



# CES Newsletter

Summer 2005

## Center for Energy Studies

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## Energy Prominent in Legislative Session



During the recently completed 2005 Regular Session of the Louisiana Legislature, twenty energy-related bills were filed. This was well above the recent historical average and came as a surprise to many industry observers. While most did not make it through the process, we highlight four that did make it through, although only two have been signed by the governor as of this writing.

Despite oil prices in the \$50 range and natural gas prices hovering around \$7, bills aimed at consumers failed to make it through the legislative process, but ironically, two drilling incentive bills were passed. Passing incentives during times of very robust commodity prices is without historic precedent, both for Louisiana as well as other states. A total of seven drilling incentive bills were filed, which was also a recent historic high. Driving their submission is the fact that drilling activity in Louisiana during the commodity boom of the past few years has lagged its neighboring producing states.

Representative Daniel's HB 835 extended the severance tax credit from 2006 to 2010 for new production from wells that have been inactive for at least two years. Moreover, the credit was extended from two years to five years, which tracks the original 1994 legislation. At that time, Louisiana was one of only two states that granted tax relief for reactivating inactive wells. Since then, most states have enacted similar legislation, and Louisiana, with a current two-year severance tax exemption, had become less competitive.

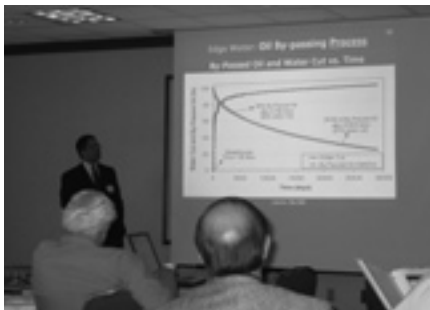
Senator Dupre et al. passed SB182 (Act 298), which provides for dry hole royalty credits on state-owned mineral leases. Limited to ultra-deep wells of 20,000 feet or greater, the royalty credit can be applied to any other ultra-deep well producing on a state mineral lease. The program sunsets on June 30, 2009, for drilling, and the royalty credit is limited to five billion cubic feet of natural gas production or 50 percent of the cost of the dry hole well, whichever is less. The program is also limited to a total of twenty wells. As there have been no ultra-deep wells drilled in state leases since 2000, the intent is to stimulate exploration in this frontier area.

Two bills dealing with alternative energy were passed. House Bill 428 by Representative Pierre et al. stipulates rules for leasing state-owned water bottoms for the production of wind energy through the Louisiana Mineral Board. Although Louisiana is not known for wind energy resources, its nearshore environment does have wind energy potential. While economic and liability questions remain, the legislation provided a first step toward development of offshore wind energy.

In an effort to assist development of the manufacture and use of biodiesel as an alternative fuel, Senator Ellington et al. passed SB 337 (Act 345), which excludes from sales tax the purchase or lease of all equipment acquired for the purposes of manufacturing, consuming, or extracting unblended biodiesel.



[www.cgrpttc.lsu.edu](http://www.cgrpttc.lsu.edu)



*Juan Carlos Hernandez, a graduate student working with Professor Andrew Wojtanowicz in the LSU Craft & Hawkins Department of Petroleum Engineering, speaks at the May 24 PTTC workshop.*

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*The goal of the Petroleum Technology Transfer Council (PTTC) is to connect independent oil and natural gas producers with technological solutions in exploration, drilling and completion, operations and production, reservoir and development, and environmental issues—when they need it.*

## **PTTC Connects with Independent Oil & Gas Producers**

The goal of the Petroleum Technology Transfer Council (PTTC) is to connect independent oil and natural gas producers with technological solutions in exploration, drilling and completion, operations and production, reservoir and development, and environmental issues—when they need it. In keeping with these goals, to ensure timeliness and relevance, and at the request of the operators, the technical workshop has become the preferred methodology for transforming upstream technologies.

During the 2005 fiscal year, the PTTC Central Gulf Region (CGR) presented 10 workshops, doubling the number of previous years. The topics included 1) the use of material balance to understand oil and gas reservoirs; 2) well abandonment methods and regulations; 3) reservoir engineering; 4) stimulation of watered-out inactive wells with dual completions; 5) low-cost oil and gas recovery methods; and 6) controlling sand production.

