

# GCSSEPM NEWS



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## The President's Column

**Who's Next?** They tell me "one day you're going to get old and die". What a dark way to begin a column. Terminal defeatism if you ask me. I think I can beat this assertion with the mere application of some creative statistics. For instance, I figure as long as the average life expectancy is increasing faster than I am aging, statistically I'll live forever. Furthermore, since roughly half the humans who ever lived are alive now, that means that only half of us have ever died. This, logically, means the odds of me eventually kicking off are only about 50:50. Most importantly, if Descartes' "I think therefore I am" axiom is indeed a truism, then  $\lim_{t \rightarrow \infty} t$  goes to infinity= $k$  and "am" is perpetual where thought= $constant$ .

Despite the inescapable logic of these mathematical suppositions, I have an itchy feeling that this condition called life is indeed terminal. While I have no intention of kicking off, or even retiring, for at least a few decades, this commonality to us all does pose a standing conundrum that anyone thinking ahead must eventually consider. After we move on, who's next?

We are all aware of our demographic bubble. The boom and bust of the energy business has imposed a bimodal distribution on the geology profession that hits energy intensive societies like GCSSEPM particularly hard. Expansive industry hires in the late 70's and early 80's were followed by rare acquisitions in the two decades to follow. Hiring has returned in recent years to add a new bubble that boxes in the bridging generation, myself being of this interim brand. Shortly the front end of the bubble will retire and soon after there will be few of us left to inform the new hires that Cher once had a Sonny.

The survival of GCSSEPM, and all organizations of its ilk, depends upon our ability to reach out to this incoming generation of geologists. This effort must start during their training and extend into their early professional years. Our future relevance depends upon how well we serve in this role. This of course brings us to the next logical question, what do they need?

Over the course of the last few months, SEPM has sponsored

two Seds and Suds forums (one at the AAPG and one at the GSA annual meeting). These forums gathered students and early professionals together with the goal of providing answers to this very question. What we have found is somewhat comforting. They need the same things prior generations needed when they first joined a professional organization. Namely, they want publication, education, and congregation. Professional organizations like GCSSEPM generate publications that transfer knowledge and give students both access to the wisdom of their precursors, along with the opportunity to add to this record of knowledge with their own written contributions.

Professional organizations are also the vehicles that deliver field trips, short courses, technical sessions, and other opportunities to learn skills from the ones who previously developed and honed these very skills. The meetings we sponsor are also a chance to network with other professionals and to learn and share findings.

A few things are different, however. In this digital age the publications come on line easily and with broad-band access. The link to the organization is blurred, and the need to be a part of the organization in order to feed and bleed the publication beast is not as apparent as was with prior generations. Likewise, one does not have to, or ever had to, be a contributing member of an organization to take part in a meeting. Though the meeting bears our name, it does not fully reveal the role we play. One place where the link to groups

### Highlights

The GCSSEPM News is published three times a year. Your comments and suggestions are welcome. Please contact Charlotte Jolley, GCSSEPM Secretary at [charlotte.jolley@shell.com](mailto:charlotte.jolley@shell.com), or contact your local business representative. Visit the GCSSEPM Website at [www.gcssepm.org](http://www.gcssepm.org) for Section and Foundation news and information.

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like GCSSEPM remains clear and critical is through the educational opportunities we offer. A field trip or short course leaves a memorable mark. One message that came across clearly during the Seds and Suds forums is that there is a hunger for more accessible educational opportunities. Cost is ever the issue to these early and developing additions to our community. Accordingly, our President-elect Bruce Hart is working to develop a series of low-cost or free short courses and/or field trips for student and recent graduate geologists who would like to join GCSSEPM (as a side note, sponsorship is quite welcome). It's a start, but we need to do more.

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### Election of 2011 Section Officers

The GCSSEPM Executive Council are currently in the process of identifying candidates for the following Section offices:

**President Elect   Vice President   Treasurer**

Nominations will shortly be posted on our website [www.gcssepm.org](http://www.gcssepm.org).

Please look out for an email announcement and take the time to read the biographical sketches, and **vote online** for the candidate of your choice.

Election results will be announced in the Fall newsletter, as well as posted on our website.

# The Director's Chair

This is being written in middle May. It seems that our industry cannot stand prosperity. If the oil industry seemed to be gaining some credence, the latest fiasco has ended the effort. The Green Machine now has what it wants to insure that additional drilling will not occur or will be greatly restricted; they did not waste time to get their anti-oil ads on television. Don't get me wrong; something did go wrong and at least some blame may well belong to everyone involved. The problem is that with our current legal system no one can afford to admit the truth. Remember the Ford/Firestone fiasco of a few years ago? Here we go again.

What also is appalling are some of the inane questions being asked in Washington and the coverage of quite a bit of our press. Just four points along this line.

