

# Penn State News

## Initiative to Provide Training in Shale-Development Best Practices



Natural gas drilling is booming all over the Commonwealth, and drilling sites, like this one in rural Bradford County, have come under scrutiny regarding safety. Penn State is partnering with other universities across the country to develop a training program for people working in the fast-growing natural gas and oil development industry. (photo credit C.J. Marshall)

UNIVERSITY PARK, Pa. -- A new multi-university initiative announced March 8 will provide best-practices training for people working in the rapidly growing shale natural gas and oil development sector. The effort involves Penn State, the University of Texas at Austin and the Colorado School of Mines; training programs will be led by faculty at each academic institution and are designed to ensure that regulators and policymakers have access to the latest technological and operational expertise to assist in their oversight of shale development. ExxonMobil and GE, two major U.S. energy corporations, each will contribute \$1 million to the new educational effort.

"The program affords the University a unique opportunity to further develop shale gas best-management practices and to offer new regulators the chance to learn the latest science-based concepts related to geology, petroleum technology and environmental quality," said Thomas Murphy, co-director of the Penn State Marcellus Center for Outreach and Research. "Penn State looks forward to providing development training that will help ensure a strong, yet consistent, regulator process across the Appalachian Basin."

The training program will draw upon Penn State's significant expertise in shale-gas geology, reservoir engineering and related sciences, and also upon University researchers' leadership in advancing the understanding of the environmental, economic and social issues related to shale-gas development.

In addition, a training program for regulators in the oil and gas industry has been added in the University of Texas at Austin's Center for Petroleum and Geosystems Engineering, and a program of courses designed to provide training in the responsible development of unconventional energy resources has been added in the Colorado School of Mines' Unconventional Natural Gas and Oil Institute.

While hydraulic fracturing, horizontal drilling and other technologies used to produce shale gas are not new, they are being used today on a larger scale than ever before. Because it is critical that regulators and policymakers have access to

a sound scientific understanding of shale-energy development, and that they are fully aware of the technologies required to produce these resources safely and efficiently while protecting the environment, GE and ExxonMobil have offered their support for the training initiative.

"Natural gas is dramatically changing the way we power America and GE is committed to its responsible development," said GE CEO Jeff Immelt. "We believe advanced technology, an expert workforce, and smart regulation are the keys to America leading the world in shale-gas development. As a technology leader in the energy sector, GE recognizes the importance of minimizing a site's environmental footprint while simultaneously increasing operational efficiency."

The benefits of the overall training initiative are expected to be felt not only in the oil and gas industry, but by state and federal regulators, and policymakers.

"America's shale-energy resources are creating jobs and economic growth in regions across the country, and Americans rightly want to know that these resources are being produced safely and responsibly," ExxonMobil CEO Rex Tillerson said. "ExxonMobil is pleased to provide the resources to assist the schools in equipping regulators with the latest technical and operational knowledge being applied in this growing sector."

GE produces nearly 40 technologies for the shale-gas sector in areas such as mobile and fixed water filtration, flare-gas capture and reuse, cleaner on-site power generation, and demand-side solutions that create liquefied or compressed natural gas for use in truck fleets and other areas.

ExxonMobil is the world's largest non-government-owned energy company and applies advanced technology to the development and production of oil, natural gas and petrochemicals. The company is the largest natural gas producer in the United States, with a significant position in the production of shale resources in Pennsylvania, Texas, Louisiana, Arkansas, Colorado, New Mexico, Utah, Oklahoma and North Dakota.

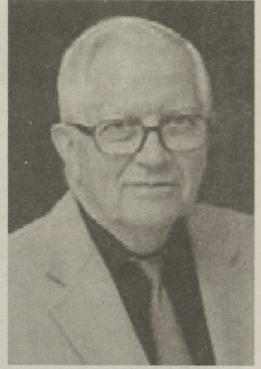
## Shoup Receives Regional Engineering Award

Jerry F. Shoup, interim director of Penn State Harrisburg's School of Science, Engineering and Technology, has received the 2012 Technical Achievement Award from the Central Pennsylvania Engineers Week Council. Chosen for his public, industry and institutional service, Shoup accepted the award during the National Engineers Week banquet on Feb. 23 in Camp Hill, Pa.