### **The PTTC CGR sponsored three workshops in Louisiana during the spring of 2005:**

*March 17:* Information about coalbed methane, a topic of high interest in north Louisiana, was presented in a workshop at Northwestern State University in Natchitoches and followed by a field trip to the Oxbow Mine near Coushatta.

*May 12:* At the Petroleum Club in Lafayette, Robert Knoll of Calgary, Alberta, spoke on cost effective horizontal well technology.

*May 24:* Andrew Wojtanowicz of the LSU Craft & Hawkins Department of Petroleum Engineering presented “Stimulation of Watered-out Inactive/Marginal Wells with Dual Completions.” The research presented by Wojtanowicz is intended to address technology “in the making,” and Downhole Water Sink technology for restoration of marginal/inactive wells can be extremely useful in improving the economics of watered out wells.

The next PTTC workshop, sponsored jointly with PTTC Texas, will be held September 22 in Houston. Horizontal drilling technology will be the topic.

Workbooks from these workshops are available for \$25 each and can be ordered by contacting Versa Stickle at [vstickle@lsu.edu](mailto:vstickle@lsu.edu).

### **Challenges for the Future of PTTC**

These workshops are examples of how PTTC has brought current research to independent producers since 1994. For such activities to continue, the Department of Energy’s (DOE’s) budget, including PTTC’s, must be restored through Congress and the appropriations process. In May, the House passed the Energy and Water Development Appropriations Bill, which the Independent Petroleum Association of America (IPAA) points out contained \$62 million for DOE’s oil and gas technology programs. The bill authorizes DOE to spend \$29 million on oil technologies and \$33 million on natural gas technologies in FY 2006. Programs funded through these functions include both the PTTC and the Stripper Well Consortium, two programs of great importance to the independent producer community.

The PTTC Central Gulf Region is directed by Bob Baumann and coordinated by Don Goddard at the LSU Center for Energy Studies.

## PTTC Producer Advisory Group

The PTTC Producer Advisory Group (PAG) provides direction and oversight to the Center for Energy Studies PTTC, which is a designated Regional Lead Organization. The PAG offers recommendations consistent with strategic guidance from the PTTC Board of Directors and headquarters staff. The next PAG meeting is July 26, 2005, in Lafayette in conjunction with the Gulf Coast Prospect Expo.

*Current members are:*

*Joseph Jacobs, Chair, Gas Masters of America, Inc.*

*Bob Meredith, Vice-Chair, Vada Energy, L.L.C.*

*Don Briggs, Louisiana Independent Oil & Gas Association (LIOGA)*

*Jerry Griffith, Advanced Oilfield Technologies, Inc.*

*Larry Hock, Petro-Chem Operating Co., Inc.*

*Ray Lasseigne, TMR Exploration, Inc.*

*Ray Mikolajczyk, Ray Oil Tool Co., Inc.*

*Henry W. Pfeffer, Jr., Summit Energy Company*

*Jim Porter, Louisiana Mid-Continent Oil & Gas Association (LMOGA)*

*Richard Price, Jr., Bay Coquille, Inc.*

*Chuck Rutland, Badger Oil Corporation*

*Don Solanas, Arrowhead Exploration, Co.*

*Herbert Thompson, Consultant*

## New Parish Desktop Well Reference Available

The new Cameron Parish Desktop Well Reference CD will be available this summer. The CD is part of the Louisiana Parish Well Reference (LPWR) series, one of the latest projects undertaken by the Central Gulf Region of the PTTC. Modeled after the Louisiana Desktop Well Reference, it is a Geographic Information System (GIS) for the Louisiana oil and gas industry emphasizing the historical field and lease unit well (LUW) production at the parish level.

The historical production data, including that prior to 1977, was compiled from two sources from the Louisiana Department of Natural Resources Office of Conservation. Monthly LUW production was taken from the Production Audit Cards, and annual field production was taken from the Annual Oil and Gas Reports.

The St. Bernard Parish reference is available. Rapides and Vernon Parish references are planned for the future.