[1] When an airplane crashes, it may take 6 months to determine the cause; it took several years to get a 9/11 report; it has taken several years to determine the cause of the financial meltdown of several years ago (then again, maybe it has not been determined) and two weeks to understand the 1000 point DJ average drop of several weeks ago. Within a week of the disaster, Washington and the press were upset that

no one involved will admit to error or admit to knowing what exactly happened. Instead, innuendo and statements like "someone claims that" are being published constantly as fact.

[2] In an interview with the office of tourism of the states of Louisiana, Alabama, and Florida, the news reporter was shocked when they said that the spill had (to-date) little affect on tourism. She was also speechless when Louisiana made the comment that 80% of the coast of Louisiana was unaffected and that there really was no shortage of seafood nor did they expect any.

[3] OK, you say all reasonable claims will be paid, but what about....and why won't you give an exact value....and what about a claim 25 years from now?

[4] A fund was set up by the oil companies to help pay for oil-spill disaster clean up; various people are upset that BP will not have to pay the entire cost themselves. These same people are trying to set up a fund for financial institutions to use to pay for future financial melt downs.

Definitely newsworthy was the comment by a Purdue professor(?) that after seeing the short video clip, obviously the flow was at least 10 times greater than has been stated. What this means is that operators can send this man a YouTube video of their well flowing and he can tell you how much it can produce; think of all the money operators will be able to save by eliminating testing. This must be the best well drilled since Spindletop.

We may end up with an ecologic disaster; the point is that at this time it has not occurred. Certain people on CNN television already have claimed that it is an ecologic disaster, we are just waiting for everything to die; yet on their electronic edition a day later, CNN noted that no major ecologic die-off has occurred or is eminent. This evening (May 14th), a news story was shown on national news about Grand Isle. It seems that fishing is still allowed there and the oil slick is miles away; unfortunately, everyone is canceling their reservations because the news programs have convinced them that disaster is at hand. (This would make the news reporter in (2) above very happy.)

I can't help but remember several other disasters that never did occur despite a tremendous amount of publicity. Three examples:

[a] The Kuwait oil fields were set aflame and burned out of control for several

weeks; numerous people predicted a black winter (they called it a nuclear winter because they thought a nuclear war would do the same thing) with loss of crops around the world and death to life in the area of the Persian Gulf.

[b] We are all going to die from avian flu.

[c] We are all going to die from mad cow disease.

I'm not even including the decade in which it was stated authoritatively that the population of the Earth is out of control and we will starve to death before the 21st century would roll along.

Over 50 years of drilling fairly safely in the Gulf of Mexico is quickly forgotten and down the tubes. The Coast Guard says that BP is doing everything possible; the news media wants to know why more isn't being done. (Well I guess you can't trust lawyers, politicians, and the Coast Guard.) There was one sane voice (unfortunately I did not get her name) on MSNBC: she stated "I always said that this was more like Apollo 13 and not the Exxon Valdez." Good Lord, can it be that one reporter grasps what happened?

Maybe this will be a big boost for natural gas. Somehow I doubt it. The Canadians have been drilling for natural gas in the Silurian reef trend in their part of the Great Lakes for decades without explosions or pollution; but in the U.S., who cares?

Let's see: The Romans deforested a good part of the Mediterranean area to heat their baths, so wood burning is out; nuclear fission creates dangerous waste so we can't do that; coal is dirty and there is no such thing as clean coal; wind energy is fine as long as you are not a bird and you don't put it in my back yard; solar energy in the desert requires billions in new transmission lines and is harmful to desert fauna; how about solar panels in space and we can beam energy down using lasers (oops did I miss the target and wipe out a city?); nuclear fusion will cost too much, is too far in the future technologically to pursue (may even destroy the earth).

Oh well, maybe the Mayans were correct, in which case we don't really have to worry about the future after all.

But in case they are wrong, does anyone have a good idea for the 2013 conference?

Dr. Norman C. Rosen  
Executive Director  
GCSSEPM Foundation

## Announcing

### 2010 Award Winners

#### GCSSEPM Distinguished Service Award

Anthony D'Agostino  
Patricia Santogrossi

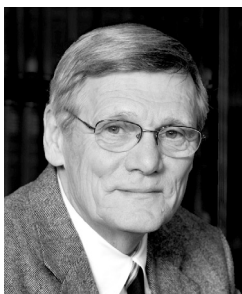
#### GCSSEPM Honorary Membership

Denise Butler  
Rashel N. Rosen

The GCSSEPM wishes to thank awardees for their outstanding contributions. Recipients will be honored at this year's GCAGS-GCSSEPM Convention.

