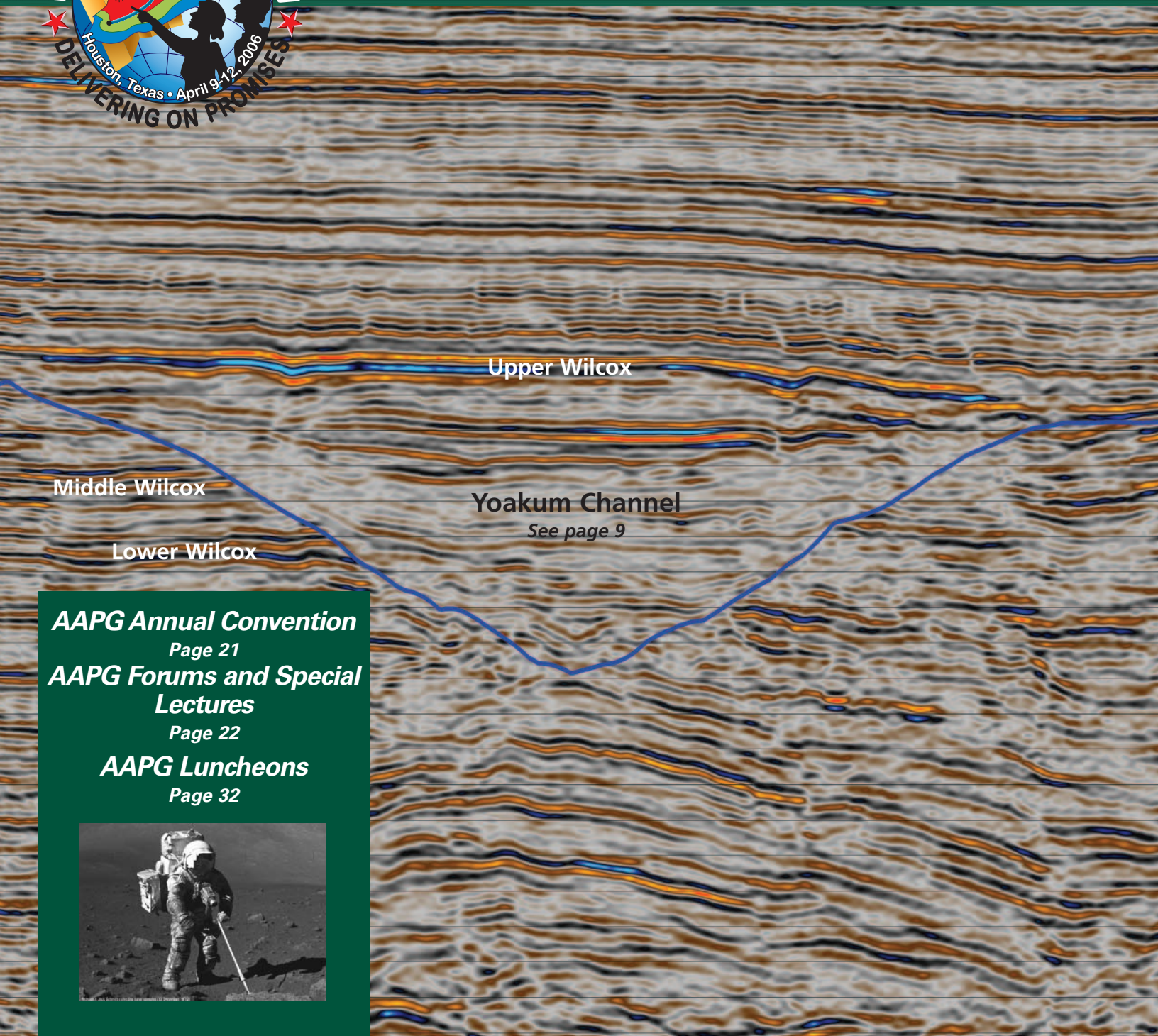
HGS Bulletin
Houston Geological Society
Volume 48 Number 8
April 2006

AAPG Annual Convention

Perfecting the Search • Delivering on Promises

April 9-12, 2006 • George R. Brown Convention Center



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Houston Geological Society

Volume 48, Number 8 April 2006

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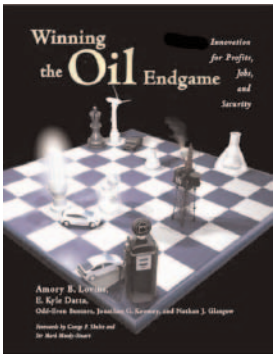

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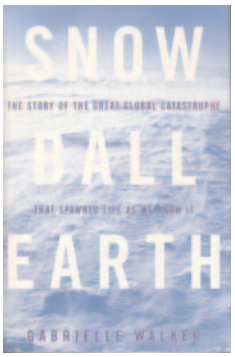

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About the Cover: This seismic line is a strike-oriented line located in southwestern Lavaca County, Texas. It shows the Middle Wilcox age Yoakum Channel, an erosional canyon that cuts down through the Middle and Lower Wilcox sediments approximately 3,500 feet in depth. The Yoakum Channel is a well-documented feature that has been better defined by 3D seismic in recent years. The Yoakum Channel is featured in this month's *From the Editor* section on page 9. ***Data Supplied by Seitel Data Ltd.***

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From the **President**

by ***Dave Rensink***

HGS Hosts the 2006 AAPG Convention

This is the month the Houston Geological Society hosts the annual AAPG convention—April 9th through the 12th. This is the eleventh time Houston has hosted the AAPG convention, and it is the first convention held in Houston during an oil boom since 1979. Charles Sternbach and his organizing committee deserve our thanks and congratulations for assuming such a tremendous responsibility, and executing it so effectively. Many HGS members have put in thousands of hours over the past two years to make this convention a success for AAPG and HGS. Thank you all for your considerable efforts and dedication.

The theme for this convention is "Perfecting the search, Delivering on promises." It reflects the current state of our industry where efficiency and accountability are not only desirable qualities but essential in an era when target sizes are getting smaller and innovation is required to bring oil supplies to market economically. Relatively high product prices can cover a lot of inefficiency for a short period of time, but drilling and production costs inevitably rise in response to higher prices with the inevitable result of the reduction of profit margins. Efficiency and the ability to produce relatively predictable results will never be out of vogue. They are as vital during a boom as they are during a period of low product prices. Whether involved in exploration or exploitation, geoscientists add corporate value through drilling, and finding and development cost on a dollar per barrel equivalent basis is one of the most commonly used measures of our success. Needless to say, efficiency in drilling and production operations weighs heavily in the calculation of finding and development costs, but so does our ability to deliver statistically predictable quantities of oil and gas. Success in the oil and gas business does not come from geologic competence alone. You also need to understand how what you do affects the ability of the allied disciplines to work effectively and your influence on the corporate bottom line. If you are only in it for the science, someone else is helping to pay your salary.

Success in the oil and gas business does not come from geologic competence alone.

Bob Merrill and his committee chairs have assembled a range of technical talks in keeping with the convention's theme. The session topics range from effective business strategies to emerging plays and to the effective exploitation of existing resources. There are also forums on the history of petroleum geology, the challenges for the oil business during the 21st century, funding exploration and development projects, and the successes and limits of high-resolution sequence stratigraphy. There is also a forum titled "Women as leaders in the E&P industry." This is by no means an exhaustive list of the technical sessions and forums. Check the program for the technical sessions and forums of the greatest interest to you. The technical program is the foundation of any annual convention, and this year will be no different.

The short course program has been organized around the themes of foundations, technical enrichment and the business side of oil and gas. Thirteen field trips are also planned for before and after the convention. Many of these courses and field trips are sponsored by HGS and SEPM.

HGS is also sponsoring an evening at Landry's Downtown Aquarium. All of the facilities of the aquarium and midway will be at your disposal for the evening. Because HGS is sponsoring this event, you do not need to register for the convention to participate in this event. However, you do need to register for this event through the AAPG convention web site. Do not try to register through the HGS web site or by calling the HGS office—all they can do is to refer you to the AAPG web site.

If you have not already registered for the convention, you can register on site at the George R. Brown Convention Center for either single day or full convention registration.

In the event that you have not been directly involved in staging the convention, you can still help. Mac McKinney needs volunteers to help staff the HGS booth in the exhibit hall during the convention. You do not need to call or email him, just show up at the booth during the ice breaker Sunday evening or Monday morning and sign up on the duty roster.

From the President *continued on page 7*

From the President continued from page 5

This year's convention should prove to be a great opportunity for technical rejuvenation and networking. A successful convention benefits you, AAPG, and HGS. I hope to see you there.

Certainly the AAPG convention will be the highlight of April, but do not forget that we have a joint lunch meeting with GSH on April 18th and the North American Explorationists have scheduled a talk on the north slope of Alaska for April 24th. ■

Member News and Announcements

500 Judges Needed for AAPG Meeting

The 2006 AAPG Meeting in Houston from April 9 to 12 needs **500 judges** for Oral (Matson Award), Poster (Braunstein Award) and SEPM presentations. Please participate as a judge by contacting: shensley@aapg.org

AAPG Treasurer **Dwight "Clint" Moore** has been appointed Manager of Business Development for the Offshore U.S. Gulf of Mexico group of Murphy Exploration & Production Co. USA here in Houston. He will be opening a new office in the Greenspoint area for the New Orleans-based group. Moore, with degrees in both geoscience and business from SMU, has over 25 years of offshore U.S. Gulf of Mexico exploration and development experience from his previous technical and management positions with Anadarko Petroleum and Diamond Shamrock/Maxus. Separately, Moore has been appointed by NOAA's National Marine Sanctuary Program to the eight-member Advisory Board of its Flower Garden Banks National Marine Sanctuary, located in the offshore U.S. Gulf of Mexico.

Academic Liaison Committee seeks Volunteers

Interested in visiting local schools to discuss geology? Join the Academic Liaison Committee. Contact Alison Henning at Alison@henning.com or 832-203-5016 for more information.

HGS Guest Night

HGS Guest Night will be on June 17, 2006, at the Houston Museum of Natural Science, the same location as last year.

HGS Directory of Oil Company Name Changes

The updated 17th edition (April 2006) of the HGS "Directory of Oil Company Name Changes" is now available.

This publication is a cross-referenced list of oil and gas exploration and production companies that have merged, been acquired, bought or sold major assets, or otherwise changed their names. The purpose of this publication is to assist geoscientists in their pursuit of logs, paleo, production histories, well files and other data that may be obscured by company name changes.

The "Directory of Oil Company Name Changes" is $13.50 plus shipping and handling, and 8.25% Texas sales tax if shipped to a Texas address. Prepayment is required and credit cards are preferred.

The "Directory of Oil Company Name Changes" can be obtained from the Bureau of Economic Geology in Austin. The Bureau's website is www.beg.utexas.edu or e-mail pubsales @beg.utexas.edu. You can also contact them by phone at 1-888-839-4365 (USA only) or (512) 471-7144. Orders may be faxed to the Bureau at 1-888-839-6277 or 512-471-0140.

HGS Earth Science Teacher of the Year Award

It is time to nominate this year's HGS Teacher of the Year. The winner will receive a $1000 cash award from the HGS and will represent the HGS at the Section level of the GCAGS. The GCAGS Teacher of the Year winner will receive another $1000 and be nominated to the national level of AAPG. The AAPG Teacher of the Year will be granted $5000 plus an all-expense-paid trip to the 2006 AAPG national convention to receive the award. If your nominee is interested in pursuing this award, have them check out the GCAGS and AAPG for details, qualifications and forms. Forms and other required materials need to be sent to Awards Chairperson at the HGS Office by May 1, 2005. For more information go to the GCAGS web site at www.gcags.org/teacheroftheYear.htm and the AAPG site at foundation.aapg.org/tchr_of_year_award/index.cfm.

The NeoGeos—The Next Wave

The NeoGeos are actively participating in the planning of the OTC Young Professional Event, called The Next Wave. Information on the event is available at http://www.otcnet.org/2006/young_professionals/index.html and registration for OTC and/or this event can be done at http://registration.expoexchange.com/ShowOTC061/.

The first 100 people to register for this event will win 2 tickets to the Houston Astros vs. the St. Louis Cardinals the evening of the session (Thursday, May 4, 2006).

The event is arranged as two panel sessions in which these dynamic industry leaders will share their success stories and provide advice on leadership, career planning and progression. The session will utilize interactive voting pads to get real-time feedback from the audience. A reception will follow for networking and further discussion in a social setting. ■

HGS *Bulletin* Instructions to Authors

All materials are due by the 15th of the month, 6 weeks before issue publication. Abstracts should be 500 words or less; extended abstracts up to 1000 words; articles can be any length but brevity is preferred as we have a physical page limit within our current publishing contract. All submissions are subject to editorial review and revision.

Text should be submitted by email as an attached text or Word file or on a clearly labeled diskette in Word format with a hardcopy printout to the Editor.

Figures, maps, diagrams, etc., should be digital files using Adobe Illustrator, Freehand, Canvas or CorelDraw. Files should be saved and submitted in .eps (Adobe Illustrator) format. Send them as separate attachments via email or on a diskette or CD if they are larger than 1 MEG each, accompanied by figure captions that include the file name of the desired image. DO NOT EMBED them into your text document; they must be sent as separate files from the text. DO NOT USE POWERPOINT, CLIP ART or Internet images (72-DPI resolution) as these do not have adequate resolution for the printed page and cannot be accepted. All digital files must have 300-DPI resolution or greater at the approximate size the figure will be printed.

Photographs may be digital or hard copy. Hard copies must be printed on glossy paper with the author's name, photo or figure number and caption on the back. Digital files must be submitted in .jpg or .eps format with 300-DPI or greater resolution at the printing size and be accompanied by figure captions that are linked by the file name of the image. The images should be submitted as individual email attachments (if less than 1 MB) or on CD or zip disk.

Advertising

The *Bulletin* is printed digitally using QuarkXPress. We no longer use negatives or camera-ready advertising material. Call the HGS office for availability of ad space and for digital guidelines and necessary forms or email to ads@hgs.org. Advertising is accepted on a space-available basis. **Deadline for submitting material is 6 weeks prior to the first of the month in which the ad appears.**

Random Inside (Black & White)					Page 2 (B&W)	Inside Front Cover (Full Color)	Inside Back Cover (Full Color)	Outside Back Cover (Full Color)	Calendar Page (Full Color)
No. of Issues	Eighth	Quarter	Half	Full	Full	Full	Full	Half	Quarter
10	$762	$1284	$2304	$4383	$5260	$7250	$7000	$6350	$2500
9	$762	$1284	$2304	$4383	$5260				
8	$694	$1168	$2076	$3988	$4786				
7	$616	$1040	$1865	$3550	$4260				
6	$546	$918	$1650	$3141	$3768				$1750
5	$460	$775	$1392	$2648	$3178	$4350	$4200	$3800	
4	$375	$632	$1132	$2154	$2585				
3	$303	$510	$918	$1746	$2094				$1000
2	$215	$363	$652	$1240	$1488				
1	$135	$228	$410	$780	$936	$1300	$1200	$1000	$750

Business Card	Full Page on Back of Calendar Page	TWO-COLOR AD
$125 per 10 Issues – Send two cards ($25 for each additional name on same card)	(FULL COLOR) $6250 - 10 issues	(Black and editor's choice) add 15% to B&W cost

HGS Website Advertising Rates

The HGS Website is seen by many people each day. In recent months, we averaged about 47,000 visitors per month. You have a variety of options for advertising your company, your job openings, or your services on the Website. There are two sizes of ads on the home page, a 165x55 pixel logo along the right-hand border and a new 460x55 Banner ad across the top.

We also offer a Banner ad across the top of our monthly Newsletters sent to registered users of the Website. Job postings are available for $100 for 30 days on the Website but they must be geoscience jobs of interest to our members. Current HGS members may post their resumes at no charge. If you have a product or service available at no charge, you can post it in the Business Directory at no charge. Geo-related Business Cards and job openings may be posted directly by any registered user and members may post their own resumes. They will be activated as soon as practical.

To place a logo or banner ad or to get more information, send an email to our Webmaster (webmaster@hgs.org) or go to the Website at http://www.hgs.org/ads/

	Home Page		Website Business	Web and Bulletin	Newsletter Sponsor	Personal Resumes	GeoJobBank
	Logo 165x55	Banner 460x55	Card (with link)	Business Card	Banner Ad (with link)	(Members only)	Posting
One year	$750.00		$60.00	$150.00	$2,000.00	Free	
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From the **Editor**

by ***Paul Britt***
editor@hgs.org

Texas's Grand Canyon of the Eocene

TOP TEN REASONS YOU MIGHT BE A GEOLOGIST: *
3. The souvenir collection from all of your vacations consists mostly of rocks.
next month, reason no. 2…

Under the gentle rolling hills and brush in the southerly most portion of an area known as the East Texas Post Oak region lies a giant geological feature. It's a canyon that starts in Caldwell County and extends basinward to Jackson County, over 65 miles in length, up to 12 miles in width and traversing portions of six counties. But even if you have driven through this canyon, you might not know it, unless you have explored in the Eocene Wilcox formation. The canyon, known as the Yoakum Channel, is 6,000 to 8,500 ft below the surface of the ground.

But what would cause such a dramatic unconformity to form underwater?