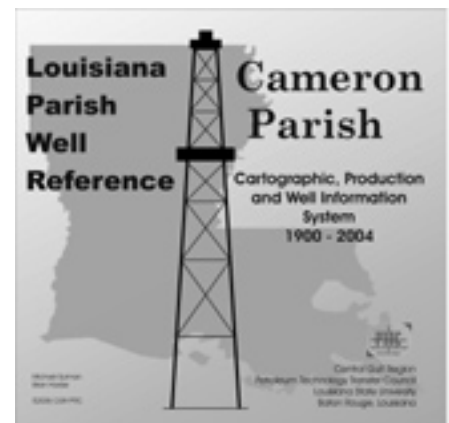
Contact Mike Surman at [msurman@lsu.edu](mailto:msurman@lsu.edu) or 225-578-4553, or visit [www.cgrpttc.lsu.edu/lpwr](http://www.cgrpttc.lsu.edu/lpwr) to order a copy.

## Gift Supports CES Research

In March, the Center received a generous donation from ConocoPhillips. The company contributed \$10,000 for information transfer and for required matching funds for federally supported research contracts. The Center intends to use \$2,000 to directly support its annual energy conference and will apply the remaining \$8,000 toward a graduate assistantship, which is funded in part by the U.S. Minerals Management Service and the U.S. Department of Energy. The Center thanks ConocoPhillips for their continued support of our research efforts.

## Scholarship Recipients Earn High Marks

Recipients of the Robert Brooksher/Louisiana Mid-Continent Oil & Gas Association Book Scholarship continue to enjoy academic success. **Catherine Taylor Persac** of Baton Rouge, a St. Joseph's Academy alumna (Baton Rouge), has completed two semesters at LSU and is on track for earning a University Medal. Taylor will soon enter the College of Engineering, majoring in civil engineering.



**Justin David Fowlkes**, a graduate of West Monroe Senior High, has completed his junior year at LSU. Justin intends to graduate next May from the College of Basic Sciences with a major in biological sciences and a minor in psychology. He, too, is a very strong student, on track for a University Medal.

The Brooksher/LMOGA scholarship provides \$400 per semester to each student for the purchase of books.

## Structure Removal Processes Subject of New MMS Report



As part of the Coastal Marine Institute's Outer Continental Shelf Study, Mark J. Kaiser, Dmitry Mesyanzhinov, and Allan G. Pulsipher have prepared a report, titled **"Modeling Structure Removal Processes in the Gulf of Mexico,"** which describes the operational aspects of removal processes in the Gulf of Mexico and develops a production-based model to forecast the removal of offshore structures. Published by the Minerals Management Service, the report provides a statistical description of the explosive removal process; develops a simple predictive model of the decision to use explosive methods in structure removal; derives four models of structure abandonment timing decisions; investigates and quantifies threshold limits of production near abandonment; and presents a production-based model to forecast removal rates and costs of offshore structures. Visit [www.enrg.lsu.edu/publications/online/2005-029.pdf](http://www.enrg.lsu.edu/publications/online/2005-029.pdf) to view the paper online.

## MPRI Researchers Study Carbon Dioxide Use

The journal *Clean Technologies and Environmental Policy* recently published **"Development and Integration of New Processes Consuming Carbon Dioxide in Multi-Plant Chemical Production Complexes,"** coauthored by Ralph W. Pike, director of the Minerals Processing Research Institute (MPRI), Aimin Xu, Sudheer Indala, and Carl Knopf, all of LSU, Thomas A. Hertwig of IMC Posphates, Inc., and Carl L. Yaws and Jack R. Hopper of Lamar University. The paper examines the use of excess carbon dioxide from chemical plants and refineries in the Lower Mississippi River corridor to reduce global warming from greenhouse gases. The paper identifies 14 new energy-efficient and environmentally acceptable catalytic processes that can use excess high-purity carbon dioxide as a raw material.

The MPRI processes economic and environmental research on oil and natural gas, sulfur, salt, and lignite, and it performs minerals processing research for chemical plants and petroleum refineries. Visit [www.mpri.lsu.edu](http://www.mpri.lsu.edu) for more information on MPRI.