## 2010 Doris Malkin Curtis Medal Award Recipients

The GCSSEPM is proud to announce two recipients this year for the Doris Curtis Medal. Our 2010 honourees are **Harry H. Roberts** and **Arnold H. Bouma**.



A native of West Virginia, **Dr. Roberts** received his Ph.D. from Louisiana State University. He later joined the faculty at LSU where he gained the highly honoured title of Boyd Professor and held the J.P. Morgan Professorship. He became director of the Coastal Studies Institute at LSU in 1989 and continued in this role until 2006. Harry's research has been highly diverse spanning all things marine from

photic-zone carbonates to seabed seep dynamics. He is probably best known to those working in the Gulf region for his many landmark works on delta systems both in the Gulf, and the world over. His strong service to industry and academia has been recognized through numerous awards, including: the Shepard Medal in Marine Geology, an AAPG Distinguished Lectureship, Honorary Membership in the Gulf Coast Section of the Society for Sedimentary Geology, the GCAGS Outstanding Educator Award, the AAPG I. A. Levorsen Award, and the accolade of Distinguished Research Master. Harry continues his work at LSU where he maintains a vigorous research program and continues to lend insights into Gulf Coast Geology.



**Dr. Bouma** is a native of The Netherlands where he received his Ph.D. from Utrecht University in 1961. He immigrated to the United States in 1966 where he initiated his first work in the Gulf Coast region as a professor of Oceanography at Texas A&M University until 1975. After a stint with the USGS, Gulf Oil, and Chevron in other and various parts of the U.S., he returned to the Gulf region in 1988

to assume the McCord Endowed Professorship at Louisiana State University. With his recent retirement from LSU, he has returned to Texas A&M where he continues his research as an Adjunct Professor. Dr. Bouma's research is synonymous with deep-water sedimentology, stemming initially from his pioneering work on the origin and stratigraphy of turbidites. He currently maintains an active and growing program seeking insights into shale gas. His contributions to the study of the Gulf region are exemplified by the many play concepts and numerous students he has produced over his long and distinguished service to our science.

**Coming in December...**

### **Seismic Imaging of Depositional and Geomorphic Systems**

**30th Annual GCSSEPM Foundation Bob F. Perkins Research Conference**

**DECEMBER 5-8, 2010, HOUSTON, TEXAS**

Seismic geomorphology is the integration of three dimensional seismic data and the historical study of earth forms – geomorphology. Through this discipline we can see the ancient morphology of our depositional systems, in a spatial detail and at a dense time scale that we have not considered before. Quantitative methods applied to these data enable us to risk and define our subsurface reservoir and seal systems with a reduced uncertainty. In areas where much of our understanding was previously based upon schematic models and distant analogs often derived in basins very different from our own, we now rely on quantitative morphologic data measured from our own reservoirs in our own data. Having these data allow us to reexamine the empirical relationships among system elements and create models to predict, for instance, channel lithology from channel sinuosity, levee width based upon levee height, or carbonate apron width from slope. They enable us to view the true distribution of petrographic facies within a context of 3D spatial distribution of depositional elements. We can begin to explain why some wells produce and others don't. We can begin to predict with increased accuracy. Application of quantitative seismic geomorphology to existing data volumes around the world has the potential to provide a heretofore unrealized dense, deep, and spatially extensive understanding of older geomorphologic framework of the world.

The aim of the 30th annual Bob F. Perkins Research Conference is to discuss the integration of geomorphic and depositional systems principles and three-dimensional seismic interpretation toward an improved understanding of how to interpret paleo-landscapes and seascapes.

The most current information and registration forms for the conference are always available on our web site at [www.gcssepm.org](http://www.gcssepm.org). We will try to maintain an accurate listing of papers and authors. As we did last year, the final program will be on-line and available for downloading before the conference starts. In addition, we will have on-line registration available!

# GCSSEPM FOUNDATION

## ED PICOU Fellowship Grant For Graduate Studies in Earth Science

Founded in 1981, the **GCSSEPM Foundation** is a tax-exempt, nonprofit organization whose primary objective is to promote the science of stratigraphy through research in sedimentary petrology, reservoir quality, paleontology, and any other related geological and geophysical fields, especially as it relates to petroleum geology, with emphasis in (but not limited to) the Gulf Coast region.

Among the activities which the Foundation may engage in are:

- Conduct research directly or through promotion, assistance, encouragement, or support of studies and research in the field of stratigraphy and in the science related thereto;
- Dissemination of information relating to stratigraphy and related fields through lectures, seminars, research conferences, symposia, publications, educational courses, teaching aids, and by other means and material;
- To carry on programs of continuing education in stratigraphy and related studies;
- To assist in career guidance to persons interested in stratigraphy and related studies;
- To assist public and private schools and colleges and universities and technical schools in teaching and education in the field of stratigraphy and related fields.

