

## PETEX PERSPECTIVES

From Director Greg McCormack



We have heard you loud and clear. PETEX understands that you have many people to be trained quickly and cost-effectively. Your training needs encompass operations personnel, technicians, professionals, and administrative staff, all of whom would benefit from flexible

training formats to get the job done. PETEX believes in a blended approach to training. Therefore, we provide a variety of learning formats—instructor-led classes, hands-on training, and self-study applications—to make sure your people are quality trained. Customized onsite training is another vehicle we provide to give companies exactly what they need by building their own standard operating processes into the curriculum.

Our clients have confirmed the importance of self-paced study, and we have undertaken a major initiative

in digital training solutions to meet the need. This is evident in our newly introduced e-books and online training modules that run on your learning management systems. PETEX Digital Training Solutions (DTS) Project Manager, Zahid Yoosufani, leads this charge. His many years of experience with IBM equip him with the essential tools needed to help transition PETEX content to digital formats. Today, PETEX offers over forty e-books, three training modules, and an interactive rig module.

That said, we know that a standardized approach is not always appropriate, so we offer our resources to help you develop the type of digital training systems you need. I am excited at the progress we are making in this arena, and I invite you to share your requirements and take part in testing so we can help develop the modules and specialized training you need. If you would like to partner in this process, please feel free to contact our DTS team at [petexdts@www.utexas.edu](mailto:petexdts@www.utexas.edu). Whatever path you take, PETEX is there to assist with your immediate and future training needs to meet the challenges afoot. Look forward to a major announcement regarding digital training in our next newsletter.

### PETEX Voice of Training

No. 492

Spring 2010



Director: Greg McCormack  
 Assistant Directors: Fran Kennedy-Ellis, Peter Kosewicz  
 Editor: Michelle Wernert  
 Graphics Designer: E.K. Weaver

Contributors: Steve Vorenkamp, Bill Mahler, Greg McCormack, Fran Kennedy-Ellis, Peter Kosewicz, Michelle Wernert, Zahid Yoosufani, Debby Denehy, Monica Moore, Chris Parker, Bernardo Navarro

### Advisory Board

- Mr. Calvin Barnhill, Northstar Exploration Company
- Mr. Richard Bobigian, Black Pool Energy
- Dr. Paul M. Bommer, The University of Texas at Austin
- Mr. Ed Burbach, Gardere Wynne Sewell
- Dr. Doug Elliot, IPSI, an affiliate of Bechtel
- Mr. Gregg Perkin, Engineering Partners
- Mr. Bill Rehm, Far East Energy
- Mr. Bob Tippee, *Oil and Gas Journal*
- Mr. Steve Vorenkamp, Wild Well Control, Inc.

### Dr. Mullins' Book Receives STC Award



Congratulations to **Dr. Oliver C. Mullins** on his 2010 Award of Excellence presented by the Houston Chapter of the Society for Technical Communication for his book, *The Physics of Reservoir Fluids: Discovery Through Downhole Fluid Analysis*, which is currently available for purchase through PETEX.

## PETEX E-books Bring Content To Life

Reading a book just became more interesting with PETEX e-books. Now you can find, highlight, bookmark, and enlarge text to get maximum benefit for your learning experience. E-books are a great choice for those who want the convenience and usability of a digital format. Now you can choose from a wide array of familiar PETEX publications and easily purchase them online and read them at your desktop. Here's what you get:

### Vibrant Features

PETEX e-books deliver the same industry-focused instructional content as our printed publications but with greater mobility and access. Our e-books are easy to read with full-color graphics and practical features that let you search for terms or phrases, make annotations, highlight text, and set custom bookmarks. E-books are easy to download after purchasing. Once downloaded, users can access the text online or offline.

### More than 40 Titles Now Available

With many more e-books on the way, PETEX continues to address the growing demand for digital publications and is seizing the opportunity to add value through technology. We reaffirm our commitment to provide training and instructional materials that are unsurpassed

in quality, value, and flexibility, now and in the future. Some popular e-book titles are shown below.