## Conferences & Meetings

### Conference Center Has Busy Year, Now Wireless

Usage of the conference center has increased by more than 100 percent in our second full year of operation. Some 268 meetings were scheduled from July 2004 through June 2005. In-house use accounted for 75 percent of the meetings held in the center, LSU unit events represented 16 percent, and non-LSU organizations scheduled 9 percent of the events held.

The conference center, as well as CES's office space, now has wireless Internet access thanks to PTTC and self-generated revenue. Visitors can now use wireless devices such as personal data assistants (PDAs) and laptop computers.

### Fall Energy Summit Set for October 19-20

The Center for Energy Studies will host its annual fall energy summit October 19-20, 2005, at the rotunda conference facilities in the Energy, Coast & Environment Building. The focus of this year's conference will be Louisiana's role in global energy markets.

"As domestic markets become more impacted by global events, we thought that developing a conference that helps draw the links between what is happening around the world to our own backyard would be of importance and of interest," said David Dismukes, associate director and associate professor of policy analysis.

Online registration will be available in August. For information on sponsorship opportunities for the conference, contact David Dismukes at [dismukes@lsu.edu](mailto:dismukes@lsu.edu) or 225-578-4343.



NASA Astronaut Michael Foale, veteran of six space flights and current U.S. record holder for time spent in space, spoke in the Rotunda Auditorium Friday, May 27. His presentation was one of 268 events held in the facility during the past year.

## CES Hosts Annual Alternative Energy Conference

The Center for Energy Studies hosted its first alternative energy conference March 2-3, 2005. The conference, titled "*Alternative Energy: The Future of Louisiana's Energy Industry?*," addressed a wide range of alternative energy technologies and their potential impact on the traditional energy industries of Louisiana and the Gulf Coast. Special emphasis was placed on identifying opportunities and outlooks for various alternative energy technologies, including wind energy, enhanced oil recovery of stranded hydrocarbon reserves in Louisiana using carbon dioxide, and biofuel options for Louisiana.

"We heard a variety of views and opinions on the topic of alternative energy," said Kristi Darby, CES research associate. "Several people commented on how comfortable they felt at the conference expressing their views in a balanced forum."

Visit [www.enrg.lsu.edu/conferences/altenergy/present.html](http://www.enrg.lsu.edu/conferences/altenergy/present.html) to view 2004 Alternative Energy Conference presentations.

## Energy Administration Official Speaks at CES

Guy F. Caruso, administrator for the U.S. Department of Energy (DOE) Energy Information Administration, presented DOE's official *Annual Energy Outlook, 2005*, Wednesday, April 13, at the rotunda conference facilities during CES's semiannual meeting of its Advisory Council. Caruso discussed the DOE's official outlook for supply and prices for crude oil, natural gas, and refined energy products. The DOE predicts that foreign oil dependence will increase 12 percent to 68 percent by 2025, while natural gas imports will rise to 25 percent from their current level, 15 percent. It is estimated that, by 2025, the U.S. will rely on foreign sources for 38 percent of its energy needs, up from today's level of 28 percent.



Guy F. Caruso

Caruso was also guest speaker for the inaugural meeting of the Louisiana Chapter of the U.S. Association of Energy Economics, which met earlier that day at the rotunda conference facilities.

## LGS Hosts National Meeting of Geologic Mapping Specialists

The Louisiana Geological Survey hosted the 2005 Digital Mapping Techniques workshop (DMT '05) at LSU on April 24-27. DMT '05 is the ninth such national meeting and is an invitation-only event sponsored by the U.S. Geological Survey and the American Association of State Geologists. It is designed to bring together government mapping scientists, cartographers, and geologists who use digital techniques to create and manage geologic maps and geographic information systems (GIS). Most state and federal geologic mapping agencies were represented, along with key GIS and digital graphics industry representatives. The workshop was attended by 104 participants representing 30 states and three countries. Sponsors were the Baton Rouge Geological Society, Louisiana Oil Spill coordinators office (Roland Guidry, Director), the Louisiana Section of the American Institute of Professional Geologists, and Navigation Electronics.