As part of this program, we try and support graduate students whose thesis or dissertation is related to our primary objective. **We are primarily concerned about quality of work and how it relates to our objectives, but we are not limited to a particular geographic area.** Maximum grants are normally for \$2500. Exact rules and regulations can be found on our web site at [www.gcssepm.org](http://www.gcssepm.org).

For 2010, we are pleased to have provided support for the following students.



**Shari Hilding-Kronforst** is currently a Ph.D. candidate at Texas A&M University. Born in Illinois, she received a microscope at age 8 and dinosaur models at age 9. She completed a triple B.S. degree in Earth Science, Chemistry, and Biology at the University of Wisconsin. She completed her M.S. degree at Texas A&M

### President's Column *continued from page 1*

The importance of this new generation to our science, and our societies, cannot be overstated. We must work hard to find ways of reaching out to the next batch if we are to remain relevant. Likewise, this means we must learn what is truly relevant to them and accommodate accordingly. With this I ask a simple question of our newest additions and would-be new additions, "What do you need from us?". We are ever looking for ideas on this front. If you have an insight as a new-comer to the profession, or as an old hand, regarding how we should evolve to serve the next round of professionals, I would love to hear what you have to say. If you have an idea of how you personally can help us meet this challenge, that's even better. Please, consider this an invitation to call me with your two-cents worth or to text me your BRB WTG.

John Holbrook  
University of Texas at Arlington  
(817) 272 1201  
[holbrook@uta.edu](mailto:holbrook@uta.edu)

and still found time to serve on the Graduate Student Council and complete several oceanographic cruises. She is currently working on her dissertation research involving the middle Eocene (42-44 Ma) refinement and/or recalibration of planktonic biostratigraphy and environmental analysis of IODP cores from Leg 171B western North Atlantic.



**Kristen Mitchell** is currently a M.S. candidate at the University of Nebraska. Born in Worcester, Massachusetts, she received her B.S. degree from Albion College in Michigan in 2009. She enjoys boating, water sports, and playing the guitar. Her thesis research is to examine *Prediscosphaera* as a paleoecologic and biostratigraphic indicator during the

late Albian to Cenomanian. She plans to detail the evolutionary patterns of *Prediscosphaera* by its abundance and paleoecological response from the late Albian to Cenomanian. Detailing the evolutionary patterns of *Prediscosphaera* will allow for a better understanding of past paleoceanographic events and age determination of in the north-central Atlantic (ODP Leg 171b) and Gulf of Mexico (DSDP Leg 77).

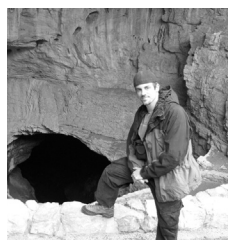


**Hiranya Sahoo** is currently a Ph.D. candidate at the University of New Orleans. After receiving his M.S. degree in geology, he attended IIT, Bombay, receiving a Master in Technology degree in Geo-exploration. He was a Schlumberger fellow during this time. His dissertation research at UNO is on the sequence stratigraphy and channel architecture of the Cretaceous

Blackhawk Formation in the Wasatch Plateau, Utah. A preliminary report was presented at a poster session at the 2010 AAPG. In addition to our support, Hiranya also has a graduate scholarship from the New Orleans Geological Society.



**Jennifer A. Barth** is currently a Master's student in the Geosciences Department of the University of Houston. She received her Bachelor's of Science, Geology, from the University of Nevada, Las Vegas. Her studies focus on the petrographic characteristics of travertine deposits located at Crystal Geysir near Green River, UT.



**Greg Gordon** received a B.S. in Geosciences from the University of Texas at Dallas, and an M.S. in Geology from California State University (Bakersfield). His M.S. thesis was entitled "Stratigraphic and sedimentologic controls on reservoir quality and distribution: Middle Wildcat Group, Grizzly Bluff gas field, Humboldt County, California."

After working for six years as a petrophysicist and development geologist for Occidental of Elk Hills, Inc., and Foothills Resources (a small independent oil and gas company) in California, Greg headed back to school to pursue a Ph.D. in Geology. As a research assistant in the Chevron Center of Research Excellence at the Colorado School of Mines, he is currently studying turbidite systems in structurally confined basins in Spain and California.

## News from the Business, Corporate & Student Representatives

*Editor's Note: As a continuing feature we will include news highlights kindly provided by our business and student representatives from each district and various corporate representatives.*

### ALABAMA AREA NEWS

Dr. David T. King Jr., Auburn University

#### UNIVERSITY OF ALABAMA

A University of Alabama geoscientist, whose research focuses on developing and sharing environmentally feasible ways of increasing oil and natural gas supplies, is this year's winner of the Burnum Distinguished Faculty Award.