The Yoakum Channel, also called a gorge, canyon and trough in various publications, has been well documented in the Gulf Coast literature since as early as 1959. It was formed near the end of the Middle Wilcox highstand and is incised through the Middle Wilcox section and down into the Lower Wilcox. The remarkable thing about this channel is that it was eroded to a depth of over 3,000 feet below the surrounding sediments, and then filled again with such rapidity that the surrounding Yoakum Shale section of the same age is about 100 feet or less in thickness, while the channel-fill sediment is over 3,000 feet thick.

The Lower Wilcox in this area consists of a generally prograding complex of deltaic sands and shales, building toward an unstable shelf edge. Growth faults formed, first slipping on or in the Cretaceous, then expanding into the basin as the shelf margin was approached. The beginning of the Middle Wilcox marked the start of a major marine transgressive sequence as shales dominated the system, with less and less sand development toward the top of the Middle Wilcox. Then an aggressive prograding delta system marched across the area, depositing Upper Wilcox delta sands up to 1,000 ft thick in gross interval. But at the crest of the high-stand during the end of the Middle Wilcox, a remarkable event occurred. This is when the Yoakum Channel was eroded and filled, in a very brief geological time period.

Near the end of the Middle Wilcox age, about 55 MY ago, something occurred to cause the channel to begin to form. Conventional thinking would suggest a drop in sea-level would cause an incised valley to form. However, a sea-level drop of several hundred feet or more in such a brief time frame is unlikely. Most discussion in the literature recognizes the channel as a submarine canyon. But what would cause such a dramatic unconformity to form underwater?

The Lower Wilcox deltaics and the Middle Wilcox shales had built out to an unstable shelf edge margin, further destabilized by the series of growth faults updip of the shelf. It is suggested that a catastrophic event, possibly an earthquake, caused a catastrophic shelf edge collapse. The release of support from the shelf edge may have caused movement successively on each of the updip fault systems. But most importantly, the sudden loss of support in the Middle Wilcox shales must have resulted in extremely rapid headward erosion through the relatively unconsolidated sediments, combined with a brief but strong increase in stream flow to cut through those sediments. Then just as abruptly, the flow must have ceased, and the channel began to backfill primarily with marine shales, until the channel was nearly completely filled to its pre-erosional level, and the Upper Wilcox deltaic sands began to march toward the shelf edge.

The Yoakum Channel was first recognized based on subsurface well log correlations. Gas fields have been found in sands trapped against the shale-filled channel and, to a lesser degree, in channel sand reservoirs formed within the channel itself. The Yoakum Channel shows compaction features such as flanking fault systems, as the predominantly shale-filled channel compacts more than the surrounding sediments. The base of the channel was commonly thought to be at the first occurrence of a sand on the well log, but 3D seismic shows the channel unconformity well and also shows that a fair number of sands are formed within the channel re-deposition.

Other similar canyons and unconformities are recognized in the Wilcox, such as the Lavaca Channel, an older canyon near the

From the Editor *continued on page 11*

From the Editor continued from page 9

Yoakum Channel. 3D seismic is leading to recognition of more canyons and major unconformities than have been previously identified. The opportunities are there, and understanding the full depositional process, especially when complicated by complex fault systems in an unstable shelf margin regime, will be crucial in finding new discoveries in a trend that already has a lot of explorers' footprints on it. ■

* * *

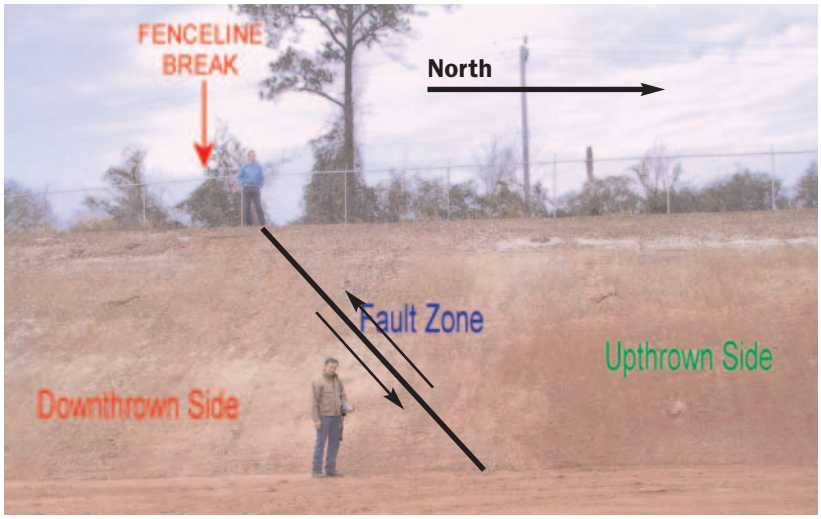
Long Point Fault Structural Problem from Last Month

Last month, a structural geology problem was presented along with a discussion of Houston's Long Point Fault, recently excavated by construction associated with the I-10 expansion project.

The correct answer was sent in by Thomas Becker, presented below. Mr. Becker gets an "A," while the rest of you get a "no-credit." Thomas, we will be sending you a souvenir rock for your efforts.

Given:

- Orientation (strike) of the pond wall is north-south and the wall face is dipping east 23 degrees.
- Strike of the fault is N68E dipping southeast 74 degrees.



Problem:

Q: What is the plunge and bearing of the line of intersection between the wall and the fault plane?

A: Bearing is N77E, plunge is 22 degrees

Q: What is the pitch (rake) in the exposure plane (wall surface)?

A: 75 degrees

Q: While facing the wall (due west), which direction would you expect to see the fault plane dipping (if it were visually more discernable)?

A: North

Q: What illusion could you expect the fault's intersection with the wall to produce?

A: The fault would erroneously appear to be a high-angle, north-dipping reverse fault instead of a south-dipping normal fault.

The Long Point Fault, shown in the picture above, while actually dipping to the southeast, would appear to be a reverse fault dipping to the north in this picture, due to the fact that the pit wall is sloping away from the viewer. One clue was in the fenceline, which shows downthrown offset, but does not appear in line with the fault due to the distance between the pit wall and the fence.

Short Courses!!

Application of Structural Geology in Prospecting in Thrusted and Extensional Terrain

New!!

Date: July 31-August 4, 2006
Location: Jackson Hole, Wyoming
Tuition: $1,295, AAPG members, $1,395, non-members (goes up to $1,395/1,495 after 7/02/06), includes course notes and refreshments, field trip transportation and box lunches on field trip days
Content: 3.4 CEU
Instructors: Charles Kluth, Consultant, Denver, CO; Ronald A. Nelson, Consultant, Cat Spring, TX

Who Should Attend

Geologists, geophysicists, engineers, and managers engaged in exploration and production projects in thrusted and extended terrain, who need an overview of structural trap shapes and modern structural techniques will benefit from this course.

Basic Well Log Analysis

Returning Favorite!

Date: August 15-18, 2006
Location: Austin, Texas
Tuition: $995, AAPG members; $1,095, non-members (increases to $1,095/1,195 after 7/11/06); includes course notes, refreshments, and a copy of Basic Well Log Analysis by George Asquith and Daniel Krygowski, with Neil Hurley and Steve Henderson
Content: 2.8 CEU
Limit: 40
Instructors: George B. Asquith, Texas Tech University, Lubbock, TX; Daniel A. Krygowski, Chevron, Houston, TX

Who Should Attend

Geologists, engineers, geophysicists, and other professionals with a need to understand the responses of common logging measurements to subsurface conditions, and become familiar with basic openhole well log interpretation techniques.

Sign up early — this one fills up fast!!

Summer School Opportunities with AAPG Education

Field Seminar!!

Fluvial to Turbidite Reservoir Systems of SE Asia: High Resolution Exploration and Development Applications from Outcrop to Subsurface

Leaders: Paul Crevello, Petrex Asia Reservoir and Stratigraphy Group, Kuala Lumpur, Malaysia; Howard Johnson, Imperial College, London, UK; John Clayburn, REPSOL, Madrid, Spain
Dates: July 19-28, 2006
Location: Begins in Kota Kinabalu, Sabah, Malaysia, and ends in Bandar Seri Begawan, Brunei
Tuition: $3,350 USD (increases to $3,450 after 6/07/06), includes guidebook, lodging, transportation, overflight and field refreshments
Limit: 14
Content: 6.0 CEU

Who Should Attend

Exploration and development geologists, geophysicists, log analysts, reservoir engineers, and exploration and development managers who want a thorough working knowledge of productive clastic reservoirs developed in structurally complex basins.

GeoTour!!

Lewis & Clark GeoTour: Marias River to Gates of the Mountains, Montana

Leader: William Hansen, Jireh Consulting Services, Great Falls, MT
Dates: August 15-20, 2006
Location: Begins and ends in Great Falls, Montana
Tuition: $2,400 (increases to $2500 after 7/17/06), includes one day outfitted float trip and one day outfitted canoe trip on Missouri River, guided trips to the Great Falls of the Missouri, White Bear Island Portage Camp, Sacagawea Sulfur Springs, Marias River "decision" point, historic Fort Benton Missouri River steamboat wharf; Sun River Canyon of the Montana Front Range; admission to Lewis & Clark Interpretive Center, C. M. Russell Western Art Museum, Ulm Pishkun Buffalo Jump and Giant Springs State Parks; cruise boat trip through Lewis & Clark's "Gates of the Mountains" canyon in the Montana Thrust Belt, lunches, transportation during Geotour, tips for boatmen and bus driver, guidebook and barbecue dinners during river trips.
Limit: 19
Content: 4.2 CEU

Who Should Attend

Lewis & Clark fans, geologists, geophysicists, spouses, and families interested in the geology that affected the Lewis & Clark Expedition in Montana. The Missouri River is a great river to float and canoe for beginners, the pace is leisurely, and many of the landscapes are unchanged in the past 200 years. Some moderate hiking will occur.

AAPG GEOSCIENCE EDUCATION

For further information, please contact the AAPG Education Department
Phone: 918-560-2650; Fax: 918-560-2678; e-mail: educate@aapg.org
Or log on to www.aapg.org/education/index.cfm

Tuesday, April 18, 2006

Westchase Hilton • 9999 Westheimer
Social 11:30 a.m., Lunch 11:45 a.m.

Cost: $25 for members with advance reservations, $30 for walk-ins, space available, ($13.50 for Emeritus and Honorary).

The HGS prefers that you make your reservations on-line through the HGS website at www.hgs.org. If you have no Internet access, you can e-mail reservations@hgs.org, or call the office at 713-463-9476 (include your name, e-mail address, meeting you are attending, phone number and membership ID#).

Joint GSH/HGS Luncheon Meeting

by ***Rebecca Latimer***
Chevron Energy Technology Company
Houston

Uses, Abuses and Examples of Seismic-Derived Acoustic Impedance Data: What Does the Interpreter Need to Know?

Throughout the years there has been a concerted effort to integrate the geoscience disciplines to become more adept at understanding the petroleum potential of an area. In the 1980s, geophysicists interpreted 2D seismic data by overlaying log data on paper seismic sections and using generalized depth-to-time curves to determine which events represented markers on the logs. Geologists interpreted cross-sections by drawing straight lines between wells to represent their correlations. Because technology advances have changed the process, many people today have become "interpreters" of 2D or 3D data on workstations where the log data, seismic data and many derivations of the seismic data (attributes, coherence, P impedance, inversions, elastic impedance, lambda rho, etc.) are available to fine-tune the analysis process. The question, however, still remains: Are we integrating the data yet?

The question, however, still remains: Are we integrating the data yet?

Inversion of seismic data into acoustic impedance provides a natural tie to the log impedance data and forces the geoscientist, in analyzing seismic data, to extract appropriate wavelets, determine the phase and amplitude of the data, determine whether or not the phase is stable throughout the volume and very intimately tie the well log impedance data to the seismic data. Utilizing inverted data at the beginning of the interpretation process requires that the geoscientist understand the rock properties in the target area before embarking on an "attribute" interpretation. Even when the P impedance data do not clearly distinguish between fluids or lithologies, value is added by using these data as the first interpretation tool. The simplicity in knowing that the change of values represents a change in rock properties without the complexity of wavelet variability is a distinct advantage to the interpreter. This initial process is critical to undertaking any interpretation of seismic data. Seismic data, being an interface property, contain tuning, side lobe effects, and phase and frequency variability, making it difficult to directly determine the geology. Inverted data, layer properties, are a more intuitive geologic tool that allows interpreters to utilize their natural ability to "see" the geology in the seismic data.

Today, advanced impedance tools use angle-stack data and shear log components that can aid in distinguishing between lithologies and hydrocarbon properties. These data combine the benefits of angle data, AVO, and rock properties, which—when analyzed together with an understanding of the depositional environments, stratigraphic concepts, and the myriad of seismic attributes—can greatly increase the interpretative ability of the geoscientist.

This presentation will demonstrate the necessity for inversion and explain why it is beneficial in an interpretation workflow. It will examine both the strengths and drawbacks of using inverted data as compared with the seismic data and the original rock data. It will also show

- how scale differences between various data types can affect the results,
- how the interpreter analyzes the rock properties and utilizes these with inverted data, and
- how to spot pitfalls in the overuse of impedance data. ■

Biographical Sketch

Rebecca Buxton Latimer is team leader for Chevron's Energy Technology deepwater stratigraphy team in Houston, Texas. She received an MS in geology/geophysics from Boston College in 1980 and has been in the oil industry for 26 years.

Joint GSH/HGS Luncheon Meeting *continued on page 15*

Joint GSH/HGS Luncheon Meeting continued from page 13

Ms Latimer started her career with Amoco in New Orleans in 1980. In 1986, she moved to Houston with Amoco and worked as an interpreter and sequence stratigrapher in a series of basin-modeling groups. In 1989 she moved to Stavanger, Norway, where she worked as a sequence stratigrapher for Enterprise Oil. After leaving Amoco in 1992, she worked for five years as an inversion/geostatistics specialist and Chief Geoscientist with Jason Geosystems in Houston.

Ms Latimer joined Texaco's Upstream Technology Group in 2000, doing work in seismic inversion and geostatistics. After the merger of Chevron and Texaco, she became a team leader in ChevronTexaco's Energy Technology Company, supporting the business units, worldwide. She is also an editor for the SEG's *Leading Edge* magazine.

Volunteer of the Month

Bonnie Milne-Andrews stepped to the role of the International Explorationists' Group technical program chairman in January 2006, taking over for Ian Poyntz, who had successfully organized the International Group's program for almost 2 years. She works for Swift Energy International in north Houston as a key member of their New Ventures/International exploration team. Before joining Swift Energy, Bonnie spent 20 years as a geologist with Amoco Corporation, and later worked with Schlumberger's NExT group. She brings the HGS International group over 25 years of industry experience, having worked challenging project areas in North America, Qatar, Gabon, Bolivia, Argentina, Russia, Kazakhstan, New Zealand and Australia.

A lot of Houston geologists know Bonnie as a member of the AAPG House of Delegates (Houston chapter) and for helping the AAPG organization. She is chairman for the Career Center activities of the upcoming April AAPG 2006 Annual Convention in Houston.

All this international experience is far away from her start in the oil industry, which began when she graduated with a Master of Science degree in geology from the University of Iowa. She remains active as a member of the Geological Alumni Advisory Board at her alma mater, is married to Houston attorney Jim Andrews and is also a proud mom to George Caracostis, a freshman at Texas State University. ■

Thursday, April 19, 2006

Petroleum Club • 800 Bell (downtown)
Social 11:30 a.m., Lunch 11:45 a.m.

Register online, call, fax or e-mail your reservation to Mrs. B.K. Buongiorno at Tel: 713-651-1639, Fax: 713-951-9659, e-mail: bkspee@aol.com by 12:00 Noon, Tuesday April 18, 2005. **Members and Affiliates who register by April 18 pay $30. The cost is $35 for guests, non-members, and new registrations at the door.** No-shows will be billed. You can now sign up for SIPES Meetings online at www.sipeshouston.org, but payment is still required by regular mail or at the door.

SIPES Luncheon Meeting

*by **Marc H. Helsinger***
Hamman Oil and Refining
Houston, Texas

Seismic/Sequence Stratigraphy—Applications for the 21st Century

The oil industry is under considerable pressure in its search for hydrocarbons and faces a major challenge in finding significant new reserves. The most easily identifiable structures and amplitude anomalies onshore and offshore have been drilled. The industry has become too reliant upon drilling amplitude anomalies over the last 30 years and has neglected using a complete integration of wells with seismic. Many companies are drilling prospects in the 40- to 100-acre range because of a perceived prospect shortage. Seismic sequence stratigraphic analysis, available to industry for over 25 years, is not being sufficiently utilized to obtain a complete integration of well and seismic data. Such analysis leads to better delineation of depositional environments, reservoir geometry and potential porosity trends. There probably are numerous prospects with substantial reserves both onshore and offshore the Texas and Louisiana Gulf Coast, but they will not be found without a completely integrated analysis. ■

The industry has become too reliant upon drilling amplitude anomalies

Biographical Sketch

Marc H. Helsinger is an Exploration Manager with Hamman Oil and Refining with 30 years of experience in the Texas and Louisiana Gulf Coast onshore and offshore. He received his BS in Marine Geology from C.C.N.Y, and his MS and PhD from Rensselaer Polytechnic Institute in Stratigraphy and Sedimentology (Clastics and Carbonates). He is a Certified Petroleum Geologist, a former National Science Foundation Fellow and a National Defense Fellow. He has been strategically involved for 20 years in using Sequence and Seismic Stratigraphic techniques to develop new trend plays and to generate oil and gas programs. He has been employed by Amoco, Samson, LL&E, and Burlington Resources.