### Additional Savings with Bundled Offerings

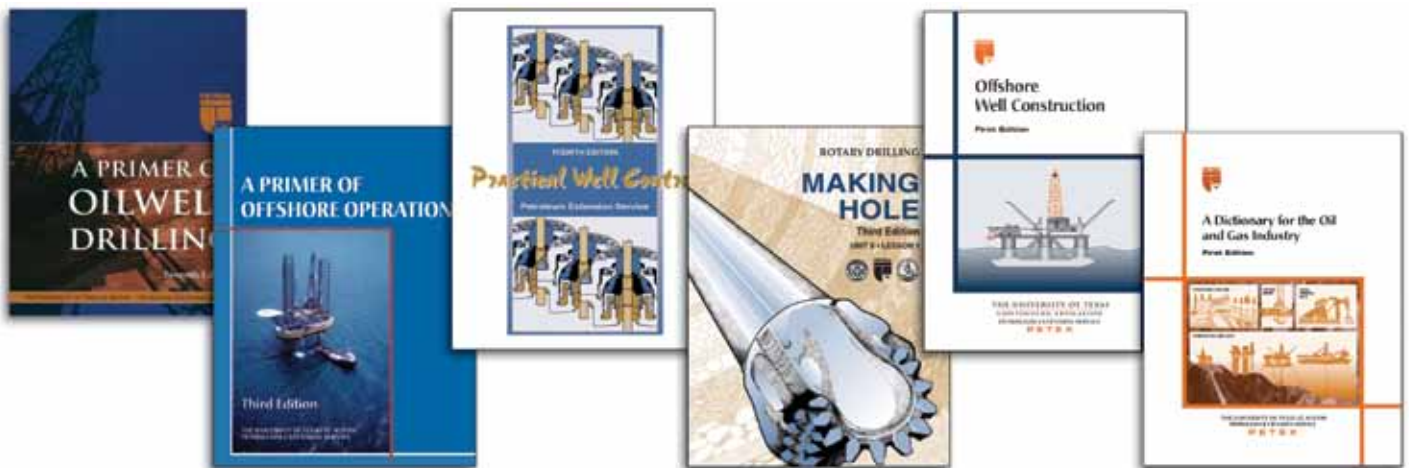
E-books can be purchased separately or at a significant discount when bundled with other offerings such as with the printed version of the same title. Volume discounts for individual e-books and bundled offerings are also available.

### Coming Soon: Super e-Books

We are currently hard at work testing the use of embedded videos and animated graphics to explain complex concepts in creative ways. "Super e-books" will take full advantage of the intersection of technology and instructional design to create a user experience that provides interactive self-training, stretching far beyond simply reading a book.

*We are also exploring making PETEX e-books available on SONY® Reader and later, on Apple iPad™.*

*We welcome your feedback and inquiries. For more information on PETEX digital training solutions, email us at [petexdts@www.utexas.edu](mailto:petexdts@www.utexas.edu) and visit our Web site at <http://www.utexas.edu/ce/petex/digital/> for updates.*



## Call For Experts

If you are a subject matter expert and would like to review publication projects in basic electricity, drilling techniques, offshore operations, oil and gas fundamentals, production technology, or well service and workover, please contact Fran Kennedy-Ellis, PETEX Assistant Director, at 512.471.6160 or [fkennedy@austin.utexas.edu](mailto:fkennedy@austin.utexas.edu).



We are PETEX



**Sandra Losoya, Manager of Operations and Shared Services**, brings extensive experience in customer service, operational management, people management, and program management to her role at PETEX. As Manager of Operations, Losoya’s primary responsibility is to ensure organizational effectiveness by providing leadership of PETEX’s operations. She also manages Shared Services, which consists of the Accounting, Sales, and Warehouse departments. Prior to PETEX, Losoya was Associate Director for the Executive MBA Program at The Wharton School of the University of Pennsylvania in San Francisco, California, responsible for operational & program management. Prior to that, Losoya managed operations at The Wharton School’s East Coast Campus in Philadelphia, Pennsylvania.

**Chris Parker, Editor** at PETEX, applies his editorial expertise in assisting PETEX with new publications and updates. In previous roles at Houghton Mifflin Harcourt, Parker was responsible for writing, editing, and proofreading a wide variety of materials including textbooks, web-based educational software and sites, teacher’s editions, and fiction and nonfiction texts. He



has also edited and copyedited highly technical academic papers.



**Bernardo B. Navarro, Editor** at PETEX, brings an extensive background in editorial project management. At Houghton Mifflin publishing company, he managed more than 150 freelance writers, editors, and reviewers on various mathematics-related publishing projects. He began his career as a fourth-grade teacher with Teach For America and also served in the U.S. Foreign Service at the U.S. Embassy in Beijing, China. He is currently pursuing Project Management Professional (PMP) certification.

**Lisa Dassler, Training Specialist III**, comes to PETEX after serving as a Program Coordinator for Research Education at the University of Texas M. D. Anderson Cancer Center. She has many years of experience coordinating and facilitating training for both faculty and research staff. She also has experience creating instructor-led training and has frequently presented to staff on research policies and procedures.

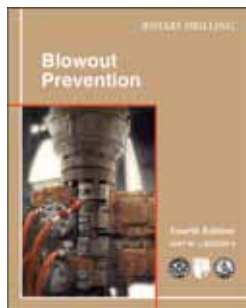


What’s New

Blowout Prevention, 4th Ed.