Shoup has served as interim director since July 2010. He holds the title of associate professor of electrical engineering, and previously served as program chair for the campus' Electrical Engineering and Electrical Engineering Technology bachelor's programs. He is a member of the Institute of Electrical and Electronics Engineers (IEEE), the Susquehanna Section of the IEEE, and engineering honor societies Tau Beta Pi and Eta Kappa Nu; a life senior member of the IEEE; and a life

member of the American Society of Engineering Education.

The Central Pennsylvania Engineers Week Council each year presents the Engineers Week activities in the Harrisburg area. Composed of representatives from local engineering firms, the council recognizes and promotes the work of professionals in the field.



Jerry F. Shoup, interim director of Penn State Harrisburg's School of Science, Engineering and Technology. (photo credit Gini Woy)

## iMBA Students World Campus Make Top 3 Percent

UNIVERSITY PARK, Pa.—Students enrolled in the iMBA program at Penn State's World Campus scored in the top 3 percent on the most recent Educational Testing Service (ETS) Master of Business Administration (MBA) Major Field Test, a comprehensive national assessment for program evaluation.

The Spring 2010 cohort of 54 students in this online program collectively scored in the 97th percentile in 2011. A total of 225 institutions administered this test to more than 14,400 students nationwide. MBA students' scores in the test categories are: Marketing, 92nd percentile; Management, 94th percentile; Finance, 97th percentile; Accounting, 98th percentile; and Strategic Integration, 97th percentile.

iMBA Program Chair Ashutosh Deshmukh said, "The students' exceptional performance on this national test is a reflection of the program's emphasis on a holistic understanding of business, which is achieved through integrated content, teamwork and applied learning and supported by two, one-week residencies. The first residency is unique nationally and internationally. iMBA students examine a company externally and internally, visiting the manufacturing/service facilities and listening and questioning top executives. Student teams prepare a deep analysis of the company, which we make available to the company."

Administered by ETS -- the same company that creates the SAT, GRE and AP exams -- Major Field Tests measure students' mastery of particular areas of

study. The MBA Major Field Test consists of 124 multiple-choice questions, half of which are based on short case-study scenarios. Most of the questions require knowledge of specific information drawn from marketing, management, finance and managerial accounting, or a combination of these disciplines.

Penn State's online MBA degree is designed for professionals who have work experience in a wide variety of fields -- business, engineering, health care, technology and many others -- and seek to position themselves for growth in the global economic environment. The online iMBA curriculum is well suited for people with either business or nonbusiness undergraduate degrees. For more information, visit the Penn State iMBA website or call 877-574-4622.

Penn State World Campus specializes in adult online education, delivering more than 70 of Penn State's most highly regarded graduate, undergraduate and professional education programs through convenient online formats. Founded in 1998, Penn State World Campus is the University's 25th campus serving more than 10,300 students in all 50 states and around the world. World Campus is part of Penn State Outreach, the largest unified outreach organization in American higher education. Penn State Outreach serves more than 5 million people each year, delivering more than 2,000 programs to people in all 67 Pennsylvania counties, all 50 states and 115 countries worldwide.

## TV's Brad Meltzer To Speak At Lehigh Valley Commencement



Brad Meltzer, a best-selling author and researcher on the History Channel series "Brad Meltzer's Decoded," will be the featured speaker at Penn State Lehigh Valley's commencement ceremony, to be held at 11 a.m. on Saturday, May 5, at Stabler Arena in Bethlehem, Pa.

"We are excited to welcome Brad Meltzer, whose career success is rooted in his love of history, to speak to our graduates during this very special and historic centennial year at Penn State Lehigh Valley," said Ann Williams, chancellor of Penn State Lehigh Valley.

Brad Meltzer is the author of the New York Times Bestsellers *The Tenth Justice*, *Dead Even*, *The First Counsel*, *The Millionaires*, and *The Zero Game*. He is currently working on his newest comic book, *DC Universe*, and recently published his latest novel, *The Inner Circle*. He can also be seen on the History Channel series "Brad Meltzer's Decoded," which investigates the secret history of the symbols and codes that surround us every day.

His books have a total of almost 6 million copies in print, have spent over nine months on bestseller lists, and have been translated into over 25 languages from Hebrew to Bulgarian.

**What do you think about the natural gas industry coming to Pennsylvania? Are these companies friend or foe? Chime in on The Lion's Eye Facebook page!**

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