The University presented **Dr. Ernest Mancini**, distinguished research professor of petroleum geology and stratigraphy, with the Burnum award in March 2010. The Burnum Award is one of the highest honors the University bestows on its faculty and is given to those who are judged by a faculty selection committee to have demonstrated superior scholarly or artistic achievements and profound dedication to the art of teaching.

Mancini is recognized nationally and internationally for his research of the Gulf of Mexico, one of the most prolific oil and gas producing sedimentary basins in North America. He has published 142 journal articles, book chapters, and proceedings volume papers, 12 field trip guidebooks, 22 technology, workshop and short-course books and 243 refereed abstracts during his 38-year career, 33 of which have been at UA.

### AUBURN UNIVERSITY

Auburn Geology MS candidate **Muhammad Shahadat Hossain** recently took Third Prize in the poster competition at the 11th Annual AAPG-SEG Student Expo held in conjunction with the 2008 Houston GSA meeting. Shahadat's presentation, titled "Overpressure in a compressional tectonic setting: the eastern Bengal basin," reflected preliminary results of the thesis project he is completing under the direction of Dr. Ashraf Uddin.

### OKLAHOMA AREA NEWS

Jonathan Funk, University of Oklahoma

#### UNIVERSITY OF OKLAHOMA

Students from the University of Oklahoma have had a very active year in terms of technical growth and research. The chapters of AAPG and SEG have had short courses on varying topics such as "Thin Bed Evaluation" and "Shale Petrophysics" from Dr. Quinn Passey of ExxonMobil, and "Oil and Gas Prospect Evaluation" by Stanley Cunningham. In addition to short courses, our chapters hosted multiple speakers that focused on topics from Asteroid Impacts on Hydrocarbon Reservoirs (Lisa Stewart, Schlumberger) to Naturally Fractured Reservoirs (Andres Mantilla, Marathon Oil), to Deepwater Channel Asymmetry (David Pyles, CSM). The AAPG Student Chapter helped support 35 students to go to the Annual Convention in New Orleans. While in New Orleans, 9 students presented their research on varying topics from deepwater channel connectivity to Woodford and Barnett Shale unconventional resources in Oklahoma and Texas to mass-transport-deposits in Mexico to applications of 3D seismic attributes. While in New Orleans, the group received recognition as Most Outstanding Chapter for the U.S. and a scholarship for \$1,000. In addition to the students that presented their research at the conference, many students have seen significant growth in their thesis projects. **Ryan Davison** is currently evaluating the impact of injectites on reservoir connectivity with various examples in the Jackfork Group. **Brett Schlichtemeier** is working with a LIDAR dataset that was acquired earlier in the

spring semester at Degray Spillway where he is developing a reservoir model incorporating everything from sequence stratigraphy to fracture density. **Fuge Zou** is finishing up some research of Baumgartner (formerly Kirby) Quarry outside of Little Rock where he has developed a reservoir model for submarine fans analogous to GOM. With students working on projects from unconventional resources like the Woodford and Barnett Shales to seismic sequence stratigraphic modeling to structural modeling of complex systems to deepwater outcrop analog studies, there are many opportunities for students to learn various aspects of the oil and gas industry and improve the science of reservoir characterization.

### SHELL

**Amy Sullivan**, Shell Senior Staff Geologist and Integrated Reservoir Modeling Team Lead, has been elected as Vice President of the Houston Geological Society (HGS) for the 2010-2011 calendar year. Amy has taken the reins from the 2009-2010 Vice President, Art Donovan (BP). Amy was the HGS Secretary for 2009-2010. HGS has several forums which reoccur monthly. If you have a potential oral presentation you would like to present to the HGS please contact her at amy.sullivan@shell.com (281-544-3876). You may access the HGS website at <http://www.hgs.org/>.

### The GCSSEPM Welcomes New Members

**Jonas Bailey**  
*Woodside Energy,*  
Houston, TX

**Gerald Baum**  
San Antonio, TX

**Richard Bennett**  
*Seaprobe, Inc.,* Picayune, MS

**Rena Bonem**  
*Baylor University,* Waco, TX

**Joseph Boudreaux**  
*Texaco, Inc.,* New Orleans, LA

**Paolo Custodi**  
Fara Novarese, Italy

**Margaret Dalthorp**  
Corpus Christi, TX

**Joseph Donoghue**  
*Florida State University,*  
Tallahassee, FL

**John Goss**  
Houston, TX

**Carolyn Green**  
*Shell International E&P,*  
Houston, TX

**Douglas Haywick**  
*University of South Alabama,*  
Mobile, AL

**Kelly Jackson**  
*University of Miami,* Miami, FL

**Barry Katz**  
*Chevron,* Houston, TX

**Ralph Kugler**  
*University of Malaya,*  
Kuala Lumpur, Malaysia

**Julie Kupecz**  
Bellaire, TX

**James Rine**  
*Omni Laboratories,*  
Houston, TX

**Brandi Sellepack**  
*ConocoPhillips,* Houston, TX

**Erik Scott**  
*Marathon Oil,* Houston, TX

**Stephen Shaw**  
Midland, TX

**David Valasek**  
Houston, TX

**Dominic Yap**  
Houston, TX

#### Lost Members

We no longer have contact information for the following individuals. If you can provide information please contact Johanna Moutoux at (713) 961-8367 or johanna.moutoux@bhpbilliton.com.