Monday, April 24, 2006

Westchase Hilton • 9999 Westheimer
Social 5:30 p.m., Dinner 6:30 p.m.

Cost: $25 Preregistered members; $30 non-members & walk-ups

The HGS prefers that you make your reservations on-line through the HGS website at www.hgs.org. If you have no Internet access, you can e-mail reservations@hgs.org, or call the office at 713-463-9476. (include your name, e-mail address, meeting you are attending, phone number and membership ID#).

HGS North American Explorationists Dinner Meeting

by ***Chet Paris***
Eni Petroleum
Anchorage, Alaska

Recent Exploration on the North Slope of Alaska

The North Slope of Alaska contains several of the largest oil fields in North America, including the largest of them all, the Prudhoe Bay Field. The recent increase in oil price, the pending Alaska Natural Gas Line, along with Alaska's political stability, have rejuvenated exploration in this world-class basin. The discovery of the giant Alpine oil field 10 years ago has opened up an exciting new stratigraphic Jurassic sandstone trend westward of the existing fields into the National Petroleum Reserve in Alaska. Other Jurassic sandstones are also presently being developed and explored in the Colville Delta area. Upper Cretaceous sandstones, containing viscous oil, are presently being developed above the existing fields, and exploration currently underway could extend this play well beyond the development boundaries and open up a large resource play. The Lower Cretaceous Kuparuk River Sandstone, which is a prolific oil-producing reservoir in the central North Slope, is still one of the hot exploration targets. Other exploration targets include the Cretaceous turbidite systems similar to the existing Tarn and Nanuq fields, the Triassic Sag River Sandstone that produces in the Prudhoe Bay and Milne fields, the Permo-Triassic Ivishak Sandstones that are the main reservoirs in the Prudhoe and Northstar fields and the Mississippian Lisburne carbonates that are presently being developed in the Prudhoe Bay Field. The recently renewed interest in exploration is ushering in a new generation of activity and players in the North Slope. ■

New plays rejuvenate exploraton in Alaska's North Slope.

Biographical Sketch

Chet Paris did his MS thesis on the Kuparuk River Field at the University of Alaska in Fairbanks. He spent over seven years with ARCO Oil and Gas as an exploration and development geologist, working Alaska, Texas and the Gulf of Mexico. Since leaving ARCO, he has worked for numerous petroleum companies, both large and small, and has consulted for a varying array of clients. His work has taken him to Norway, Colorado and now back to Alaska. Within Alaska, Mr. Paris has worked on the development of the giant Kuparuk and Prudhoe Bay fields and their satellites, has explored for hydrocarbons throughout the North Slope and the Bering Sea and has evaluated the petroleum potential of several interior basins. He is presently Eni Petroleum's representative and geoscience liaison in Alaska.

AAPG Annual Meeting

by ***Charles A. Sternbach,*** *General Chairman*

There is no place quite so exciting to professional geoscientists as Houston today. We are glad you are here! On behalf of the Houston Geological Society and the AAPG 2006 Convention Committee, welcome to the 2006 Annual Convention of the American Association of Petroleum Geologists, its divisions—Division of Environmental Geosciences, Division of Professional Affairs and Energy and Minerals Division—and SEPM (Society for Sedimentary Geology).

The theme of the meeting, "Perfecting the Search," reflects efforts to improve our abilities to find and produce hydrocarbons commercially as we strive to become better scientists and explorers. The program favors a practical approach intended to benefit geoscientists in their daily searching. Technical achievement paves the way to profitable business so that we may "Deliver on Promises" that we make to an energy-hungry world, investors and fellow geoscientists. We think that you will find Houston 2006 to be the time and place for a landmark convention. Houston is a thriving energy capital, crossroad of technology and gateway of "know-how" to the world. Houstonians think big with a "can do" attitude. The world's keen need for energy—reflected by strong product prices—should make your convention experience rewarding, invigorating and memorable. Global networking opportunities abound with representatives and decision makers from more than 80 countries. Special thanks are extended to our sponsors for their continued generous contributions and to our more than 200 exhibitors for showcasing new products, new services and the latest advances in technology.

As you look over our program, I would like to highlight a few things. The strength of the technical program is our foundation. Mindful that exploration is a business, we have taken steps to ensure that business relevance is integral to this convention.

Sessions such as "Energizing the World in the 21st Century" will be held all-day on Monday. CEOs and other senior executives will share their visions of the future. Other business-relevant sessions include "Overcoming Challenges for E&P in the 21st Century," "Reserves Now and in the Future" and "Show Me the Money! How Wall Street Logic, NYMEX Traders and Capital Markets Impact You." Additional forums include "Winning the Oil End Game—The Future of Hydrocarbon Resources in Our Global Economy" and "Women as Leaders in the E&P Industry." Celebrated industry leaders will speak at the division luncheons.

Alignied with our "Perfecting the Search" theme are three separate sessions on "Recent Discoveries and Play Openers" as well as a session on "Successes and Failures—Lessons Learned in Exploration." A session on "Giant Fields, Their Implications and What They Have to Teach Us" will be accompanied by a core workshop—a privileged opportunity to view cores from giant fields. SEPM plans a concerted presentation on deepwater reservoirs that you won't want to miss. And we are pleased to offer many field trips and practical short courses that include classes geared to students and young professionals.

To celebrate Houston being home to NASA, we invite you to participate in an inspiring program on space exploration. Jack Schmitt, Apollo 17 astronaut (moonwalker, U.S. senator, geologist) will receive honorary membership at the opening ceremony on Sunday and will deliver the Halbouty Lecture on Monday. We will also feature an astrogeology session on Tuesday.

Special events include Tuesday evening at the new Houston Aquarium, which will be a treat for visitors to Houston and longtime residents alike. Guest events will be novel and will highlight the history and exciting cultural facets of our area. The 2006 Annual Convention is an opportunity to build on the proud heritage of the petroleum geologist and to perfect the search for future energy. We welcome your participation and hope you have a wonderful time!

AAPG Forums and Special Lectures

Michel T. Halbouty Lecture: Wildcatting the Moon

Date: Monday, April 10
Time: 5:10 p.m. – 6:00 p.m.
Location: General Assembly A
Chair: R. K. Merrill

The Michel T. Halbouty Lecture series is an ongoing special event at AAPG annual meetings. The lecture topics focus either on wildcat exploration in any part of the world where major discoveries might contribute significantly to petroleum reserves, or space exploration where astrogeological knowledge would further humanity's ability to develop resources on earth and in the solar system.

The Michel T. Halbouty Lecture series marks its sixth anniversary with Harrison H. (Jack) Schmitt presenting "Wildcatting the Moon." In the spirit of Mike Halbouty, the Apollo Astronauts on Apollos 15, 16 and 17, began the drilling of wildcats on the Moon with six approximately three-meter holes in the lunar regolith. "Regolith" is the meteor-impact-generated debris zone that covers the basaltic maria of the Moon to an average depth of up to six meters.

Over three to four billion years, the lunar regolith has accumulated volatiles implanted by the solar wind that include hydrogen, helium, carbon and nitrogen. About 1/2600 of the helium is its light isotope, helium-3. In 1986, researchers at the University of Wisconsin-Madison pointed out that helium-3 would be a nearly ideal potential fuel for future fusion electrical power plants if cost-effective means of producing this unique lunar resource were possible. The energy equivalent value of helium-3 relative to $2.50/million Btu steam coal is about $140 million per 100 kilograms when fused with deuterium, a heavy isotope of hydrogen. 100 kilograms of helium-3 is equal to energy required to fuel a 1000- Mwe fusion power plant for over a year, or enough to supply the annual needs of a city of about a million people. The country's entrepreneurial energy sector should begin the process to persuade national and international investors to make sustaining commitments based on the economic potential of lunar resources. It's not easy, but at least it's predictable in terms of what conditions investors require to be met relative to other uses of their capital. The initial financial threshold for a private sector initiative to return to the moon is low: about $15 million. This investment would initiate the first fusion-based, profit-making bridging business: that is, production of medical isotopes for point-of-use support of diagnostic procedures using positron-emission tomography (PET).

International law relative to outer space, specifically the Outer Space Treaty of 1967, permits licensed and regulated commercial endeavors if properly licensed and regulated by a signatory to the Treaty. Under the treaty, lunar resources can be extracted and owned, but national sovereignty cannot be asserted over the resource area. History clearly shows that a system of internationally sanctioned private property, consistent with the treaty, would encourage lunar settlement and development far more than the establishment of a lunar "commons" as envisioned by the largely un-ratified 1979 Moon Agreement. It should be obvious, in view of the experiences of the 20th century, economic systems encompassing the recognition of private property have provided far more benefit to the world than those that attempt to manage common ownership.


Astronaut Jack Schmitt collecting lunar samples (12 December, 1972).

The entrepreneurial private sector has an obligation to support NASA's vision of returning to the Moon to stay, as articulated by President George W. Bush. We also have an obligation to follow our own path to get there in order to be additive to the overall goals of settling the Solar System and improving lives for those who remain on Earth. Traversing that private enterprise path, with an ideally funded business plan, would require about $15 billon and 15 years.

Whenever and however a return to the Moon occurs, one thing is certain: that return will be historically comparable to the movement of our species out of Africa about 150,000 years ago. Further, if led by an entity representing the democracies of the Earth, a return to the Moon to stay will be politically comparable to the first permanent settlement of North America by European immigrants.

History of Petroleum Geology Forum: Contributions of the Gulf Coast to Geoscience Technology

Date: Sunday, April 9
Time: 1:30 p.m. – 3:30 p.m.
Location: Room 311
Co-Chairs: J. Tucker and R. Hatcher, Jr.

This year's History of Petroleum Geology forum focuses on how the Gulf Coast has served as the cradle for and fostered developments in micropaleontology and industrial biostratigraphy, geophysical techniques, salt tectonics, offshore technology and other disciplines. Speakers chronicle the influence of geoscience and engineering breakthroughs here in these and other related topics through >100 years of exploration that have had worldwide impacts on petroleum exploration and development. Houston is a perfect place for such a forum because of its location and pivotal role in this history.

AAPG Forum: Energizing the World in the 21st Century

Date: Monday, April 10
Time: 8:00 a.m. – 11:15 a.m. and 1:15 p.m. – 4:30 p.m.
Location: General Assembly A
Co-Chairs: J. Adamick, M. Coffield, E. Medvin and J. Lund

This full-day executive business session brings together the leaders of prominent oil and gas companies to discuss how the E&P industry will meet increasing hydrocarbon demand in the years to come. This inherently growth-oriented story is addressed from each company's unique perspective. Each speaker is allotted thirty minutes to make his or her presentation and a ten-minute Q&A session follows.

This topic is pertinent to AAPG members but also has far-reaching implications for the world as a whole. Because of this, organizers believe that this session will be of great interest to a large audience including traditional convention attendees as well as members of the financial community and national/international media. The organizers of the session have deliberately recruited executives from a wide variety of companies so that a full range of business models will be presented during the session.

Participating companies range from start-up independents to super-majors, with geographic focus ranging from domestic onshore U.S. to regional international specialists to truly global players. Most of the participating companies are publicly traded but at least one is privately held. Scheduled speakers include Robert Ryan, general manager of Global Exploration for Chevron; David Trice, chief executive officer of Newfield Exploration; William Maloney, senior vice president of global exploration for Statoil; James Hackett, chief executive officer of Anadarko; Helge Haldorsen, president of Hydro Gulf of Mexico; Bill Gammell, chief executive officer of Cairn Energy; Stacy Schusterman, chief executive officer of Samson Resources; Chuck Davidson, chief executive officer of Noble Energy; and Matthias Bichsel, executive vice president of global exploration for Shell International E&P. In addition, Tim Cejka, president of worldwide exploration for ExxonMobil, addresses this session's topic in his presentation as All-Convention Luncheon Speaker for the convention.

SEPM Research Symposium: The Significance of Mass Transport Deposits in Deepwater Environments

Date: Monday, April 10
Time: 8:00 a.m. – 11:45 a.m.
1:15 p.m. – 5:00 p.m.
Location: General Assembly B
Co-Chairs: C. Shipp, P. Weimer and H. Posamentier

The 2006 SEPM Research Symposium for the Annual Convention is "The Significance of Mass Transport Deposits in Deepwater Environments." Mass transport deposits (MTDs) are relevant to all aspects of E&P business. An associated poster session is scheduled for Tuesday morning, April 11.

MTDs are defined as deepwater features or stratigraphic intervals that have been mobilized and re-deposited since their time of original deposition. MTDs include what are commonly termed slumps, slides, mass flows, debris flows, slope failure complexes, mass transport complexes and numerous other terms. The symposium involves technical discussions on classification, geomorphology, depositional environment, geotechnical properties, petrophysical properties, geophysical properties and pressure regimes.

Two half-day technical sessions are scheduled. The morning session is dedicated to the general theme of definition, morphology, distribution and properties of MTDs in specific or multiple global deepwater basins in an effort to better understand the diversity and terminology used to characterize MTDs. The afternoon session is focused on specific examples or case studies. The purpose of the second session is to illustrate how the presence of MTDs has affected or influenced geohazard assessment, geotechnical or geophysical characterization (shallow or deep in the stratigraphic interval), subsea development or objective-level issues, such as a trapping mechanism or even reservoir.

A poster session to complement the oral sessions is associated with this symposium.

AAPG Forums and Special Lectures *continued on page 25*

The 5th PESGB/HGS African Conference
Africa: Elephants of the Future

Tuesday and Wednesday September 12th-13th, 2006
QE2 Conference Centre, London

Africa continues to be an "elephant" of the upstream oil & gas industry. The themes for the PESGB/HGS 5th annual African conference are reserves growth in existing fields, the potential for large new "elephant" sized discoveries, and the technologies that will enable these. This event has established itself as the primary technical E & P conference on Africa, and attendance is expected to exceed 300+.

Format: The event will include a large poster programme in addition to a comprehensive oral programme of about 25 high quality talks and two days of vendor exhibits.

EARLY REGISTRATION DISCOUNTS
Before 1st July

£250 for PESGB/HGS/Geol Soc. Members
£295 for non-members

(includes admission to the conference, exhibition and posters, all refreshments, lunch and evening reception on Tuesday.

For registration forms, to book online, view sponsor opportunities and associated exhibition space visit: www.pesgb.org.uk, or email: pesgb@pesgb.org.uk, tel: +44 (0)20 7408 2000

Inquiries about the program can be sent to Duncan Macgregor at duncan.macgregor@neftex.com or duncan.macgregor2@ntlworld.com.

<<<Check HGS Events Calendar for links to latest information>>>

The conference committee includes in London: Ray Bate (Chairman), Duncan Macgregor (Technical Co-ordinator), Val Clure, Enzo Zappaterra, and Mike Lakin (sponsorship), and for the HGS in Houston: Al Danforth, Ian Poyntz, Steve Henry and Gabor Tari.

PESGB

HOUSTON GEOLOGICAL SOCIETY 1923

AAPG Forums and Special Lectures *Continued from page 23*

SEPM Forum:
High-Resolution Sequence Stratigraphy: Is the Model Breaking Apart?

Date: Monday, April 10
Time: 1:15 p.m. – 5:00 p.m.
Location: Room 311
Chair: V. Abreu

SEPM will host a special technical session entitled "High Resolution Sequence Stratigraphy: Is the Model Breaking Apart?" The objective is to have an open debate about the controversies associated with sequence stratigraphic interpretations in high-resolution data sets. Several researchers are puzzled with questions arising from interpretation in high-resolution surveys: What is the relationship between sea level and systems tracts during the last glacial cycle? Are the sequence stratigraphic surfaces in fact time-transgressive? Which surfaces are more likely to be synchronous? What are the implications for reservoir correlation and mapping? The research forum addresses these and other questions. The forum is moderated by Vitor Abreu (SEPM Research Councilor), and seven invited guests from industry and academia lead the discussion with different approaches and points of view about the subject. This format allows different opinions to be expressed and defended on a scientific basis, and we hope it may shed a light on this controversial subject.

The discussion is centered on siliciclastic sequence stratigraphy, and adopts a "source-to-sink" approach, where high-resolution datasets are available from the continent through the shelf and slope in a same geographic location: the Gulf of Mexico. Therefore, we have five "source-to-sink" participants: Michael Blum (Louisiana State University), John Anderson (Rice University), Charles Winker (Shell International Exploration and Production), Henry Posamentier (Anadarko Canada Corporation) and Rick Beaubouef (ExxonMobil Exploration Company).

Finally, two participants of the forum have the responsibility of focusing the discussion on the available models: William E. Galloway (University of Texas at Austin) and Jack Neal (ExxonMobil Exploration Company).

AAPG Forum:
Overcoming Challenges for E&P in the 21st Century

Date: Tuesday, April 11
Time: 8:00 a.m. – 11:45 a.m.
Location: General Assembly A
Co-Chairs: P. O. Yilmaz and A. Afifi

Growing energy demand in the world is the key driver for challenges faced by our industry today. These range from global recruiting from education centers; training, development and retention of highly skilled and talented employees, to innovative and responsible ways to develop the world's resources through advanced technology for the growing energy demand in the 21st century.

Energy is called one of the world's most essential industries. Global prosperity and consumption of energy go hand-in-hand. The rate of growth in the world economy implies growth in global energy demand of about 1.7% (ref: International Energy Agency). Despite the expected growth in nuclear, wind and solar energy, oil and natural gas will remain the primary source to meet this demand. Investment in new technology and talent is needed to increase the available resource base. Advances in technology require greater skill levels than ever before, and the remote geographic locations of many new provinces means mobility of employees. We have added another challenge in lack of trained and skilled staff joining our industry.