## Staff News

### Baumann and Dismukes Address Legislative Committees

Robert Baumann, CES director of research and development, and David Dismukes, CES associate director and associate professor of policy analysis, addressed members of legislative committees during the 2005 session of the Louisiana Legislature. Baumann addressed the House Ways and Means Committee Wednesday, May 18, regarding the renewal of the Louisiana Severance Tax Relief Program (STRP) for inactive wells, which was originally created by Act 2 of the 1994 Regular Session of the Louisiana Legislature. The STRP was amended in 1998 and again in 2002, when the period of severance exemption was reduced from five years to two, which made Louisiana's incentive program less competitive than those in other states. During the 2005 session, with a background study

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by Baumann and the CES, the Louisiana Legislature returned the program to its original five-year exemption period. The background study, *"Louisiana Tax-Relief Helps Restore Inactive Well Production,"* was published in the *Oil & Gas Journal*, Volume 103, Issue 21 (June 6, 2005).

Prior to the session, Baumann worked with the Louisiana Departments of Wildlife & Fisheries and Natural Resources and the Louisiana Independent Oil & Gas Association to assess the competitiveness of various oil and gas fees as established by Act 8 of 2000. The study led to some proposal changes during the current session via House Bill 515, which passed and was signed into law by Governor Blanco on June 21, 2005 (Act 89).

On May 20, 2005, Dismukes participated in the joint House/Senate Natural Resources Committee hearing on liquefied natural gas (LNG). Dismukes's participation in the hearing is one of many activities undertaken by the Center supporting its ongoing LNG research initiative. This research has been funded by the Louisiana Department of Economic Development, Greater New Orleans, Inc., and the Minerals Management Service. At the hearings, Dismukes presented testimony outlining the nature of LNG, why the proposed development of these facilities has recently exploded, and the importance of LNG to the Louisiana economy and the current natural gas supply disposition in the U.S.

At various times during the legislative session, CES also provided background information and data on several other proposed laws and concurrent resolutions, much of which led to amendments. These ranged from sales tax estimates generated from industrial natural gas usage to liability questions on state leases for wind energy to state royalty credits on ultra-deep drilling.

## **Iledare Promoted**

Omowumi (Wumi) Iledare has been promoted to Professor-Research in the Policy Analysis Division of the CES. Iledare is also an adjunct professor of international petroleum economics in LSU's Craft & Hawkins Department of Petroleum Engineering and an associate member of the graduate faculty of the Department of Environmental Studies in the School of the Coast & Environment.

## **Goddard and Team Present Annual Project Update to DOE**

In May, the research team working on the five-year project titled *"Basin Analysis and Petroleum System Characterization and Modeling, Interior Salt Basins, Central and Eastern Gulf of Mexico,"* presented its year-two progress report to the Department of Energy. The team includes Don Goddard, CES associate professor of research, Ernest Mancini of the Department of Geological Sciences at the University of Alabama and Ronald K. Zimmerman of the Louisiana Geological Survey.

## **Goddard to Present at Gulf Coast Association of Geological Societies**

Don Goddard will present two papers for which he is coauthor at the annual meeting of the Gulf Coast Association of Geological Societies in New Orleans in October: *"Petroleum Source Rocks of the Onshore Interior Salt Basins, North Central and Northeastern Gulf of Mexico,"* by Ernest A. Mancini, Peng Li, Donald A. Goddard, Ronald K. Zimmerman, and *"Remaining Hydrocarbon Potential in Oligocene Reservoirs of Mature Fields, West Baton Rouge Parish, Louisiana,"* by Donald A. Goddard, Ronald K. Zimmerman, Charles M. Meeks.

## **Dismukes and Kaiser Win National Awards**

Two researchers from CES earned national honors last spring. David Dismukes, CES associate director and associate professor of policy analysis, won the award for the best article published during 2004 from the National Regulatory Research Institute. His article, *"Using Competitive Bidding as a Means of Securing the Best of Competitive and Regulated Worlds,"* published in the *Journal of Applied Regulation*, analyzes the benefits of using competitive bidding as a means of securing least cost generation resource additions. Tom

Ballinger of the Florida Public Service Commission and Elizabeth Downer of the Acadian Consulting Group were coauthors.