*Garth E. Syhlonyk*  
*Duncan W. McMaster*  
*Paul Owens*  
*Didier Arboulie*  
*Kazuyoshi Hasegawa*

Gulf Coast Section – Society of Economic Paleontologists and Mineralogists

# MEMBERSHIP APPLICATION AND RENEWAL

PLEASE USE THIS FORM FOR MEMBERSHIP APPLICATION, MEMBERSHIP RENEWAL AND ADDRESS CORRECTIONS AND CHANGES

Check appropriate box(es): APPLICATION RENEWAL ADDRESS OR E-MAIL CHANGE

**Membership dues for the year 2010 are now due.** If the date shown on the name line of your mailing label is not **10** or later, please remit dues with this form as soon as possible in order to remain a member of the GCSSEPM and continue to receive this Newsletter. **You can also renew online at [www.gcssepm.org](http://www.gcssepm.org).**

Today's Date: \_\_\_\_\_

Name (Last, First, Middle Initial): \_\_\_\_\_

Company or University: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City, State/Country, Zip: \_\_\_\_\_

Business Telephone: (\_\_\_\_) \_\_\_\_\_ Daytime Telephone: (\_\_\_\_) \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Are you a member or associate member of National SEPM?  Yes  No

**Please Check:**

- RECOMMENDED**  **5 Year Membership or Renewal \$40.00** (check or credit card)  
 3 Year Membership or Renewal \$25.00 (check or credit card)  
 1 Year Membership or Renewal \$10.00 (by check only)  
 Lifetime Membership \$300.00 (check or credit card)

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\* Credit Card Payment can be accepted for 3 year, 5 year or Lifetime Memberships only

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Credit Card Account Number

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Card Expiration Date

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Printed Name on Card

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Authorized Signature for Card

**Mail this form with payment to: GCSSEPM Treasurer, 2719 S. Southern Oaks, Houston, Texas 77068  
or Fax to (281) 586-0833 (Fax available for Credit Card Payment only)**



Gulf Coast Section  
Society of Economic Paleontologists  
and Mineralogists  
2719 South Southern Oaks Drive  
Houston, TX 77068-2610

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# 2<sup>nd</sup> CALL FOR PAPERS AND POSTER PRESENTATIONS

## Attributes: New views on seismic imaging

31st Annual GCSSEPM Foundation Bob F. Perkins Research Conference

DECEMBER 4-7, 2011, HOUSTON, TEXAS

The aim of the 31st Bob F. Perkins Research Conference is to establish the value and limitations of both modern seismic attributes and their interpretation workflows in improving our understanding of the earth's subsurface as illuminated by modern 3D seismic reflection data. Geoscientists apply attributes in two ways. The first application is to use attributes to illuminate subtle features that allow us to reconstruct the depositional, tectonic deformation, and diagenetic history of the imaged earth volume. From these images we use principals of seismic geomorphology, structural geology, and fluid flow to infer lithology, the presence of fractures, or diagenetic alteration to enhance or destroy porosity. The second application is more quantitative, where densely-sample attributes sensitive to reservoir thickness, porosity, and fluid product are correlated to sparse well logs and/or production data to provide predictions of the well or production property on a dense grid. Multiattribute analysis tools range from simple animation, through more sophisticated multiattribute visualization and cluster analysis, to geostatistics.

The 1996 GCSSEPM Research addressed how seismic attributes such as AVO can aid geologists in predicting lithology and fluid product. Since that time, spectral decomposition, coherence, volumetric curvature, and elastic impedance inversion, as well as the 3D visualization, neural network, and geostatistical tools to analyze them have become available to almost all seismic interpreters.