NEW EDITION

By Timothy Bell, Daniel Eby, Jace Larrison, and Bhavesh Ranka



A team of experts from Cudd Well Control has updated this informative book, complete with full-color graphics and the latest prevention practices. This edition focuses on the most important single consideration for crewmembers on a drilling rig—blowout prevention. Readers will learn about the special equipment

and proper steps for detecting and controlling kicks, along with proper safety measures. Review questions help readers check comprehension.

Basic EOR (Enhanced Oil Recovery) Course

Offered at PETEX Houston and West Texas Training Centers

This popular new course by industry experts Dr. Larry Lake and Dr. Mojdeh Delshad from The University of Texas at Austin reviews reservoir engineering fundamentals and principles of EOR processes.

Field Handling of Natural Gas and Plant Processing of Natural Gas Courses

Emphasis on Operations

PETEX now offers separate courses for engineering and operations. These two new courses held at the West Texas Training Center in Odessa focus on natural gas field handling and plant processing operations.



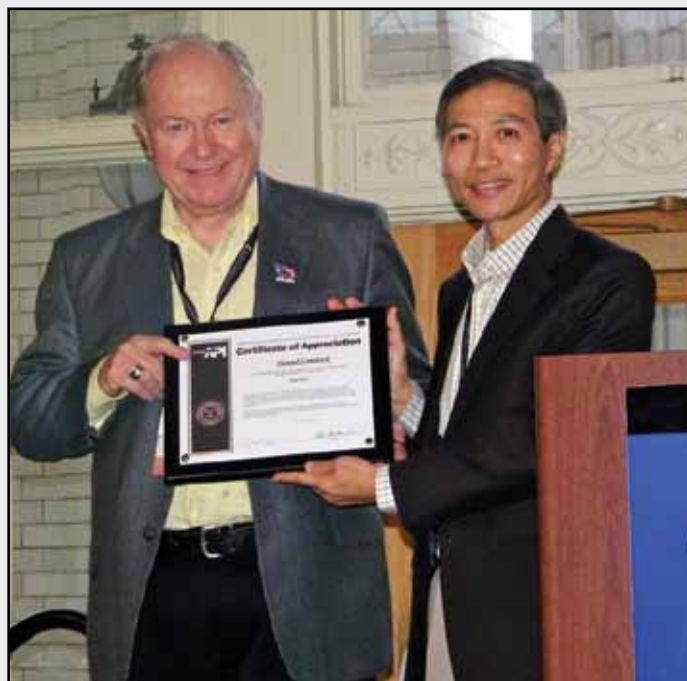
## West Texas Training Center Schools Scheduled

- Basic EOR (Enhanced Oil Recovery)
- Completion and Workover
- Elementary Drilling
- Field Handling of Natural Gas—  
Emphasis on Operations
- Gauging, Testing, and Running  
of Lease Tanks
- Natural Gas Measurement—  
Fundamentals
- Natural Gas Measurement—  
Design/Application/Inspection
- Petroleum Fundamentals
- Plant Processing of Natural Gas—  
Emphasis on Operations
- Production Technology
- ValvePro® Certified Valve Maintenance  
Technician



The 2010 course dates are now online for training in Odessa on the campus of The University of Texas of the Permian Basin. To enroll or for a map and directions, visit us online at [www.utexas.edu/ce/petex](http://www.utexas.edu/ce/petex) and click on Training Courses.

## PETEX Training Specialist Honored with Technical Standards Award



Congratulations to PETEX Training Specialist **Dan Comstock** (left) who was recently honored for over thirty years of exemplary service to the petroleum industry in the development of API Measurement Standards. This certificate represents the highest award bestowed on API Technical Standards Committee members, given one time to a member for noteworthy accomplishments in the Technical Standards arena. Presenting the award is **Ken Mei** of Chevron (right), current Chair of the API Committee on Petroleum Measurement.



THE UNIVERSITY OF TEXAS AT AUSTIN  
 Petroleum Extension Service (PETEX)  
 1 University Station, R8100  
 Austin, Texas 78712-1100

ADDRESS SERVICE REQUESTED

NON-PROFIT ORG  
 U.S. POSTAGE  
 PAID  
 PERMIT NO. 391  
 AUSTIN, TEXAS



THE UNIVERSITY OF TEXAS

## SPRING TRAINING

For the complete 2010-2011 schedule, visit [www.utexas.edu/ce/petex](http://www.utexas.edu/ce/petex)