Mark Kaiser, associate professor of policy analysis, was awarded an Excellence in Partnering award by the National Oceanographic Partnership Program (NOPP) for his contribution to a study titled *“Coordinated Regional Benefit Studies of Coastal Ocean Observing Systems.”* The award was presented at a meeting of the National Ocean Research Leadership Council, which is composed of the heads of the fifteen federal agencies concerned with ocean science and policy. The meeting was held at the White House Conference Center in Washington, D.C. The project was coordinated by the Woods Hole Oceanographic institute and involved several universities as well as LSU. Kaiser’s component of the project dealt with the Gulf of Mexico, specifically, the value of better weather information to the offshore oil and gas industry.

## Iledare to Conduct Seminar, Chair USAEE/IAEE Sessions

In August, Wumi Iledare will present a one-week seminar on petroleum economics and risk analysis at the Institute of Petroleum Studies, University of Port Harcourt, Nigeria. He will also present his paper, *“The Impact of a Cost Recovery Ceiling on Deepwater E&P Economics: A Case Study of Production Sharing Contracts in Nigeria”* at the Society of Petroleum Engineers Nigeria Annual International Conference and Exhibition (NAICE 2005). In September, Wumi will serve as concurrent session chair at the 25th Annual North American Conference of the USAEE/IAEE in Denver. Session themes include global energy security, regulation of greenhouse gases, restructuring U.S. and European electricity markets, and economic impacts of price volatility. For more information on the conference, visit [www.iaee.org/en/conferences](http://www.iaee.org/en/conferences).



## Darby Presents Paper at IAEE Conference

Kristi Darby, research associate and geologist at the Center, gave a presentation at the 28th Annual Conference of the International Association of Energy Economics in Taipei, Taiwan, in June. The theme of the conference was *“Globalization of Energy: Markets; Technology; and Sustainability.”* Kristi discussed the results of recent research conducted by the Center on the decrease of drilling activities in Louisiana and the role that incentive programs play in encouraging E&P activities.

CES Research Associate Kristi Darby at the IAEE conference in Taipei.

## New to CES

Marybeth Pinsonneault joined the CES staff in March as communications manager. She coordinates production of the Center’s publications, including annual reports, newsletters, and press releases, and she assists CES staff with conference planning, media relations, and Web content management. Before joining the CES staff, Marybeth worked as an editor for the *Journal of Macroeconomics* and as a writer and editor at LSU’s Office of University Relations. She earned a B.A. in English from Southeastern Louisiana University in 1987 and has been with LSU since 1989.

Seth Cureington began working at the Center as a research associate in June. Seth has experience conducting econometric analysis, market concentration studies, and economic impact analysis in both academic and professional settings. Prior to joining CES, Seth was responsible for revamping a forecasting model used by the University of New Orleans to predict economic and labor market activity for the New Orleans area economy. He received a B.S. in forestry and an M.S. in economics from LSU.

*The Center for Energy Studies conducts, encourages, and facilitates research and analysis to address energy-related problems or issues affecting Louisiana's economy, environment, and citizenry. Whether conducted by its staff or by others it supports, the Center's goal is to provide a balanced, objective, and timely treatment of issues with potentially important consequences for Louisiana.*

## Congratulations & Thank You

Two of the Center's student employees graduated last spring. Cara Mabe worked for CES for the four years she attended LSU. In May, she graduated from the Ourso College of Business with a bachelor of science in international trade and finance. In the fall, Cara will enter the School of Law at Loyola University in her home town, New Orleans.

Graduate assistant Chad Gary, a Lake Charles native, worked for the Center for approximately two years while he earned a master of business administration with a specialization in internal audit and finance from the Ourso College. Chad helped out with a variety of the Center's research projects as well as our various annual conferences. He recently accepted a position with the accounting firm Deloitte & Touche. As an enterprise risk services consultant, Chad will perform external audits in the Houston area, where a majority of his clients will be energy companies.

The CES staff are grateful to Cara and Chad for their many hours of hard work and dedication. We wish them well in their future endeavors.

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