Papers are solicited to span multiple scales – from basin analysis to reservoir characterization, and diverse lithologies – carbonates, clastics, intrusive and extrusive igneous rocks in the sedimentary section as well as fractured basement. The emphasis of the papers should be on interpretation and workflows and they should deal with the following themes:

- Attributes that predict fluid lithology and predict fluid product – AVO, acoustic/elastic impedance inversion, Q estimation and other reservoir attributes
- Attributes and workflows to map natural fractures, induced fractures, and present-day stress fields – Azimuthal velocity analysis, AVAz, curvature, and other related attributes
- Attributes and workflows to enhance or extend vertical resolution – spectral decomposition, spectral inversion, high-frequency reconstruction, etc.
- Attributes that map angular and depositional discontinuities
- Integration of attributes with seismic geomorphology interpretation workflows
- New multiattribute visualization tools and workflows
- Algorithms and workflows to accelerate interpretation – multiattribute geobodies, automatic channel detection, success and failure in automatic fault detection
- Algorithms and workflows that improve attribute performance – prestack gather conditioning, structure-oriented filtering, footprint suppression, enhanced diffraction illumination
- Multiattribute analysis using supervised and unsupervised classification

Authors of accepted papers will be required to submit a manuscript for a short paper of no fewer than 4 published pages (including illustrations) for publication on the CD-ROM proceedings of the conference. We do not anticipate setting a maximum page limit. Animations or movie files can be used to illustrate the papers in addition to static images. All authors should also prepare a poster for the conference poster session in addition to their presentation.

Authors interested in presenting a paper at the conference should submit by e-mail a preliminary title and 250-word abstract to Kurt Marfurt [kmarfurt@ou.edu](mailto:kmarfurt@ou.edu) or Dengliang Gao [dengliang.gao@mail.wvu.edu](mailto:dengliang.gao@mail.wvu.edu) by October 1st 2010.

### PROGRAM DEADLINES

<b>October 1, 2010</b>	Preliminary title and abstract
<b>November 15, 2010</b>	Tentative program announced
<b>December 15, 2010</b>	First manuscript
<b>June 1, 2011</b>	Final illustrated manuscript

### PROGRAM TECHNICAL CO-CHAIRS

Kurt J. Marfurt	The University of Oklahoma
Dengliang Gao	The University of West Virginia

# Seismic Imaging of Depositional and Geomorphic Systems

## 30th Annual GCSSEPM Foundation Bob F. Perkins Research Conference

HOUSTON, TEXAS, DECEMBER 5-8, 2010  
Houston Marriott Westchase Hotel

Seismic geomorphology is the integration of three dimensional seismic data and the historical study of earth forms – geomorphology. Through this discipline we can see the ancient morphology of our depositional systems, in a spatial detail and at a dense time scale that we have not considered before. Quantitative methods applied to these data enable us to risk and define our subsurface reservoir and seal systems with a reduced uncertainty. In areas where much of our understanding was previously based upon schematic models and distant analogs often derived in basins very different from our own, we now rely on quantitative morphologic data measured from our own reservoirs in our own data. Having these data allow us to reexamine the empirical relationships among system elements and create models to predict, for instance, channel lithology from channel sinuosity, levee width based upon levee height, or carbonate apron width from slope. They enable us to view the true distribution of petrographic facies within a context of 3D spatial distribution of depositional elements. We can begin to explain why some wells produce and others don't. We can begin to predict with increased accuracy. Application of quantitative seismic geomorphology to existing data volumes around the world has the potential to provide a heretofore unrealized dense, deep, and spatially extensive understanding of older geomorphologic framework of the world.

The aim of the 30th annual Bob F. Perkins Research Conference is to discuss the integration of geomorphic and depositional systems principles and three-dimensional seismic interpretation toward an improved understanding of how to interpret paleo-landscapes and seascapes.

*The Call for Papers* has been answered with over thirty significant papers from industry and academia that will address these questions. A current listing of papers is available on our web site. All papers will be presented orally as well as poster format available for browsing throughout the meeting. All authors will be writing complete articles or expanded abstracts, which will be published in **CD or DVD** format in the same successful manner as the GCSSEPM has done since 1999. This means full color illustrations, longer articles, and, perhaps, some oversized illustrations.

As in the past, our registration fees will include conference CD/DVD, ice breaker, meals, and refreshments. **This year, the technical presentations will span 3 days!** For **GCSSEPM Members who are current in their dues**, early registration (before November 12, 2010) will be **\$450**. Early registration for non-members or those who are behind in their dues will be **\$500**. Registration after November 12, 2010, will be \$550. A limited number of student registrations will be available for **\$200**. Because of expected space demands, student registrations will go on sale **after** October 1, 2010. (**Note: Student presenters can register before this date.**) All students should e-mail (gcssepm@comcast.net) for a special form. Up-to-date **SECTION** members **70 or more years of age** may register for \$300 **BEFORE** November 12th. (**Note: "Current" in dues means 2010 expiration or later. For \$475, non-members may join for 3 years and pay member's registration during early registration only.**) Cancellation Policy: Before 11/12/10, \$75 charge; 11/12-11/25, \$125 charge if we have a replacement; no refunds will be granted for cancellations after 11/25/10. Payment may be made by our secure form on-line, by mail, or by fax: **281-586-0833**. (**FULL Session registration on-site will be \$600.**)

The most current information and registration forms for the conference are always available on our web site at [www.gcssepm.org](http://www.gcssepm.org). We will try and maintain an accurate listing of papers and authors. As we did last year, the final program will be on-line and available for downloading before the conference starts. In addition, we will have on-line registration available!