A large proportion of our professional workforce entered the industry in the "booms" of the 1970s and 1980s. As they move toward retirement, this group of older professionals must be replaced by new graduates. While this may be so, universities are experiencing a drop in graduates in science-based disciplines. According to API 2005 publications, there is also a general decline in educational emphasis on areas relevant to the technological process such as math and science.

Speakers participating in this management forum are asked to take different aspects of the challenges discussed above.

Speakers include Timothy L. Killeen, director, National Center for Atmospheric Research; Ceri Powell, vice president exploration for Middle East, CIS and South Asia; Carlos Dengo, resource operations manager, ExxonMobil Exploration; Kelly Hartshorn, general manager exploration, Chevron International Exploration and Production; John Brooks, department of trade and industry-UK (retired); and Jack Casey, chairman, Department of Geosciences, University of Houston. Other organizations invited to participate are Schlumberger and the National Science Foundation.

AAPG Forum:
Show Me the Money – How Wall Street Logic, NYMEX Traders and Capital Markets Impact You

Date: Tuesday, April 11
Time: 10:00 a.m. – 11:45 a.m.
Location: Room 317
Chair: L. S. Durham

Yesterday: Commodity prices soared, E&P stock prices stumbled.
Today: The reverse. Tomorrow: Who knows?
Let's face it, you can get whiplash watching price oscillations in this industry. **AAPG Forums and Special Lectures** *continued on page 27*

AAPG Forums and Special Lectures *Continued from page 25*

Even a predicted two-day cold snap in the U.S. northeast can send the NYMEX commodities traders into a frenzy, bidding up natural gas prices to record highs only to send them tumbling the next trading day. Combine this ever-changing scene with the downward tick in stock price that has been known to follow impressive E&P company earnings and beefed up production announcements, and it's enough to keep you reaching for the headache pills.

But there is method to this madness—according to those in the know—and it behooves you to get a handle on what's happening and why. After all, the fallout from the actions of the NYMEX crowd and their neighboring Wall Street investment gurus trickles down to even the smallest E&P players—for better or worse.

So take advantage of this opportunity to hear a panel of experts provide insight into a number of intriguing yet fundamental aspects of the industry, such as the motivating factors at work in the fast-paced world of commodities trading and what constitutes the trigger points that dictate price swings for oil and gas company equities. Other presentations for this event include a look at where some of the current deep-pockets money sources are wanting to invest their capital these days and what this means for you.

Speakers include Chris Theal, managing director of research, Tristone Capital; James Wicklund, managing director and senior equity research analyst, Banc of America Securities, LLC; Jeff Jones, partner, Quantum Energy Partners; Scott Richardson Brown, associate partner, Oriel Securities; and Andy Evans, vice president E&P group, ARC Financial.

DPA/AAPG Forum:
Reserves: Now and in the Future
Date: Tuesday, April 11
Time: 1:15 p.m. – 5:00 p.m.
Location: General Assembly A
Co-Chairs: D. J. Tearpock and M. J. Smith

During the past few years there has been a lot of publicity relating to reserves writedowns and concerns about the reliability of reserves disclosures. Reserves concerns have had an impact on investor confidence in the E&P industry.

The AAPG/DPA has assembled a high-level panel of industry experts from Wall Street, private industry, association, consulting and academia to provide their views on the subject of "Reserves: Now and in the Future." The forum allows for short presentations by each industry expert, followed by an open question and discussion session from you, our distinguished participants. This panel includes Pete Rose, president, AAPG; Ron Harrell, chairman of the board, Ryder Scott; Andrew Oram, vice president, Moody's Investors Services; Duncan Frost, reserves manager, Chevron North American and chair, SPE Oil and Gas Reserves Committee.

AAPG Forum:
Winning the Oil End Game: The Future of Hydrocarbon Resources in our Global Economy
Date: Wednesday, April 12
Time: 8:00 a.m. – 11:45 a.m.
Location: General Assembly A
Chairs: M. Downey and D. Morrison

World oil production currently accounts for about 40% of world energy, so the peak of oil production will initiate significant changes in our world. As growth in world energy continues to increase and expanding production capacity begins to slow, prices will trend higher.

Key to mitigating the impact of a changing world energy picture is how we deal with this change. Peak oil, or the date that world oil production begins to decline, may be close or it may be decades off, but clearly we are in no danger of running out of oil immediately. To help attendees better understand the challenges and opportunities that are developing in a changing global commodity environment, this program focuses on the technical, commercial and economic implications of a reduced global resource.

Forum panel members discuss the role of exploration for both conventional and unconventional resources, giant fields and field rehabilitation and development technologies to meet the growing demand for hydrocarbons. Addressing the economic risks and possible mitigating solutions, panel members also consider the commercial and economic implications of peak oil from various perspectives, including that of an E&P company, a financial institution or a consumer of energy products.

Panel members include Mike Bahorich, Amory B. Lovins, Andrew Latham, Daniel J. Tearpock, Marlan Downey, James Robertson, and Sandy Rushworth/Pete Stark.

DPA Panel Discussion and Forum:
"Women as Leaders in the E&P Industry: Challenges and Opportunities"
Date: Tuesday, April 11
Time: 1:30 p.m. – 3:30 p.m.
Location: George R. Brown Convention Center
Co-Chairs: Jeff Lund and Robbie Gries

Women are fulfilling operating and executive leadership roles with increasing

AAPG Forums and Special Lectures *continued on page 28*

AAPG Forums and Special Lectures

Continued from page 27

frequency at E&P organizations ranging from multinational majors, large independents and national oil companies. The panel examines the challenges faced by women in their rise to pioneering leadership positions and the opportunities they foresee.

The importance of women in the energy workforce and input from the audience on the subject of retention of women in the energy workforce is encouraged. A question and answer session follows presentations by panel members, all of whom are distinguished leaders in the E&P industry.

Participants include Susan Cunningham, Sr. Vice President, Noble Energy, Houston; Kathy Hogensen, President, Santos USA, Houston; Pat Horsfall, Vice President, Nexen, Calgary; Evelyn Medvin, Vice President, Core Laboratories, Houston; and Deborah Sacrey, President, Auburn Energy, Houston.

A complementary joint AAPG-AWG workshop "Women in the Petroleum Industry: Developing Future Female Leaders Today" follows the panel discussion and forum to provide more resources on developing leadership skills.

Women in the Petroleum Industry: Developing Future Female Leaders Today
Date: Tuesday, April 11
Time: 3:30 p.m. – 5:00 p.m.
Location: George R. Brown Convention Center
Co-Chairs: Marjorie Chan and Allyson K. Anderson
Admission: No cost, but you must pre-register for this event

This joint sponsored AAPG-AWG workshop focuses on developing leadership skills for women professionals within the petroleum industry. Two distinguished invited speakers (to be announced) from the petroleum industry give interactive presentations and lead discussions on leadership styles and challenges.

This is presented as a complementary session after the AAPG panel discussion and forum: "Women as Leaders in the E&P Industry: Challenges and Opportunities." A reception consisting of light snacks and refreshments will immediately follow the workshop. The workshop is open to all professionals and students. Any student who attends the workshop receives a one-year complementary student membership to the Association for Women Geoscientists.

The workshop is generously funded by ExxonMobil and the Association for Women Geoscientists.

The Houston Geological Society and the 2006 AAPG Convention Entertainment Committee present Landry's Downtown Aquarium An Underwater Adventure.

A great meal, a museum-quality aquarium and midway rides, all in one location.

All features included, only $60 per person.

Online go to: www.aapg.org/houston and click on "registration."

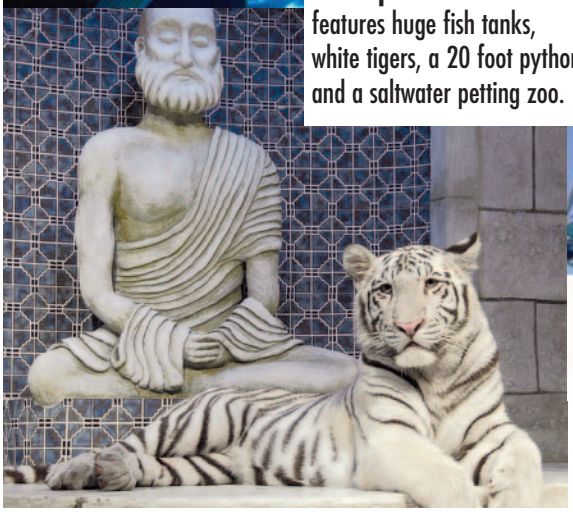
If you are registering for the convention, choose "Landry's Downtown Aquarium" social activity.

If you are not registering for the convention, scroll down and choose "no badge" (to purchase tickets ONLY to the Landry's Aquarium event).

DOWNTOWN AQUARIUM
AN UNDERWATER ADVENTURE

Sharks!

The Aquarium Adventure features huge fish tanks, white tigers, a 20 foot python and a saltwater petting zoo.



Midway Rides

Take the Ferris Wheel or a Train Trip through an acrylic tunnel tank filled with sharks.

AAPG Technical Program

- Building on our theme "Perfecting the Search, Delivering on Promises," we have put together a forward-looking program that will enhance our technical skills as well as develop our business skills.

- The technical program was put together to improve our abilities to find and produce hydrocarbons from both our successes and failures to make us better scientists and explorers.

- Technical achievement paves the way to profitable business.

- The themes were developed to get the session chairs and authors to focus on active messages that focus on learning, discipline integration and the business of our profession.

- Business relevance is an integral part of our program, and many of the luncheon speakers will focus on the business.

- Discussions of future exploration and energy supplies are integrated into the program as posters, oral presentations and forums.

- The Halbouty Lecture by Harrison "Jack "Schmidt, the only geologist to walk on the moon to date, is titled "Wildcatting the Moon."

- Short courses and field trips are presented in the three theme areas of Foundations, Technical Enrichment and Energy Business.

- One of the highlights is what we can learn from Giant Fields.

- The Giant Fields short course and core poster session are probably the only time these cores will be together, so it is important to take advantage of this opportunity.

- Many of the sessions will present case studies, including a short course and oral session on Bypassed Pays and Plays.

- Other technical program highlights include play openers and where they are leading us, unconventional reservoirs, and reservoir characterization and modeling. ■

AAPG Luncheons

Tickets for luncheons, if still available, can be purchased at the Short Courses/Field Trips/Tickets counter in the Convention Registration area, Exhibit Hall E at the George R. Brown Convention Center. All activities are in the George R. Brown Convention Center unless otherwise noted.

All-Convention Luncheon:
Expanding the Search
Date: Monday, April 10
Time: 11:30 a.m. – 1:15 p.m.
Location: George Bush Grand Ballroom B and C
Fee: $30

Tim Cejka addresses the significant challenges facing our industry as we strive to keep the world supplied with affordable sources of energy.

Tim Cejka argues that technology and its skillful application will be critical in meeting this challenge, and that it will come not only in the form of new hardware and software, but also in the way we are organized, operate, learn and interact. It will allow us to produce oil and gas in ever-more remote areas and deeper waters and make currently "non-conventional" resources part of the mainstream of our portfolios. The magnitude of the challenge before us should provide a strong incentive both to those already working in the oil and gas industry and those at university. Highly-skilled geoscientists, expert not only in their technical disciplines but also in their ability to collaborate and adapt to change, will be essential, and a highly rewarding career can be found within our industry.

A.T. (Tim) Cejka is President, ExxonMobil Exploration Company, and a Vice President of Exxon Mobil Corporation.

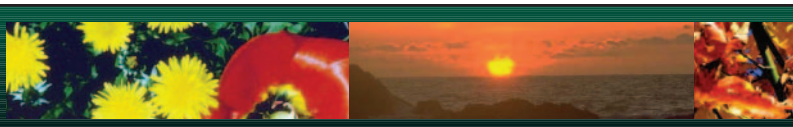
He began his career with Exxon in 1975 as an exploration geophysicist for offshore California. After serving in various supervisory and managerial positions, he became an advisor to the upstream director for Exxon Corporation. He served three years as the exploration advisor for Exxon's Netherlands and German affiliates.

In 1993, when Exxon created the Exxon Ventures (CIS) company, he became the vice president of Exploration. Post the merger of Exxon and Mobil, he became vice president for the Caspian/Middle East Region for ExxonMobil Exploration Company. In 2001, he assumed the position of executive vice president for ExxonMobil Exploration with responsibilities for exploration and geoscience in Europe, Russia, the Middle East and the Caspian Region.

Mr. Cejka is a member of the SEG, co-chair of the United States-Azerbaijan Chamber of Commerce (USACC) and a member of the Board of Trustees, Houston Museum of Natural Science. A native of Pittsburgh, Pennsylvania, Mr. Cejka is married with two daughters.

AAPG Luncheons *continued on page 37*

April 2006



Sunday	Monday	Tuesday	Wednesday
	Reservations: The HGS prefers that you make your reservations on-line through the HGS website at www.hgs.org. If you have no Internet access, you can e-mail reservations@hgs.org, or call the office at 713-463-9476. **Reservations for HGS meetings must be made or cancelled by the date shown on the HGS Website calendar, normally that is 24 hours before hand or on the last business day before the event**. If you make your reservation on the Website or by email, an email confirmation will be sent to you. If you do not receive a confirmation, check with the Webmaster@hgs.org. Once the meals are ordered and name tags and lists are prepared, no more reservations can be added even if they are sent. **No shows will be billed.**		
2	3	4 **HGS Executive Board Meeting** **AAPG/SEPM Pre- Convention Field Trips and Short Courses begin**	5
9 **AAPG/SEPM Annual Convention** Page 21	10	11 **Downtown Aquarium Dining Adventure** Page 29	12
16	17	18 **Joint GSH/HGS Luncheon Meeting** by R. Latimer *"Uses, Abuses, and Examples of Seismic-Derived Acoustic Impedance Data: What Does the Interpreter Need to Know?"* Page 13	19
23 30	24 **HGS North American Explorationists Dinner Meeting** by Chet Paris *"Recent Exploration on the North Slope of Alaska"* Page 19	25	26


GeoEvents

Thursday Friday Saturday

Members Pre-registered Prices:		
General Dinner Meeting	$25	
Nonmembers walk-ups.	$33	
Env. & Eng.	$25	
Luncheon Meeting	$30	
Nonmembers walk-ups.	$33	
International Explorationists	$25	
North American Expl.	$25	
Emerging Technology	$25	

NOW you can make your reservations on-line at www.hgs.org

1

NeoGeos Family BBQ at Bear Creek Park
11 a.m.– 4 p.m.

6

7

8

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AAPG/SEPM Post-Convention Field Trips and Short Courses begin

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15

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SIPES Luncheon Meeting
"Seismic/Sequence Stratigraphy-Applications for the 21st Century"
Page 17

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Upcoming GeoEvents

Friday, May 5
GSH: SEG-DISC:
SEG Short Course
Seismic Attribute Mapping

Monday May 8
HGS Dinner Meeting
Lower Tertiary Deposition in Walker Ridge, Gulf of Mexico

Monday May 15
HGS International Dinner
Speaker: David R. Steele, Deep Water Nigeria Play Characterization

Tuesday May 16
HGS NorthSiders Luncheon
The Wilcox - Outcrop to Deep Water

Thursday, May 18
HGA Annual Meeting and Style Show Program

Friday, May 19
HGS Annual Tennis Tournament
page 62

Monday, May 22
HGS N. A. Explorationist Dinner Meeting
A Dynamic Model For The Permian Panhandle & Hugoton Fields, Western Anadarko Basin

Wednesday, May 24
HGS Luncheon
Tectono-Stratigraphic History of Greater Mississippi Canyon

Saturday, June 17
HGS 2006 Skeet Shoot
Greater Houston Gun Club, page 52

Saturday, June 17
HGS Guest Night

Saturday, June 24
GSH 6th Annual GSH Saltwater Tournament

AAPG Luncheons *Continued from page 32*

Division of Environmental Geosciences Luncheon
Winning the Oil Endgame
Date: Wednesday, April 12
Time: 11:30 a.m. – 1:00 p.m.
Location: Room 301
Fee: $30

The DEG is very pleased to announce Amory B. Lovins, cofounder and CEO of Rocky Mountain Institute and lead author of *Winning the Oil Endgame.* A consultant experimental physicist educated at Harvard and Oxford (where he received an MA by virtue of being a don), he has advised the energy and other industries for over 30 years, as well as the U.S. Departments of Energy and Defense. Published in 28 previous books and hundreds of papers, his work in ~50 countries has been recognized by the "Alternative Nobel;" Onassis, Nissan, Shingo and Mitchell Prizes; a MacArthur Fellowship; the Happold Medal; nine honorary doctorates; and the Heinz, Lindbergh, Hero for the Planet and World Technology Awards.

He advises industries and governments worldwide, including major oil companies, and has briefed 18 heads of state. Since 1990, he has led the development of quintuple-efficiency, uncompromised, competitive automobiles and a profitable hydrogen transition strategy. Much of his work is synthesized in Natural Capitalism (www.natcap.org) and *Small Is Profitable: The Hidden Economic Benefits of Making Electrical Resources the Right Size* (www.smallisprofitable. org), one of the Economist's top three business and economics books of 2002. He is a member of the Society of Automotive Engineers, American Physical Society and International Association for Energy Economics and is a Fellow of the American Association for the Advancement of Science, World Academy of Arts and Sciences and World Business Academy. *Automobile* magazine has called him the 22nd most powerful person in the global car industry; the *Wall Street Journal*, one of 39 people in the world most likely to change the course of business in the 1990s; and *Newsweek*, "one of the Western world's most influential energy thinkers."