School	CEUs	Location	Length	Dates	Tuition
Valves and Actuators (Operation and Maintenance)	3.3	Houston	4½	May 3-7	\$1,680
Elementary Drilling	3.3	Odessa	4½	May 10-14	\$1,800
Completion and Workover	7.1	Houston	9½	May 17-28	\$3,690
1st Week	3.8		5	May 17-21	\$1,890
2nd Week	3.3		4½	May 24-28	\$1,800
Basic EOR (Enhanced Oil Recovery)	2.3	Odessa	3	June 2-4	\$2,050
Gauging, Testing, and Running of Lease Tanks	1.1	Houston	1½	June 3-4	\$ 605
Natural Gas Measurement—Fundamentals	2.3	Houston	3	June 7-9	\$1,180
Hydraulics for Pipeline Operators	1.9	Houston	2½	June 8-10	\$1,260
Natural Gas Measurement— Design/Application/Inspection	1.1	Houston	1½	June 10-11	\$ 780
Natural Gas Measurement— Electronic Flow Measurement	2.3	Houston	3	June 14-16	\$1,180
Petroleum Fundamentals	3.3	Houston	4½	June 14-18	\$2,050
Plant Processing of Natural Gas— Emphasis on Operations	3.8	Odessa	5	June 14-18	\$1,890
Natural Gas Measurement— Sampling and Analysis (Quality)	1.1	Houston	1½	June 17-18	\$ 780
Field Handling of Natural Gas— Emphasis on Operations	3.8	Odessa	5	June 21-25	\$1,890

Courses are held at PETEX Training Centers in Houston and West Texas. Training dates are subject to change.

To enroll, visit [www.utexas.edu/ce/petex](http://www.utexas.edu/ce/petex), call 800.687.7052, fax 281.443.8722, and/or email [petexhtc@www.utexas.edu](mailto:petexhtc@www.utexas.edu).

by Steve Vorenkamp and Bill Mahler, Wild Well Control

Today, blowouts occur at a rate of nearly one in one-thousand wells drilled or operated. Unfortunately, this rate appears to remain roughly constant year after year. A blowout is the most catastrophic event that can occur during a drilling or workover operation. However, virtually all blowouts are preventable.

A blowout can take many forms including a massive fireball that engulfs a rig. Even if there is no fire, a blowout wastes the valuable petroleum or gas expelled.

### Leading Causes of Incidents

The first stage of a well-control incident is when oil, gas, or water from the formation enters the wellbore. This is known as a kick. If not controlled, a kick can intensify. The fluid or gas entering the wellbore displaces an equal volume of drilling mud. Loss of that dense drilling mud reduces the fluid pressure within the wellbore, allowing more formation fluid to flow into the well. That, in turn, reduces the wellbore pressure even further, and so on. If this vicious cycle is not broken quickly, it can accelerate into a blowout powerful enough to eject the drill string from the well, damage the rig, and, in some cases, create a plume of gas or oil that can be easily ignited.

The two leading causes of kicks are poor drilling practices and equipment failures. Poor practices include not maintaining the drilling fluid at the correct density or fluid level, not waiting long enough for cement casing to set, and tripping pipe too fast, causing fluctuations of hydrostatic pressure called “surging” or “swabbing.” Poor

practices also include failure to detect and manage a kick when one does occur. Equipment failures can also occur during drilling or completion operations. They are a particular problem in high-pressure frac operations such as those done in the Bakken and Marcellus shales.

### Preventing an Event

Responsible operators, drilling contractors, and well workover and servicing companies must take preventive action to mitigate the risks and maximize the chance of bringing the well back under control. To do this, computer software is used to model kick behavior using the expected parameters for a particular well before drilling begins and again with updated data during drilling. The well-control equipment on a rig is

carefully inspected and tested regularly. Operators and rig personnel are put through well-control training programs so they can spot the signs of a kick and react correctly. These training courses must be practical and tailored to the type of well the crew will be drilling. Frequent emergency drills—realistic and unannounced—will

build a crew’s readiness to handle a real crisis. Practical, straightforward emergency response plans should be prepared and ready for quick use. Finally, if conventional well-control methods do not work, personnel on the rig should be prepared to call in well-control specialists.

It is crucial that operators, drilling contractors, and well servicing companies understand the risks posed by blowouts. Once acknowledged, these risks can be addressed and mitigated through policies and preventive measures, the most important of which is thorough training.

*Steve Vorenkamp is General Manager of Training and Bill Mahler is Executive Vice President and General Manager of Wild Well Control Inc., a leading provider of firefighting, well control, engineering, and training services based in Houston, Texas. Wild Well supports PETEX in delivering quality training on well control issues. Vorenkamp is a long-time and popular instructor of well control operations at the PETEX Houston Training Center.*



### IN THIS ISSUE

- PETEX Launches E-Books
- West Texas Training Center Schools
- New Edition of *Blowout Prevention*
- Instructor Receives Prestigious Award