### PROGRAM ADVISORY COMMITTEE COCHAIRMEN

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**REGISTRATION FORM**  
**GCSSEPM FOUNDATION 30<sup>th</sup> ANNUAL BOB F. PERKINS RESEARCH CONFERENCE**  
 December 5–8, 2010 • Houston, Texas

❖ ❖ ❖ PLEASE USE THIS FORM TO REGISTER FOR THE CONFERENCE BY MAIL OR BY FAX ❖ ❖ ❖

Name (Last, First, Middle Initial) \_\_\_\_\_ Nickname for Badge \_\_\_\_\_  
 Company \_\_\_\_\_ Spouse Name (if registering) \_\_\_\_\_  
 Mailing Address (Street or P.O. Box) \_\_\_\_\_ Day Phone (Include area/country code) \_\_\_\_\_

City \_\_\_\_\_ State/Country \_\_\_\_\_ ZIP/Postal Code \_\_\_\_\_

e-mail Address: \_\_\_\_\_

GCSSEPM Section Member \$450 Until 11/12/10     Nonmember \$500 Until 11/12/10     Spouse Registration \$75  
 Late Registration \$550 (After 11/12/10)     Over 70 \$300 (Before 11/12/10)     Join Section/register \$475     \$600 ON-SITE (Full)  
 Check enclosed     Visa     Discover     MasterCard     American Express    \_\_\_\_\_  
Credit Card Account Number

Card Expiration Date \_\_\_\_\_ Printed name of Card Holder \_\_\_\_\_ Authorized Signature for Card \_\_\_\_\_

**Mail this form with payment to the GCSSEPM Foundation, 2719 S. Southern Oaks, Houston, Texas 77068 or Fax to (281) 586-0833 (Credit Cards only). Checks or money orders must be drawn on U.S. banks in U.S. funds only. We do have on-line registration available at <http://www.gcssepm.org> (Credit Cards only).** Students wishing to apply for one of the limited number of \$200.00 student places should request a special student registration application from the GCSSEPM Foundation by mail, fax or telephone at the number given above, or email **after October 1st (except for student presenters)**.

----- CUT ON THIS LINE TO SEPARATE FORMS -----

**Houston Marriott Westchase Hotel Reservation Form**

**GCSSEPM Foundation 30<sup>th</sup> Annual Bob F. Perkins Research Conference • December 5–8, 2010**  
**MAIL OR FAX HOTEL RESERVATION FORM DIRECTLY TO THE HOUSTON MARRIOTT WESTCHASE**

Houston Marriott Westchase Hotel - ATTENTION: RESERVATIONS  
 2900 Briarpark Drive, Houston, Texas 77042  
 (800) 452-5110 (If you call, mention GCSSEPM Foundation Conference)    **Reservations Fax: (713) 735-2727**

Arrival Date: \_\_\_\_\_ Approximate Time: \_\_\_\_\_ Departure Date: \_\_\_\_\_ Number of Rooms: \_\_\_\_\_  
 Guest Name: \_\_\_\_\_ Names of Additional Occupants: \_\_\_\_\_

Street Address: \_\_\_\_\_ Day Phone (Include area/country code): \_\_\_\_\_

City: \_\_\_\_\_ State/Country: \_\_\_\_\_ ZIP/Postal Code: \_\_\_\_\_

**Special conference rate: \$121 single, \$121 double, \$131 triple, \$141 quad (BEFORE November 21, 2010)**

I have enclosed a check or money order in the amount of one night's room rate plus occupancy tax (currently 17%).  
 Please charge one night's room rate plus 17% occupancy tax to the following credit card:  
 Visa     MasterCard     American Express     Carte Blanche/Diner's Club     Discover  
 Credit Card No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

I understand that (1) I am liable for one night's room rate plus occupancy tax (currently 17%, **subject to change**), which will be covered by my deposit, in the event that I do not arrive as scheduled or cancel reservations less than 48-hours prior to my scheduled arrival; (2) upon check-in I must verify departure date.

Name on Card (Print or type): \_\_\_\_\_ Authorized Signature: \_\_\_\_\_

This hotel reservation request form must be accompanied by a deposit of one night's room rate plus 17% occupancy tax either by check, money order or with a major credit card. This deposit will be applied to the first night of the reservation. Deposits made via a credit card will be considered guaranteed and billed accordingly in case of a no-show. **Occupancy Tax is subject to change without notification.** Check in time is 3:00 PM. Check out time is 12:00 Noon.