Winning the Oil Endgame presents a peer-reviewed plan for reducing or finally eliminating oil use by the United States. The book discusses a strategy that integrates four technological methods to displace oil: using **AAPG Luncheons** *continued on page 39*

AAPG Luncheons

Continued from page 37

oil twice as efficiently, then substituting biofuels, saved natural gas, and, optionally, hydrogen. The plan proposes public policy-driven solutions without additional taxes. A $130 billion annual savings is projected from $180 billion investment over 10 years.

The DEG Awards are presented at the luncheon following the speaker presentation.

Division of Professional Affairs Luncheon
Perfecting the Search for Drilling Capital
Date: Tuesday, April 11
Time: 11:30 a.m. – 1:00 p.m.
Location: Room 302
Fee: $30 non-DPA members, $15 DPA members

The DPA luncheon is pleased to have Ms. Leslie Haines, Editor-in-Chief of the *Oil and Gas Investor*, as its distinguished guest speaker. Ms. Haines speaks on the availability of money to finance drilling ventures. Ms. Haines notes that there is more public and private capital available for drilling now than at any time in the past 20 years. She explores who the main providers are of capital and what they expect from an exploration and production company and detail some of the ways E&P companies have successfully accessed this capital and on what terms.

Ms. Haines is the Editor-in-Chief of the *Oil and Gas Investor*, the award-winning monthly magazine that brings together oil and gas executives and the financial community. In 2006 the magazine celebrates its 25th anniversary.

She began writing for *Oil and Gas Investor*, Hart's flagship magazine, in 1985. She has been editor of the magazine since 1992. That same year she received the Unsell Award for Excellence in Petroleum Journalism from the Independent Petroleum Association of America (IPAA) at its annual meeting. In 2005, the magazine won the prestigious Neal Award for Business Journalism Excellence. She began her journalism career as a newspaper reporter in Williston, North Dakota, in 1980. In 1982 she joined the Midland, Texas, *Reporter-Telegram* as that paper's business and energy editor. She is a magna cum laude graduate of Keene State College in her native New Hampshire and spent her junior year at the Universite of Dijon in Dijon, France.

AAPG Luncheons *continued on page 41*

AAPG Luncheons

Continued from page 39

Energy Minerals Division Luncheon
Perfecting the Search for Unconventional Resource Plays
Date: Tuesday, April 11
Time: 11:30 a.m. – 1:00 p.m.
Location: Room 301
Fee: $35

Creative geologic thinking, technology advancements, maturing conventional plays, investor preference for low risk drilling inventories and pricing improvement have all led to an industry-wide focus on "Perfecting the Search for Unconventional Resource Plays." What used to be the nearly exclusive domain of small to mid-sized independent companies is now the mantra for even the largest North American gas companies.

Peter Dea, President and CEO of Western Gas Resources, has been exclusively focused on unconventional gas for the last decade before it was "cool" both with his current and predecessor company. Such perseverance and dismantling of the paradigms have paid off for geologists and shareholders.

During his tenure at Barrett Resources form 1993 to 2001, the company's market cap exploded from $200 million to $2.7 billion largely fueled by double-digit annual production and reserve growth of its tight gas sand and coal bed methane unconventional resource plays. A similar focus of unconventional gas at Western Gas Resources has led to Wall Street recognition as a leader in several performance metrics over the last several years and resulting in a multi-fold increase in market cap.

Peter Dea discusses the multi-disciplined aspects that he and his peers have focused on to unlock the riches in unconventional gas in the last decade. The results show dramatic success in unconventional gas leading the growth of U.S. gas supply, reserve additions, technology advancements, environmental mitigation and driving major pipeline projects.

Peter Dea is President and CEO of Western Gas Resources, Inc., a registered geologist in Wyoming and former Chairman and CEO of Barrett Resources Inc. He spent the first decade of his career with Exxon Company U.S.A, following geology degrees from the University of Montana (MS) and Western State College (BA). In 2003 he presented the Michel T. Halbouty Honorary Lecture at the AAPG annual convention. Complimenting his career, he has also experienced geology in other unconventional ways through multi-week skiing and climbing expeditions to the continent's highest peaks and kayaking its deepest canyons. ■

Candidates for the 2006–2007 Executive Board

Ballots for the 2006–2007 candidates will be mailed separately. Pleaase take time to read the candidates' profiles and vote for your Executive Board members.

President-Elect (two candidates)

Martin M. Cassidy

Education:
AB cum Laude Geology, Harvard University
MS Geology, University of Oklahoma.
PhD Geology, University of Houston

Experience:

1994–present	Consultant, international, domestic, CO2.
1991–1994	Staff Geological Assistant, International Amoco.
1987–1991	Sr. Geological Assistant, Domestic, International, Amoco
1984–1986	Exploration Manager Amoco, UK
1983–1984	Division Geologist Amoco, UK
1982–1983	Division Operations Supervisor, Amoco UK
1980–1982	Division Operations Supervisor Far East, Amoco
1973–1980	Sr. Staff Geologist, Amoco, International
1969–1973	Chief Geologist, Pan American Libya Oil Co.
1962–1969	Geologist to Sr. Geologist, Amoco, domestic
1960–1962	Gordon McKay Teaching Fellow, Harvard Univ.
1958–1960	Teaching assistant, Oklahoma Univ.
1956–1958	Ammunition Officer USAF, Korea, and Denver USA

Professional Affiliations:
HGS, AAPG, AIPG, AAAS, GSA, Geol. Soc. London, PESGB, SEPM, Sigma Xi, Registered Texas Geologist, AAPG Certified Petroleum Geologist, AIPG Certified Professional Geologist

Honors and Awards:

1999	HGS President's Award

Professional Activities:

2001–2005	AAPG Publication Pipeline Committee Chairman
2001–2006	AAPG House of Delegates
1998–1999	GS International Explorationists chairman
1968–1969	HGS Vice-President
1967–1968	HGS Treasurer

Statement:
The HGS is central to professional geologists in the region. With

Martin M. Cassidy *continued on page 48*

Linda R. Sternbach

Education:
BS Geology, Syracuse University, 1981
MS Geology, Rensselear Polytechnic Institute, 1984

Experience:

2002–present	Kerr McGee, senior geophysicist Trinidad/Caribbean and Gulf of Mexico deepwater
1998–2002	Globex Energy, working international projects
1993–1998	Geophysical consultant, Gulf of Mexico
1984–1993	ARCO Oil and Gas, geologist

Professional Affiliations:
HGS, SEG, AAPG (CPG #5286), SIPES, GSH, Registered Geophysicist, Texas, #2307

Professional Awards:

2005	HGS Distinguished Service Award
2003	HGS President's Award
1995	HGS Rising Star Award

Professional Activities:

2005–2006	HGS Vice President
2006	Organized and moderated the January Geo-Legends special program
2005–	AAPG House of Delegates, member
2003–2005	HGS Guest Night chairman (Themes on Moon, Mars, Tsunamis)
2002–2004	HGS International Explorationists' technical program
2000–2001	HGS Directory chairman
1998–2002	*Leading Edge* magazine editorial board member
1997–1998	HGS *Bulletin* Editor
1996–1997	HGS *Bulletin* Editor-Elect

Statement:
I am very excited to be nominated for President-Elect of the HGS. I have been a member since 1985, and have served on the HGS Board twice and contributed to a lot of HGS activities,

Linda R. Sternbach *continued on page 48*

Candidates for the 2006–2007 Executive Board *(continued)*

Vice-President (two candidates)

Andrea S. Reynolds

Education:
BA Geology, State University of New York at Geneseo, 1996
MS Geology, Texas A&M University, 1999

Experience:

2002–present	Shell International E&P, Senior Geologist
2000	San Jacinto College South, Adjunct Professor
1998–2002	Amerada Hess, Geologist

Professional Affiliations:
HGS, AAPG

Honors and Awards:

2004	HGS President's Award
2001	HGS Rising Star Award

Professional Activities:

2005–present	HGS Membership Committee Co-chair
2005–present	AAPG Student Chapter Committee
2004–present	AAPG EMD Vice-Chair, 2006 Annual Meeting
2005	AAPG House of Delegates Alternate
2003–2005	Director, HGS Board
1999–2003	HGS Earth Science Week Committee
2001–2003	HGS NeoGeos
1999–2001	HGS NeoGeos Co-chair and Chair

Statement:
The HGS is a world-class local society that offers its members many benefits. I feel the most important of these benefits are the top-notch lunch and dinner meetings open to all members and guests. If elected to the position of vice-president, I would be charged with continuing to provide the HGS membership with exciting topics and engaging speakers for our technical program.

I am honored to be nominated for this position in the society, and if elected, would commit to providing an enticing array of technical talks that would appeal to our diverse membership. I have experience on the HGS Board, and am familiar with the work that goes into this position, having witnessed two vice-presidents put together impressive programs. My work within Shell and with the HGS

Andrea S. Reynolds *continued on page 48*

Frank Walles

Education:
BS Natural Sciences, Michigan State University, 1979
MS Geology, Michigan State University, 1980
Environmental Engineering Graduate Courses, University of Houston, 1993

Experience:

2005–present	Devon Energy, Corporate Unconventional Resources, Sr. Geological Advisor
2005	Kerr McGee - International Exploration, Sr. Geological Specialist
2003–2005	Advanced Interpretation - Petroleum Systems, Geological Consultant
2000–2003	Anadarko Petroleum - Unconventional & Basin Studies, Sr. Staff Geologist
1994–2000	Union Pacific Resources - Unconventional & Conventional, Sr. Staff Geologist, Ft. Worth, TX
1988–1994	British Gas E & P - International Petroleum Systems, Principal Geologist
1979–1988	Tenneco Oil Company - GOM, Frontiers & International, Project Geologist

Professional Affiliations:
HGS, AAPG, DPA (CPG # 5890), EMD, SPE
Texas Licensed Professional Geoscientist # 1980

Honors and Awards:

2005	HGS Rising Star Award
1991	Best Technical Paper Award - British Gas

Professional Activities, HGS:

2003–present	HGS Co-Chair / Technical Program - HGS Northsiders Group
2005–present	2006 EMD Technical Chair - EMD Program for AAPG Annual Convention- Houston, TX
2003	HGS Northsiders Group - Origination committee member
1994	Offshore Technology conference AAPG/SEG Subcommittee on 3-D Seismic
1994	Co-chairman of OTC Session on 3-D imaging below subsurface salt-GOM

Frank Walles *continued on page 48*

Candidates for the 2006–2007 Executive Board *(continued)*

Secretary (two candidates)

Jennifer L. Burton

Education:
MS Geology (1996), University of North Carolina at Chapel Hill
BS Geological Sciences (1993), University of Memphis

Experience:

1996–present	Project Geologist, Anadarko Petroleum Corporation
1991	Summer Geophysics Intern, Unocal Corp.
1990	Summer Geology Intern, Unocal Corp.

Professional Affiliations:
Texas Licensed Professional Geoscientist, #3655
AAPG
HGS

Honors and Awards:

2003–2004	HGS Rising Star Award

Professional Activities:

2006	AAPG EMD Short Course Co-chair for AAPG Annual Meeting
2002–present	HGS Earth Science Week Committee Co-Chair
2004	HGS Ad-Hoc Committee

Statement:
I am truly honored to be nominated for the office of HGS Secretary. Having served as a co-chair of the Earth Science Week Committee for the past few years, it has been gratifying to share in the collective efforts of fostering greater earth science awareness in our community. I have been enriched by the valuable networks, friendships, and collaborative projects that underscore the mission of the society and that make me proud of our profession. As we are all aware, the geosciences are facing a demographic challenge that will undoubtedly affect our membership in years to come. It is thus incumbent upon us to develop strategies to engage new members and promote the society as a key resource for continuous education, networking and career development. Serving in this role is an excellent opportunity to address these issues and help to ensure that the society will be strong for many years to come. ■

Natalie Uschner

Education:
BS Geology, The College of William and Mary
MS Geology, Indiana University

Experience:

1998–1999	Senior GIS Mapping Analyst, Virginia Division of Mineral Resources
2001–2005	Geoscientist, Schlumberger Information Solutions
2006–present	Petrophysicist, WesternGeco / Schlumberger

Professional Affiliations:
HGS, AAPG, SPE, GSA, HMNS

Honors and Awards:
HGS Rising Star Award
HGS Volunteer of the Month, January 2005

Professional Activities:

2003–2005	NeoGeos Chairperson
2005–2006	Society of Petroleum Engineers Emerging Leaders Program Board Member
2006	AAPG Leadership Conference

Statement:
I am honored to be asked to run for the position of Secretary of the Houston Geological Society. The HGS gives its membership a chance to interact both socially and professionally through a variety of meetings, educational outreach and social events.

My experience as the chairperson of the NeoGeos, the HGS young professional group, allowed me to see how important and beneficial it is to become involved in a local geological society early in one's career, and to encourage others to do the same. The HGS enables all geoscientists to grow and gain experience in their field, not only by engaging them through meeting and program content, but also by presenting them with the opportunity to network with other society members. Developing these key relationships and building camaraderie among the entire geological community is what truly makes this organization great.

Natalie Uschner *continued on page 49*

Candidates for the 2006–2007 Executive Board *(continued)*

Treasurer-Elect (2 candidates)

Second Treasurer-Elect candidate not available at *Bulletin* press-time. Please refer to the HGS website for the latest information.

James G. Foradas

Education:
Ph.D. Anthropology, The Ohio State University
BS Geology, The Ohio State University
AS Ocean Technology, College of Oceaneering

Experience:

2004–present	HRA Gray & Pape, LLC/ Senior Principal Investigator Geoarchaeology
2001–2004	Louis Berger Group, Inc./ Principal Investigator
2001	Santa Ana Community College/Lecturer Earth Sciences
2000–2001	California State University, Long Beach/ Lecturer Anthropology
1999–2000	Computer Sciences Corporation/Archaeologist
1998–1999	Commercial diving, welding inspection and scuba retail
1996–1998	Cultural Resources Management consulting in USA and Greece
1995–1996	University of Massachusetts, Boston/Lecturer in Anthropology and American Studies
1994–1996	Franklin Pierce College/ Lecturer in Anthropology and Earth Sciences

Honors and Awards:

2005	Project RESPECT (Texas) recognition for individual contributions that earned HRA Gray & Pape the HGS Corporate Star Award
1999	Certificate of Honor for Special Achievement, College of Oceaneering
1992	Inducted into the Phi Beta Delta Honor Society for International Scholars
1990	Inducted into the Golden Key National Honor Society
1985	Inducted into Sigma Xi: The Scientific Research Society for geoarchaeological research in the Bahamas

Professional Affiliations:
Registered Professional Archaeologist (RPA)
American Institute of Professional Geologists - MEM #0737
Society for American Archaeology
Geological Society of America **James G. Foradas** *continued on page 49*

Editor-Elect (one candidate)

Steven A. Earle

Education:
BS Geosciences, 1974, University of Arizona
MBA, 1988, Houston Baptist University

Experience

2003–present	Sabco Oil and Gas, Geophysicist
2000–2003	BP, Senior Geophysicist
1994–2000	Vastar, Senior Geophysicist
1980–1994	Arco Oil and Gas, Area Geophysicist
1974–1980	Amoco, Geophysicist

Professional Affiliations
HGS, AAPG, SEG, GSH

Professional Activities:

2002–2006	Chairman, North American Explorationists
2003–present	AAPG House of Delegates

Statement:
I believe the HGS *Bulletin* is one of the finest newsletters of its kind and a real tribute to our society. So it is a great honor to be nominated for the position of editor-elect. I pledge to maintain the high standards of professionalism and scientific merit established by previous editors. At the same time, I will strive to keep the *Bulletin* as reader friendly as possible.

The *Bulletin* is truly your newsletter. Anyone with thoughts about what should be published is encouraged to express their opinion and I will respond. I do think a little controversy can be a good thing and will not shy away from such topics, but will always insist on respectful discussion. ■

Candidates for the 2006–2007 Executive Board *(continued)*

Director (four candidates) *Vote for two candidates*

Valdis Budrevics

Education
Diploma, The Management Program, Rice University
Post-Graduate Studies, McGill University
MS Geology, University of Manitoba
BS Geological Engineering, University of Toronto

Experience:

2002–present	Panther Bayou E&P, LLC, VP Exploration
1999–present	Peritus Associates, Inc, President and Consultant
1999–present	Labyrinth Consulting Services Inc, Director
1974–1999	Amoco Production Co, Managerial and technical assignments internationally and domestically
1976	Shell Canada Ltd., Exploration Geologist
1973	Cominco Ltd., Mining Exploration Geologist
1972	Campbell Chibougamau Mines Ltd., Party Chief Mineral Prospecting Crew

Professional Affiliation:
HGS, AAPG, CSPG

Honors and Awards:

2004	HGS "Rising Star" Award
1980	CSPG "You Made Tracks" Award

Professional Activities:

2003-2005	HGS Public Relations Committee Chairman
1997-2001	AAPG House of Delegates Alternate

Statement:
The Houston Geological Society is a strong and dynamic professional organization that can be proud of its work and its membership. It would be a privilege to serve on the Board of Directors. I am at a point in my professional life where I can dedicate my energy and time to further the success of our organization. ■

Chuck Caughey

Education:
MA Geology, University of Texas at Austin
BS with Honors, University of Texas at Austin

Experience:

1989–present	ConocoPhillips and predecessors, Jakarta and Houston
1978–1988	LL&E/Inexco, Lafayette and Houston
1973–1978	Conoco, Ponca City and Lafayette

Professional Affiliations:
AAPG, HGS, WTGS, AIPG, Indonesian Petroleum Assn, Southeast Asia Petrol Expl Soc.

Honors and Awards:

2005	Indonesian Petrol. Assn. Honorary Member
2001	AAPG Distinguished Service Award
2000	Indonesian Petrol. Assn. Distinguished Service Award
1989	HGS Certificate of Appreciation

Professional Activities:

2005–present	HGS Project Respect Volunteer
2005–present	AAPG Chair, Visiting Geologist Program Committee
2005–present	AAPG Vice Chair, International Regions Committee
2004–present	AAPG Student Focus Coordinating Committee
2004	Organizing Committee, Conf. on Deepwater and Frontier Exploration in Asia and Australasia
2002–2005	AAPG Visiting Geologist Program Committee
2000–2005	AAPG Service Team Leader for Indonesia
2000	Organizing Committee, AAPG/IPA Bali International Conference
1998	Organizing Committee, Conf. on Gas Habitats of SE Asia and Australasia
1995	General Chair, Int'l Symposium on Sequence Stratigraphy in SE Asia
1994	AAPG Field Trip co-leader, North Sumatra Basin
1993–2004	Professional Div., Indonesian Petrol. Assn.
Distant past	HGS Academic Liaison volunteer, AAPG

Chuck Caughey *continued on page 49*

Candidates for the 2006–2007 Executive Board *(continued)*

Director (four candidates) *Vote for two candidates*

Robert K. (Bob) Merrill

Education:
BA Geology, Colby College
MS Geology, Arizona State University
PhD Geology, Arizona State University

Experience:

2005–present	Catheart Energy, Inc.
2000–2005	Samson
1989–2000	Unocal
1983–1989	Occidental
1974–1983	Cities Service Co.
1973–1974	Arizona State University
1970–1971	American Stratigraphic Company

Professional Affiliations:
AAPG, HGS, RMAG, Geological Society, PESA, AIPG, GSA

Professional Activities:

AAPG	
2006	Technical Program Coordinator AAPG Annual Meeting 2006
2001–2002	General Chair, AAPG Midcontinent Section Meeting, Tulsa
2000–present	AAPG Member Data Preservation Committee
1990–1995	AAPG Treatise of Petroleum Geology Committee
AGI	
1998–1999	AGI Committee on Human Resources
1998–2000	AGI Chairman National Geoscience Data Repository System Steering Committee
AIPG	
1996	President
1992–1993	Secretary

Statement:
The Houston Geological Society has a history of providing continuing education and other support for geologists. In my role as Technical Program Coordinator for the 2006 AAPG Annual Convention I have had the opportunity to work with many of the dedicated members of HGS to prepare what we think could be one of the most successful AAPG meetings. Building on our theme, "Perfecting the Search, Delivering on Promises", we have put together a forward looking program that will enhance our

Robert K. (Bob) Merrill *continued on page 49*

Bonnie Milne-Andrews

Education:
Master of Science, Geology, University of Iowa, 1979

Experience:

1979–1999	Amoco Corporation, Geologist, Domestic and International Exploration
2000–2002	Schlumberger (NExT) Business Development Manager, North and South America
2002–2004	Burning Dog Exploration (Consultant to Paragon Exploration, Red River Energy, Swift Energy International)
2005–present	Swift Energy International, Senior Geologist New Ventures

Professional Affiliations:
Licensed Professional Geoscientist, State of Texas # 2717
Houston Geological Society
American Association of Petroleum Geologists

Professional Activities:

1997–2000, 2004–present	AAPG House of Delegates (Houston Chapter)
2002–2004	HGS International Explorationists Group, Talks and Poster Judging
2002–2004	HGS International Explorationists Group, UH Student Poster Contest

Member of University of Iowa Geology Alumni Board
AAPG 2006 Convention - Chairman, Career Center Booth

2006–2007	HGS International Explorationists Group, Technical Talks

Statement:
The Houston Geological Society has blossomed since it's infancy in 1923 when it was chartered with 74 active members. At present, with over 4000 members, the HGS offers an amazing array of professional, educational and social programs that address the interests of all "varieties" of geologists. The Houston Geological Society is one of the best spots to network in town and should be the "First Stop" for new members of the Houston geological community. It is not easy to say "No " to an opportunity to help one of the best

Bonnie Milne-Andrews *continued on page 49*

Candidates for the 2006–2007 Executive Board *(continued)*

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Martin M. Cassidy — *Candidate for President-Elect*

volunteers that form the board of directors to those that staff some fifty committees and positions, the HGS provides support, services, training, education, information, entertainment, outreach to the community in which we live, networking in special interest groups, and camaraderie among members and their families. ■

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Linda R. Sternbach — *Candidate for President-Elect*

especially the International Group, Guest Night and the HGS Bulletin. I am willing to step up and help the Society in a longer-term role. I have a background like most of our members, working exploration within a medium size oil company, but I also have experience with a major (ARCO), and as a consultant, and with small independents. As a mid-career geoscientist who uses both geology and geophysics to generate and evaluate prospects, I can relate to the majority of HGS members.

I want to help the HGS plan for the next 5 years, which will likely involve expansion of membership, technical programs, interaction with AAPG and geophysical societies, communication using the monthly HGS Bulletin and the online webpage. HGS needs to think and plan on a long range scale, be relevant to our members' goals, but still operate within reasonable budgetary constrains. One of the important missions of the HGS is to "aid and encourage professional interaction among geoscientists." The HGS should help young professionals (as we already do through student awards and the NeoGeos group), and provide networking and technical information for established professionals. I favor collaboration and cooperation with national (AAPG) and local societies (GSH, SIPES, GCAGS), at the same time insuring that HGS has a prominent role and future as unique and successful geological society. ■

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Andrea S. Reynolds — *Candidate for Vice-President*

and AAPG has exposed me to many people, topics, and different disciplines from which to draw quality presentations with wide appeal.

I would look forward to working with the HGS board again, and use my experience as co-chair of the Membership Committee to continue to increase attendance at our meetings. Thank you for this opportunity. ■

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Frank Walles — *Candidate for Vice-President*

1992	Co-convener for Northern South America Section of Mesozoic and Early Cenozoic Development of the Gulf of Mexico and Caribbean Region GCSSEPM Foundation Research Conference.
1985–2005	Published and presented multiple papers at Research conferences, PTTC, HGS, and overseas

Statement:
As a long-time member of HGS (since1984), I am sincerely honored to be nominated to run for HGS Vice-President. The role of the HGS Vice President is to serve the membership by fostering the development of a relevant and applicable high quality technical program.

Active experience in developing such technical programs includes my three years of Co-Chairing and technical program development for the HGS Northsiders Group. My national experience includes developing the 2006 AAPG EMD Technical Program in conjunction with 14 session co-chairs and the review of180 plus technical talks. My current corporate role includes the development of barrier free technology networks, including recognizing technically relevant talks—especially in the hot unconventional resources field.

Surveys from our members and past participation history defines the needed future HGS technical program as one that include topics such as; field studies with application of technology improvements; Gulf Coast, GOM, domestic and international petroleum systems reviews; successful application examples of current and new technology; and unconventional resource play identification, development and assessment.

Our technical program could be designed in such a way that allows each of us to inter-connect into integrative technology professional networks. In addition, our meetings, symposiums, and workshops should fulfill the completion of continuing education credits that are needed for our professional development.

New ways of delivering these relevant technical programs are also needed; such as the successful application of Applied Technology Workshops (ATWs) utilized by the Society of Petroleum Engineers (SPE). The great success SPE has with this format concept provides clear evidence for application of this technical program format concept for our society. Perhaps we can create Applied Geological/Geophysical Workshops (AGWs). Our HGS Northsiders group with the HGS Continuing Education Committee is applying a similar format concept to an upcoming 2006 core workshop. ■

Candidates for the 2006–2007 Executive Board *(continued)*

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Natalie Uschner — *Candidate for Secretary*

It would be a great privilege to continue my active involvement in the HGS through the secretary position, where I would work diligently to help maintain and further develop the HGS as the outstanding organization it is. ■

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James G. Foradas — *Candidate for Treasurer-Elect*

Houston Geological Society
Sigma Xi

Professional Activities:

2005–2006 Archaeological advisor to HGS/Project RESPECT cemetery restoration and preservation projects

Statement:

It is an honor and a privilege to be considered for this position after being here in Houston for a relatively short time. I see it as an opportunity to repay the HGS for over a year of fun. My work on a variety of cultural resource management (CRM) projects in the greater Houston area has been greatly facilitated by HGS membership and the resources the association provides. HGS's greatest resources are its members, several of which have enlightened me on a variety of topics regarding the geology and geomorphology of greater Houston; the environmental consulting industry of which CRM is a part; and various other aspects of life in Houston.

I also have to thank HGS for learning more about my father's military career while I was volunteering with the HGS for Project RESPECT at Evergreen Negro Cemetery last June. Dad synopsis of his military experience has always been "we all had a job to do...I came home in one piece, and I thank God for that." Additional details about Dad's service would not likely have come to light had it not been for Steve Levine's donut run for the HGS volunteers which led to a chance meeting with a retired U.S. Army Sergeant Major at the cemetery. The Sarge enlightened me to my father's and other Philco Tech Reps' critical roles in the Korean War (1950-51) and in the early Cold War. That's a story I'm willing to share over donuts at upcoming HGS events. ■

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Chuck Caughey — *Candidate for Director*

International Liaison Committee, AAPG
Technical Program Committee, AAPG
Conventions Committee, GCAGS Field Trip Leader, GCAGS/SEPM Best Paper award

Statement:

I have enjoyed participating in many HGS events and activities, and I would consider it an honor to actively represent HGS members and committees as a Director of the organization. ■

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Robert K. (Bob) Merrill — *Candidate for Director*

technical skills as well as develop our business skills. As a Director it is important to not only continue supporting our members through continuing education and services, but expand programs that support the objectives of the Society. These programs become even more important considering the large number of young geologists and geophysicists that will be coming to work in Houston in the next few years, replacing the retiring workforce. We need to encourage young members to become volunteers as part of their professional development while building on the strong tradition of volunteering already part of the Society. We need to continue to find ways to keep the retiring workforce engaged in the Society as well. I look forward to working with the HGS Board and HGS special interest groups to continue to build on an already strong program. ■

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Bonnie Milne-Andrews — *Candidate for Director*

organizations a geologist can be part of. As a Director, I would commit to facilitating communication across the HGS organization. ■

HGS Directory of Oil Company Name Changes

The updated 17th edition (April 2006) of the HGS "Directory of Oil Company Name Changes" is now available. The "Directory of Oil Company Name Changes" is $13.50 plus shipping and handling, and 8.25% Texas sales tax if shipped to a Texas address. Prepayment is required and credit cards are preferred. The "Directory of Oil Company Name Changes" can be obtained from the Bureau of Economic Geology in Austin. The Bureau's website is www.beg.utexas.edu or e-mail pubsales @beg.utexas.edu. You can also contact them by phone at 1-888-839-4365 (USA only) or (512) 471-7144. Orders may be faxed to the Bureau at 1-888-839-6277 or 512-471-0140.

The NeoGeos Help Plan the OTC Young Professional Event *The Next Wave*

The NeoGeos are actively participating in the planning of the OTC Young Professional Event, called The Next Wave. Info on the event is available at http://www.otcnet.org/2006/young_professionals/index.html and registration for OTC and/or this event can be done at http://registration.expoexchange.com/ShowOTC061/.

The first 100 people to register for this event will win 2 tickets to the Houston Astros vs. the St. Louis Cardinals the evening of the session (Thursday, May 4, 2006).

Panelists include:

- Art Smith, CEO of J. S. Herold
- Joe Bryant, Chairman and CEO of Cobalt International Energy
- Marise Mikulis, Energy Industry Manager at Microsoft
- Blake DuCharme, President of Infinistar Oilfield Services
- Janeen Judah, General Manager of Reservoir and Production Engineering for Chevron
- John Gibson, Executive Managing Director of Fox Paine and Executive Chairman of Paradigm Geophysical

The event is arranged as two panel sessions where these dynamic industry leaders will share their success stories and provide advice on leadership, career planning, and progression. The session will utilize interactive voting pads to get real-time feedback from the audience. A reception will follow for networking and further discussion in a social setting.

Warren L. and Florence W. Calvert Memorial Scholarship Fund

The Warren L. and Florence W. Calvert Memorial Scholarship Fund provides scholarships to US citizens who are graduate students majoring in the earth sciences. Each year half of the earnings of monies invested in the fund are paid out in scholarships, while the remaining half is added to the corpus of the fund. This growth factor, along with the donations from individual HGS members, allows the fund to award larger scholarships each year to meet, at least in part, the increasing costs of a college education. For the current year, the fund awarded $3200 scholarships to four exceptional students.

The HGS and the Memorial Scholarship Fund Board gratefully acknowledge the following contributions to the Fund in 2005. The three categories of contributions are Patron ($500 or more), Donor ($100 to $500) and Contributor (less than $100). ■

Patrons

Gulf Coast Association of Geological Societies (GCAGS)
A special thanks goes to the GCAGS for its contribution of matching funds for 2004 & 2005.
Monica Miley (2004) (in memory of Maria Hoznar)
William F. Bishop
Carl E. Norman (in memory of Dr. Margaret S. Bishop)

Donors

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Richard S. Bishop
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Michael Cervantes (in memory of Kevin Werle)
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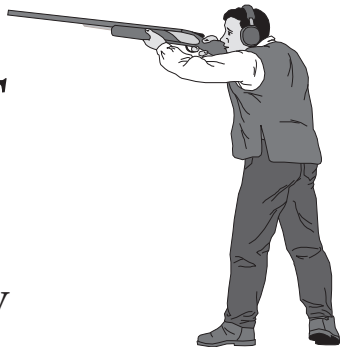
David G. Rensink.
Michael Riettini
Ianthe Sarrazin (in memory of Peter Nelson)
John C. Scheldt
Elle Marie Schollnberger
Henno Siismets
Frank Sonnenberg
Denise Stone
Dennis Thomas
Tiffany A. Tyler
Graham Ward
Robert Wiener
Richard P. Wilkerson
Stephen Windle
Robert S. Young

22nd Annual HGS SKEET SHOOT

Saturday, June 17, 2006

Greater Houston Gun Club
6702 McHard Road, Missouri City



This tournament is a 50-target event. Shells are provided, however **you must bring eye and ear protection**. Greater Houston Gun Club and National Skeet Shooting Association safety rules will be in effect. Winning shooters will be determined by the Lewis class system. Door prizes will be awarded by a blind-drawing after the conclusion of shooting. All competitors are automatically entered into the door prize drawing, but you must be present at the time of the drawing to win.

BBQ lunch will be provided from 11:30 a.m. until 1:30 p.m.
Refreshments will be available throughout the day.

IMPORTANT!!

WE ARE LIMITED TO 160 SHOOTERS IN FOUR ROTATIONS. ENTRY FEE IS $60 PER SHOOTER FOR REGISTRATIONS RECEIVED BY FRIDAY, JUNE 9. AFTER JUNE 9, REGISTRATION WILL BE STRICTLY ON A "SPACE AVAILABLE" BASIS AND THE ENTRY FEE WILL BE $80 PER SHOOTER. REGISTER EARLY!!

For more information, contact: Tom McCarroll at (832) 366-1623 ext. 205 or tmccarroll@cheypet.com.

****

HGS SKEET SHOOT REGISTRATION FORM

Name: _____ Company:_____

Email: _____ Phone:_____

Preferred shooting time: (circle one) 9:00 10:00 11:00 12:00

Indicate ammunition required: (circle one) 12 gauge 20 gauge

Please return form(s) with check for $60.00 per shooter, payable to: ***Houston Geological Society***

Mail to: ***Tom McCarroll • Cheyenne Petroleum • 1221 Lamar St #1301 • Houston TX 77010***

Registration Fee: $_____ + Sponsor contribution: $_____ = Total: $_____

If you wish to shoot with a specific squad (5 shooters max.), please submit all forms together.

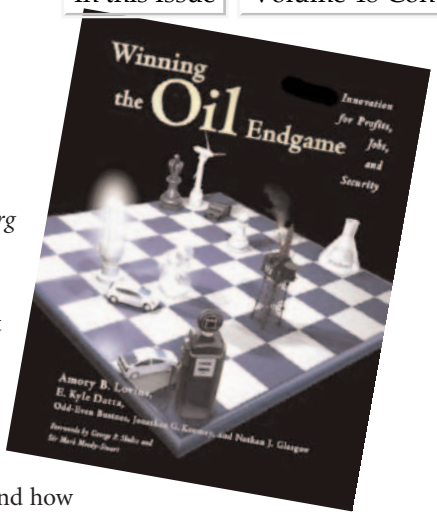
****

ALL SHOOTERS WILL BE REQUIRED TO SIGN A DISCLAIMER OF RESPONSIBILTY BEFORE THEY WILL BE ALLOWED TO SHOOT!

Book Review

Craig M. Dingler, P.G.

Winning the Oil Endgame: Innovation for Profits, Jobs, and Security, *by Amory B. Lovins, E. Kyle Datta, Odd-Even Bustnes, Jonathan G. Koomey and Nathan J. Glasgow. Published by the Rocky Mountain Institute (Snowmass, CO), 2005, 305 pages. $40.00 or download free from http://www.rmi.org*



A number of books published in the last three years tout the end of oil as a viable long-term energy source. With the increase in oil prices from the 1998–99 lows to the present range near $60 per barrel, Kenneth Deffeyes' *Beyond Oil: the View from Hubbert's Peak* and Jeremy Rifkin's *The Hydrogen Economy* are quite popular with the public.

Winning the Oil Endgame takes a different tact from these books in that it looks beyond the problems and issues of oil supply, refinery capacity and storage. Instead, the authors examine possible means of stretching the resource base to maintain economic strength and quality of life. The authors explain numerous solutions that the country can invoke to reduce oil imports and achieve some degree of independence from oil exporting countries. These changes are discussed along the lines of technology, economics and government procurement. In short, the authors discuss how increases in oil consumption, primarily for transportation, can be curtailed or reduced so that conventional oil supplies can be used for other purposes considered important and necessary such as feedstock for plastics.

Amory Lovins, lead author, will be the featured speaker at the Division of Environmental Geosciences luncheon at the AAPG Convention (Houston), Wednesday, April 12, 2006. A "Winning the Oil Endgame" forum will be held in a morning session that same day.

Compared to the publications listed above that are written for a general audience, an initial look inside *Winning the Oil Endgame* reveals a daunting amount of detail. After you get into it a ways, it becomes a good read—especially if you are fascinated by technology and your personality is that of a problem-solver. The book is organized in a logical fashion, with a discussion of oil dependence leading the reader into extensive reviews of substitutes (e.g., ethanol) and technological methods for conserving oil. Nearly half the book concerns implementation strategies. There are extensive references and notes, detailed graphs and side-boxes of case studies and tangential discussions.

Although the book is full of facts and figures, my overall impression was that I was reading a Tony Robbins self-help book for the country. This is not a tree-hugging, bunny-counting environmental tome. There are no haranguing discussions of carbon taxes, the Kyoto treaty, or other regulatory solutions proposed by some environmental groups. For an America addicted to oil supplies from politically unstable regions, as the President mentioned in his recent State of the Union address, this book lays the groundwork for ways to get rid of that dependence.

The authors have gone to great lengths to discuss the economics of oil dependency and how the country can maintain growth and quality of life through numerous incremental changes with known technology. Many of the implementation strategies are in market-driven scenarios. They generally perceive changes taking place now through the next 30 years. A few changes are occurring already such as increased sales of hybrid autos.

In another example, the authors believe that the federal government and specifically the military will change the specifications for vehicle procurement to lighter vehicles using a fuel other than straight diesel or gasoline, thereby initializing and stimulating change on the rest of American society. Think of the Jeep and the Hummer as past examples. Indeed, I found it interesting, and perhaps foretelling, that the Pentagon partially underwrote the publication of this book.

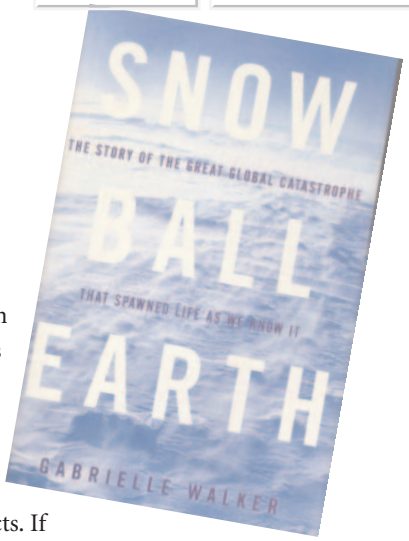
Most difficulties anyone would have with the premises of this book are refuted by the authors' exhaustive explanations. However, I still see two problems. One is basis for the technological change. What will get Americans out of their heavy SUVs and into light hybrid or fuel-cell cars? Even with $60/bbl oil, gasoline prices seem to have little effect with people's driving habits. Political resistance and public apathy are still major hindrances to a comprehensive energy policy. Another problem is the early timeline for changes that the authors foresee. Oil prices are set on global markets, and increases in the costs of fuel and energy will have an impact on the people of poorer and developing nations before provoking us Americans enough to get beyond our resistance to change. The solutions the authors envision with lighter vehicles and bio-fuels would conceivably be used in the BRIC countries (Brazil, Russia, India, and China) before they catch on in the United States. Will this put the United States at a strategic disadvantage, putting our industrial base at a shortcoming due to an inability to keep up with the foreign technological innovation? With the recent revelations of the financial problems at GM and Ford, is this occurring sooner than anyone envisioned?

Winning the Oil Endgame is certainly a thought-provoking book worthy of your attention. ■

Book Review

George O. Chandlee, *Source Environmental Sciences, Inc.*

Snowball Earth: The Story of the Great Global Catastrophe that Spawned Life As We Know It.
Gabrielle Walker. xviii + 269 pp. Crown Publishers, 2003. $24.95.



Theories in the earth sciences are constantly being revised, updated and generated as new data become available, old data are reinterpreted, and concepts and facts from other disciplines are integrated in existing paradigms. Theories change, evolve, adapt and arise anew. Within the course of a professional lifetime, theories once considered immutable may change, new observations are presented and accepted models of Earth history and development become altered and incorporated into new models.

As may have occurred to many geoscientists, the present represents an especially interesting time in Earth history. Consider the fact that complex life on the Earth is a recent occurrence. For most of Earth history, life was nonexistent or mostly simple, unicellular organisms. Then, suddenly, at a moment roughly 600 million years ago, something transformed the Earth and multicellular, complex life forms developed. From this came the beginnings of body symmetry, complex sensory organs, advanced neurosensory networks and other biological systems commonly associated with complex life forms. What event triggered this change?

In this book by Gabrielle Walker, the genesis and history of a new theory and possible explanation for the development of complex life on the Earth based on new facts are explored. The discussion involves Harvard professor Paul Hoffman and the "Snowball Earth" theory.

Inviolate scientific orthodoxy holds that no theory can ever be proved. A theory can only be disproved, and the longer it survives arguments against it, the more robust it becomes; but it is never known for certain if it is right. To Thomas Kuhn, a philosopher and historian of science, theoretical perspectives change as a succession of revolutions, when an existing paradigm remains unchanged in the scientific establishment until it is disproved and a new one takes its place.

The difficulty comes in the process of disproving as described above. Scientists often find it hard to relinquish an existing theory. When some new finding shows it to be wrong, it is hard to accept. There are many theories whose proponents have supported them for too long, rendering them more and more elaborate in a desperate attempt to accommodate the findings that disprove them.

Deciding when a theory has been disproved and can be discarded is difficult. Often the counterarguments can be incorporated into the theory itself until it becomes more robust because it has adapted and incorporated new facts. If a theory comes under attack when it's too young, it will be prematurely suspect. Wegener's theory of continental drift is one example of this. And Alvarez's asteroid hypothesis to explain the Cretaceous extinction event is another, more recent example.

This book describes the Snowball Earth theory in a manner that is easily accessible to the layman, not in highly technical detail but providing enough information so that the educated layman will be able to understand the ideas, predictions and tests of the theory. The theory is controversial and has a history going back to about 1986. Joseph Kirschvink became fascinated with the idea in the 1980s. The idea became full fledged in the early 1990s, underwent careful scrutiny and was even the impetus for highly polarized camps, the "believers" and the skeptics. During Snowball Earth time the climate was bitterly cold and permitted ice sheets and permafrost to extend into equatorial latitudes. No plants grew on land and only simple plants and animals were able to live in the oceans. These extreme glaciations occurred just prior to a rapid diversification of multicellular life, culminating in a rapid proliferation of species between about 575 and 525 million years ago.

Imagine the dramatic appearance of Earth covered by more than a kilometer of ice.

Imagine the dramatic appearance of Earth covered by more than a kilometer of ice. Nothing but the simplest life forms are present. Out of this frozen Earth rise the peaks of volcanoes that pierce the ice shroud. From the volcanoes, plumes of smoke and gas waft over the ice. These volcanoes episodically emit gases. With time and the span of millions of years these gases, some of which absorb radiant energy emitted from the icy surface, accumulate in the atmosphere. As they do so, radiant energy emitted from the icy surface is absorbed and global temperatures gradually rise. The ice cover rapidly and catastrophically thaws. The Earth becomes warm again, ready for a new emergence of life. According to the Snowball Earth theory, this sequence of events occurred several times and set the stage for the appearance of "complex" life forms.

Book Review *continued on page 57*

Book Review continued from page 55

It may be that the Snowball Earth was the catalyzing event that generated the "Cambrian explosion." However, the timing of the events is somewhat problematic and details still remain to be worked out. The end of the Snowball Earth era has been established to be at about 570 MYB (million years before present). The Cambrian explosion occurred at about 525 MYB. This gap in time, even the originators of the theory agree, is much too long a gap. The times are based on geomagnetic evidence as well as radiometric dating and, therefore, are considered reliable.

The supercontinent Rodinia rifted apart near the end of the Proterozoic, and the increased marine habitat area resulted in a proliferation of new multicellular organisms. Complex life form fossils are found in the Ediacara Formation of South Australia and in approximately 20 other sites throughout the world. Many are thought to have no known existing biological affinities because they exhibit unknown body architecture, lacking, for instance, distinct heads or tails, circulatory, nervous or digestive systems. These organisms became extinct about 540 million years ago, at the very beginning of the Cambrian explosion.

The Ediacaran faunas found in Australia, Newfoundland and northern Russia (among other localities) constitute impressive evidence of life before the Cambrian explosion. The fossils collectively forming this fauna are faint impressions in sandstone that are difficult to see unless under conditions in which the sun is low on the horizon. The creatures represented by the fossils preserved at the Ediacaran sites lived in a shallow sea and perished when periodic landslides sent sands that blanketed, suffocated and rapidly buried the organisms. The extinction of these organisms seems to have been concomitant with the appearance of more "modern" organisms.

Walker does an engaging job in describing the personalities that first developed the Snowball Earth theory. She makes the events, mechanisms and processes leading to the Cambrian explosion and the evolutionary burst that lead to the development of multicellular animals fascinating and accessible to a wide audience. This book does a good job of describing the development and refinement of the Snowball Earth theory as the possible precursor event and catalyst for the evolutionary burst of multicellular life.

Walker is able to provide an impressive amount of geological detail in the book. A rudimentary understanding of the geology involved is fundamental to grasping the Snowball Earth concept, and Walker is able to unobtrusively present this information as an integral part of the overall story. The carbon cycle, global warming, paleomagnetism, geochemistry, paleoclimatology, carbonates, methane hydrates, the Cambrian explosion and plate tectonics are some of the topics covered. These are introduced with enough explanation to guide the educated reader through the basics of each topic.

In reading this book and considering the improbability of global glaciations, it is important to bear in mind the natural time scale of geological phenomenon on the Earth. Our understandably parochial perspective of the Earth must at least be set aside temporarily, in favor of a broader view. The profound, virtually unimaginable vastness of "deep time" offers us the flexibility to consider the possibility (perhaps not certainty) that global glaciations did occur. Thus, the metaphorical door is opened for a causal explanation as to the "rapid" (again, on a geological time scale) appearance of diverse multicellular life forms on the Earth.

The book both informs and entertains. The writing is lively and achieves its objectives. As an introduction for a general audience, Snowball Earth is accessible and engaging. The more advanced geoscientific audience too will find the book fascinating and enlightening. ■

Government Update

by ***Henry M. Wise, P.G.*** *and* ***Arlin Howles, P.G.***

TCEQ News

The Texas Commission on Environmental Quality's (TCEQ's) draft January 2006 Update to the Water Quality Management Plan for the State of Texas (draft WQMP update) is now available on their website at:
http://www.tceq.state.tx.us/nav/eq/eq_wqmp.html

The Water Quality Management Plan is developed and promulgated in accordance with the requirements of federal Clean Water Act, §208. The draft WQMP update includes projected effluent limits of indicated domestic dischargers useful for water quality management planning in future permit actions. Once the commission certifies a WQMP update, the update is submitted to the United States Environmental Protection Agency (EPA) for approval. For some Texas Pollutant Discharge Elimination System (TPDES) permits, the EPA's approval of a corresponding WQMP update is a necessary precondition to TPDES permit issuance by the commission. The draft WQMP update may contain service area populations for listed wastewater treatment facilities and designated management agency information.

All Appropriate Inquiry Approved

The ASTM has released a 2005 update of its "E1527 Standard Practice for Environmental Site Assessments" which further addresses the issues of "all appropriate inquiry" as well as the limitations. The following link contains the first section of the standard with references to all appropriate inquiry (AAI) highlighted: http://www.astm.org/cgibin/SoftCart.exe/STORE/filtrexx40.cgi?U+mystore+dhck7127+-L+ALL:APPROPRIATE:INQUIRY+/usr6/htdocs/astm.org/DATABASE.CART/REDLINE_PAGES/E1527.htm

The following link is to the EPA web page detailing the final adoption of the AAI rule with links to it:
http://www.epa.gov/swerosps/bf/regneg.htm

The AAI rule was adopted on November 1, 2005, and becomes mandatory November 1, 2006, for maintaining the exemptions from CERCLA liability. Until the new rule applies a person may use either the 2000 or 2005 ASTM standard, but after November 1, 2006, either the All Appropriate Inquiries Final Rule or the 2005 ASTM standard must be followed.

A few of the more interesting changes are:

- The Phase 1 report must be signed by an environmental professional—essentially a PG, PE or someone with many years of experience.
- Data gaps must be duly noted.
- Engineering and institutional controls must be duly noted.
- The relationship of the purchase price to the value of the property must be discussed.
- Two signed declarations to be included in the written report.

AGI Government Affairs Monthly Review (January 2006)

Fiscal Year 2006 Appropriations Wrap Up

President Bush brought an end to the fiscal year (FY) 2006 appropriations process when he signed the last two appropriations bills into law on December 30, 2005. Congress inserted a 1% across-the-board cut to discretionary spending, which includes nearly all federal science funding, in the last bill they passed for Defense appropriations. Below is a brief summary of the final figures for key geoscience-related programs.

The U.S. Geological Survey gained a small increase compared to FY2005 funding for an overall budget of $966.2 million. This amount includes the 1% across-the-board cut but does not include supplemental funding that the agency got last year related to Hurricane Katrina and the Indian Ocean Tsunami. Within the USGS, the Geological Programs received $235.1 million, a 2% increase primarily for hazards programs compared to FY2005. Also receiving funding increases were the Earthquake Hazards program, an 8% increase to total $50.8, and the Global Seismographic Network, a 21% increase to $3.9 million. The Mineral Resource Assessments program received a 7% cut from last year's funding to total $49.9 million. Funding for the National Cooperative Geologic Mapping program remained the same as FY2005 at $25.2 million. Rounding out the USGS allocations: Mapping programs received $129.9 million (a 9% increase), Water Resource programs received $212.9 million (a 1% increase) and Biological Resources programs received $175.5 million (a 2% increase).

Funding for the Department of Energy (DOE) rose slightly from FY2005 to a total of $24 billion. Renewable Energy activities received $358.4 million, a 6% decrease from last year's level. The Office of Science will receive $3.6 billion, a negligible decrease from last year's allocation. Within this amount, the Basic Energy Sciences will receive $1.1 billion, an increase of 2.6% from the previous year, which includes $219 million for the Chemical Sciences, Geosciences and Energy Biosciences account and $140 million for the Climate Change Research account. Funding for the Yucca Mountain project, which is funded through a defense and a civilian account, totaled $445.5 million that translates into a 22% decrease for the project from last year's allocation. Fossil Energy (FE) activities at DOE will receive a decrease of 7.5% from last year, for a total of $592 million. The majority of this decrease was absorbed by the Natural Gas Technologies and the

Petroleum-Oil Technology account, which received $32.7 million (-27%) and $31.7 (-7%), respectively. Also within DOE, the Carbon Sequestration account received $66.3, a 46% increase from last year; the Clean Coal Power Initiative received $68.7 million, a 2% increase from last year; and the Coal Research and Development account received $215.8 million, a 5% increase from last year.

The National Science Foundation is reporting a FY2006 total of $5.58 billion, which is a 2% increase from last year's funding level. Funding for the Research and Related Activities account, which includes the discipline-based directorates, increased 2% to total $4.33 billion. The Major Research Equipment and Facilities Construction (MREFC) account is up nearly 16% from FY2005 levels. Earthscope will receive almost $50 million of the MREFC account's $190.9 million.

Senate Continues Hearings on Response to Katrina

On January 24, 2006, the Senate Homeland Security and Government Affairs Committee continued its investigation of the response to Hurricane Katrina with a hearing on the state of emergency preparedness in Louisiana before and after the 2004 Hurricane Pam emergency preparation exercise. The federally-funded storm simulation was designed to coordinate local, state and federal responses to a catastrophic hurricane. Pam was designed as a slow-moving Category 3 hurricane that hit New Orleans directly and caused extensive mock damage throughout 13 Louisiana parishes. Pam's fictional aftermath included 10 to 20 feet of flooding in New Orleans, overtopped levees, evacuation of over a million people and 60,000 deaths. The exercise also predicted overcrowded hospitals and shelters, food and water shortages, and flooded highways.

The witnesses, representing local, state and federal levels of government and the contractor responsible for the Hurricane Pam simulation, all confirmed that emergency plans were in place before the Pam exercise. The ultimate goal of the exercise was to create a "bridging document" between these various plans; however, the final plans were incomplete at the time of Hurricane Katrina. State and local officials complained of a series of delays and a lack of funding for post-exercise planning. Chairwoman Susan Collins (R-ME) and Ranking Member Joseph Lieberman (D-CT) questioned the pre-landfall evacuation plans and the role to be played by the federal government. The federal and state officials explained that the responsibility for emergency evacuation lies first with local and state governments, and that FEMA steps in only if federal aid is requested. In spite of this, Jesse St. Amant of the Plaquemines Parish Office of Homeland Security and Emergency Preparedness stressed that Pam had demonstrated that a hurricane of Katrina's magnitude was "beyond the state and local capability" and that "FEMA should have been prepared to support them."

Evolution Round-Up

Philosophy of Design Course Dropped in California

The El Tejon School District in southern California agreed to stop teaching an elective course, entitled "Philosophy of Design" at Frazier Mountain High School after 11 parents filed a lawsuit claiming that the course violates the separation of church and state clause of the constitution. The syllabus for the class said, "This class will discuss Intelligent Design as an alternative response to evolution. Topics that will be covered are the age of the earth, a worldwide flood, dinosaurs, pre-human fossils, dating methods, DNA, radioisotopes, and geological evidence. Physical and chemical evidence will be presented suggesting the earth is thousands of years old, not billions." The full syllabus and more details about this case and other political challenges to the teaching of evolution are summarized at:
http://www.agiweb.org/gap/legis108/evolution.html

The Benefits of Seismic Monitoring

In January 2006, the National Academies released a report entitled "Improved Seismic Monitoring, Improved Decision Making, Assessing the Value of Reduced Uncertainty." The U.S. Geological Survey commissioned the study and the objective was to provide advice about the economic benefits of seismic monitoring with emphasis on the benefits of implementing the Advanced National Seismic System (ANSS). The report concludes that investments in monitoring of tens of millions could potentially save hundreds of millions in future losses. The full report is available at:
http://www.nap.edu/catalog/11327.html

Bureau of Land Management Opens More Land for Drilling

On January 11, 2006, the Bureau of Land Management (BLM) announced plans to open 390,000 acres in the northeast National Petroleum Reserve-Alaska (NPRA) for oil development. The USGS estimates that drilling in this area could result in up to 2 billion barrels of oil over the next several years.

Senator Pete Domenici (R-NM), Chairman of the Senate Committee on Energy and Natural Resources, expressed his approval of the Administration's decision. "With oil hovering at $60 a barrel and some analysts expecting it to climb higher, America must develop more of its own oil," he said. "Those who clamor for energy independence certainly recognize that increased production has to be part of that equation." House Resources Committee Chairman Richard Pombo (R-CA) was more reserved in his approval, noting that production in only 2,000 acres of the Arctic National Wildlife Refuge (ANWR) would yield 10.4 billion barrels of oil. "Opening this area of the NPRA is a step in the right direction when it comes to increasing American supplies of energy," Pombo said, "but opening the tiny

Government Update *continued on page 61*

Government Update continued from page 59

portion of ANWR would take U.S. energy policy forward by leaps and bounds."

MMS Releases Hurricane Impact Details and Request Research Areas

On January 19, 2006, the Minerals Management Service released its analysis of the effects of hurricanes Katrina and Rita on offshore platforms and pipelines in the Gulf of Mexico. According to the MMS press release, "3,050 of the Gulf's 4,000 platforms and 22,000 of the 33,000 miles of Gulf pipelines were in the direct path" of these two hurricanes. Hurricane Katrina destroyed 46 platforms and damaged 20 others, and Hurricane Rita destroyed 69 platforms and damaged 32 others. There was "no loss of life or significant oils spills from wells on the outer continental shelf (OCS) attributed to either storm." In response to this damage on OCS offshore facilities, MMS has requested research proposals in six subject areas: "(1) Assess and evaluate pipeline movement or damage; (2) Assess and evaluate platform damage; (3) Provide hurricane hindcast data; (4) Evaluate and assess the performance of jack-up rigs; (4) Assess methods to eliminate hydrates in pipelines and risers during startups after hurricanes; and (6) Assess the response of waves and currents throughout the water column in the northern Gulf of Mexico slope and shelf." Details on the impact assessment of offshore facilities are available at http://www.mms.gov/ooc/press/2006/press0119.htm

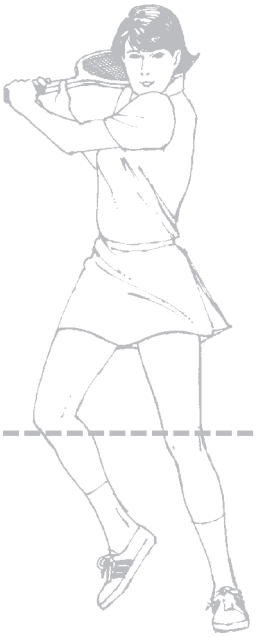
USGS Releases Latest Minerals Productions

On January 24, 2006 the U.S. Geological Survey released its "Mineral Commodity Summaries 2006," an annual report on non-fuel mineral production. According to the press release, the "value of U.S. non-fuel production rose last year to $51.6 billion." which is an increase of 13% from the previous year. The value of domestically processed mineral materials is estimated to be $478 billion. The continued growth of mine production and processing is primarily due to the high demand for these goods from the growing economies in China and India. The annual report is available online and provides detailed information about events, trends, and issues in the domestic and international minerals industries for 2005. It also provides a summary of industrial trends for about 90 individual commodities. The Mineral Commodity Summaries 2006 is available at:
http://minerals.usgs.gov/minerals/pubs/mcs/ ■

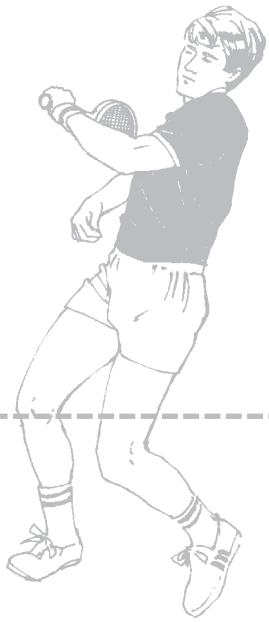
Fall, 2006 Courses: Dept of Geosciences, University of Houston

The following is a listing of selected advanced- and graduate-level courses scheduled to be offered by the Department of Geosciences, University of Houston this coming Fall semester, 2006. Enrollment begins April 10, with classes to begin August 21st. Details (including payment deadlines) can be viewed at http://www.uh.edu/enroll/rar/enrollment_schedule.html. Additional information is available at the department website: http://www.geosc.uh.edu/, as well as from the graduate advisors in Geology (Hank Chafetz, hchafetz@uh.edu), Geophysics (Hua-Wei Zhou, hzhou@uh.edu), and Atmospheric Science (Sharon Zhong, Sharon.Zhong@mail.uh.edu).

GEOS	Course	Instructor	Time
4330	Introduction to Geophysics	Hilterman	7-8:30 MW
4382	Introduction to Petroleum Geology	Van Nieuwenhuise	7-10 W
4397	Introduction to GIS	tba	7-10 T
4397	Groundwater / Engineering Geophysics	Hall	5:30-7MW
4397	Introduction to Atmospheric Chemistry	Rappengluck	5:30-7TT
6333	Geophysical Fluid Dynamics	Byun	2:30-4 TT
6339	Igneous Petrology	Snow	5:30-7MW
6348	Carbonate Petrography	Chafetz	4-5:30 MW
x6358	Terrigenous Depositional Systems	Dupre	4-5:30 TT
6397	Geochemistry: Water-Rock Systems	Capuano	11:30-1 TT
6383	Plate Tectonics	Casey	5:30-7 TT
6387	Reservoir Geophysics	Castangna	4-5:30 - MW
6390	3-D Seismic Exploration I	Marfurt	4-5:30 TT
6397	Hydrocarbon Indicators	Castangna	7-8:30 MW
6397	Basin Studies: Gravity & Magnetics	Bird	7-8:30 TT
6397	Seismic Rock Physics	Han	1-2:30 TT
6397	Principles & Practices of Petroleum Geochemistry	Bissada	7-8:30 TT
6397	Atmospheric Instruments & Measurement	Lefer	4-5:30 MW
7323	Borehole Geophysics	Strack	7-8:30 TT
7333	Seismic Wave & Ray Theory	Li	5:30-7 MW
7341	Geophysical Data Processing	Zhou	5:30-7 TT



HGS Tennis Tournament



Friday, May 19, 2006

Location: Houston Racquet Club
10709 Memorial Drive

Time: 11:45 a.m. to 5:00 p.m.

Prizes: Div. A & B Prizes

Send a check for $45.00 and entry form to: DAVIS BROS.
1221 McKinney, Suite 3100, Houston, Texas 77010
Attn: Ross Davis, Tournament Director
Call (713) 659-3131 with questions; Fax (713) 659-8070
Rossdavis@davisbros.com

Name: _____

Address: _____

Phone: _____ Work Phone: _____

Rank (A, A-, B): _____ E-Mail: _____

Remembrances

Since the last report from the Remembrances Committee, our geological community has lost the following member:

Stewart H. Folk, of Houston, died February 15, 2006, after a lengthy illness. He is survived by his wife Mary Boyd Folk; children, Harry B. Folk, William R. Folk, Maribel Mast and Susan E. Laird; and sisters and extended family. "Stu" received a BA in geology with honors from Baylor University and an MS in geology from Iowa State University, and undertook additional graduate work at the University of Iowa, the University of Illinois and Rice University. Prior to WWII, he worked with Magnolia Petroleum Co (now Mobil) and the Illinois Geological Survey in studies of surface geology in the central United States, and then served in the U.S. Navy in northern Alaska as Technical Advisor to the Naval Petroleum Reserve. He briefly served as Associate Professor of Geology at Baylor University, and then moved to Mexico with his family to work with DeGolyer and McNaughton and Texas Gulf Sulfur in the exploration of petroleum and sulfur and other minerals. He became General Manager of subsidiary companies for Texas Gulf Sulfur and led the exploration of petroleum and sulfur deposits in Italy, the Middle East and North Africa, 1954–1958. Settling in Houston with his family in 1958, he became a consulting geologist and worked with the T.U.L.M. Group (Tenneco, Union Texas, Lion and Murphy) and subsequently for Union Texas Petroleum Division of Allied Chemical, Corp. and Jefferson Lake Sulphur Division of Occidental Petroleum Corp, as well as many others. His work took him to every continent, save Antarctica. He was a member of the Association of Petroleum Geologists, American Institute of Mining and Metallurgical Engineers, American Institute of Professional Geologists (Certified Professional Geologist), Geological Society of America (Fellow), Geological Society of Mexico, Geothermal Resources Council and Houston Geological Society, which he served as Treasurer, 1969–70. He greatly enjoyed the companionship of his family and friends, including many geological colleagues at the Houston Petroleum Club. We will miss him. ■

Application to Become a Member of the Houston Geological Society

Qualifications for Active Membership

1) Have a degree in geology or an allied geoscience from an accredited college or university; or
2) Have a degree in science or engineering from an accredited college or university and have been engaged in the professional study or practice of earth science for at least five (5) years.

Qualifications for Associate Membership (including students)

1) Be involved in the application of the earth or allied sciences.
2) Be a full-time student enrolled in geology or in the related sciences.

Annual Dues Expire Each June 30. (Late renewals – $5 re-instatement fee)

Annual dues are $24.00; full-time students and emeritus members pay $12.00.

Mail this application and payment to:

Houston Geological Society
10575 Katy Freeway, Suite 290 • Houston, TX 77024
Telephone: 713-463-9476 Fax: 713-463-9160

Payment method:

☐ Check, ☐ VISA, ☐ MasterCard, ☐ American Express, ☐ Discover

Card # _____

Expiration Date: _____ Card I.D. _____

(Card I.D. – 3 or 4 digit number on front or back of card)

To the Executive Board: I hereby apply for ❑ Active or ❑ Associate membership in the Houston Geological Society and pledge to abide by its Constitution and Bylaws. ❑ Check here if a full-time student.

Name: _____
Address: _____

Home Phone: _____ *Spouse's Name:* _____
Email: _____
Job Title: _____
Company: _____
Company Address: _____

Work Phone: _____ *Fax Number:* _____
Circle Preferred Mailing Address: Home Office
Professional Affiliations:
❑ Active AAPG Others: _____

Professional Interest:
❑ Environmental Geology
❑ International E&P
❑ North American E&P (other than Gulf Coast)
❑ Gulf Coast E&P (onshore & offshore)

Membership Directory Preference
❑ CD Rom
❑ Printed

School _____
Degree _____ *Major* _____ *Year* _____

School _____
Degree _____ *Major* _____ *Year* _____

School _____
Degree _____ *Major* _____ *Year* _____

Earth Science Work Experience _____

Applicant's Signature _____ *Date* _____

Endorsement by HGS member (not required if active AAPG member)

Name: _____

Signature _____ *Date* _____

Membership Chairman _____ *HGS Secretary* _____

rev. 2/7/2006

HGA *and* GeoWives **News**

HGA

*by **Edie Bishop**, HGS/HGA Liaison*

Before the predicted April showers, Auxiliary members welcomed the spring with a delightful bus trip to the Grand Theater in Galveston for a viewing of "Thoroughly Modern Millie." One of the joys in life is sharing wonderful times with wonderful friends, which occurred at this great event—wine, lunch, laughter and camaraderie were the staples of the day. Kudos were given to Chairperson Sally Blackhall and her committee for creating this highly successful outing.

A special thanks is extended to Kat McKinney, Sandra Pezzettaand Marilyn Burger for joining the volunteers for the pre-registration of Winter NAPE. They provided much needed assistance on short notice and made such a difference in their commitment. We have much to be proud of in our Auxiliary and Society.

Speaking of pride, Houston once again has the occasion to shine as we play host to the annual national convention of the American Association of Petroleum Geologists to be held at the George R. Brown Convention Center starting April 9. Guest Activities Chair, Karen Handschy has put together an array of programs and entertainment for visiting spouses. Our own Auxiliary President Norma Jean Jones has been working hard to maintain the wonderful tradition of an outstanding Hospitality Room as a gathering place to visit with friends while enjoying refreshments or a late afternoon glass of wine. Auxiliary Membership Chairman Norma Jean Bacho is gathering volunteers from the membership to assist in this effort. If you wish to be part of this showcasing of Texas hospitality, please contact Norma Jean at 281-494-9247.

At the end of January, Ad Hoc Chairman Winona LaBrant Smith hosted 14 representatives from the Geophysical Auxiliary of Houston, Women's Auxiliary to Houston Area Petroleum Landmen, Auxiliary for the Society of Petroleum Engineers, and Houston Geological Auxiliary to discuss the integration of the auxiliaries. The site of this meeting was the Junior League Tea Room. Following lunch, Winona opened the meeting with a presentation of a possible mission statement and two proposals on the procedure of this effort. Then she asked representatives to share their thoughts and insight. The consensus was such an effort is important and the step forward would be the co-hosting of a couple of events in the upcoming year. This will make for a more informed membership in reaching a decision. During the discussion, we found that we host many common functions. With declining membership, it becomes harder to hold the high-quality event that has been the trademark of our organizations. We also discovered many worthwhile activities new to some groups that we would like to support. This common ground should be the basis of successful progress. The next step is the appointment of two representatives from each group to continue dialogue. Winona is to be congratulated on her ability to join these representatives in forward progress. ■

See you at something HGS.

HGS Earth Science Teacher of the Year Award

It is time to nominate this year's HGS Teacher of the Year. The winner will receive a $1000 cash award from the HGS and will represent the HGS at the Section level of the GCAGS. The GCAGS Teacher of the Year winner will receive another $1000 and be nominated to the national level of AAPG. The AAPG Teacher of the Year will be granted $5000 plus an all-expense-paid trip to the 2006 AAPG national convention to receive the award. If your nominee is interested in pursuing this award, have them check out the GCAGS and AAPG for details, qualifications and forms. Forms and other required materials need to be sent to Awards Chairperson at the HGS Office by May 1, 2005. For more information go to the GCAGS web site at www.gcags.org/teacheroftheYear.htm and the AAPG site at foundation.aapg.org/tchr_of_year_award/index.cfm.

As a HGA member you are invited to join

GeoWives

2005–2006 dues are $7.50

make check payable to *GeoWives* and mail to:

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Please provide the following

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Sreet Address: _____

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I will help plan a GeoWives activity ☐
I will serve on a committee ☐
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My home is available for a meeting ☐

GEOSCIENCE JOBS & PERSONNEL AVAILABLE!

Job Seekers:

During the past year, the HGS Jobs Hotline website has averaged over 30 positions per month. New ads are being posted almost every day!

Employers:

Post your job listings, and get a large response from qualified candidates, for your ads. Our website averages nearly 11,000 website "hits" per month.

Current Jobs page at:

http://www.hgs.org/en/jobs/search.asp

Contact info:

Peter Welch – Chairman, HGS Personnel Placement Committee • (713) 862-2287
peter-welch@sbcglobal.net

Professional Directory

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George D. Klein, PhD
TX Registered Geologist #440
AAPG-DPA Certified Petroleum Geologist #5662

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Sugar Land, TX, USA, 77479-2564 FAX: (281) 937-9456
E-mail: gdkgeo@earthlink.net

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GeoExperts

John Burton
Executive Director

3300 South Gessner #120
Houston, Texas 77063
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