

## Contents

[From the Director's Desk](#)

[OPI and IOGA-NY Host Joint  
Technical Conference](#)

[Recent Trenton Discoveries Attract  
Interested Producers](#)

## PTTC Appalachian Region

Douglas G. Patchen  
Program Director  
West Virginia University  
Appalachian Basin Regional Lead  
Organization  
P.O. Box 6064  
Evansdale Drive  
Morgantown, WV 26506-6064  
Voice: (304) 293-2867 ext. 5443;  
Fax: (304) 293-7822  
email:  
[dpatch@wvunrce.nrcce.wvu.edu](mailto:dpatch@wvunrce.nrcce.wvu.edu)

Kevin Smith  
Chairman, Producers' Advisory  
Group  
Oxford Oil Company  
P. O. Box 910  
Zanesville, OH 43702-0910  
Voice: (740) 452-4503 x235  
email: [KSmithPE@aol.com](mailto:KSmithPE@aol.com)

West Virginia University's National Research Center for Coal and Energy (NRCCE) houses the regional lead organization (RLO) for the Appalachian region of the Petroleum Technology Transfer Council (PTTC). The Appalachian region is composed of eastern Kentucky, New York, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. The Appalachian Oil and Natural Gas Research Consortium (AONGRC) at WVU serves as RLO for the region.

## FROM THE DIRECTOR'S DESK...

Welcome to the initial issue of our new On-Line PTTC Newsletter. We at the Appalachian Oil and Natural Gas Research Consortium, the group responsible for implementing the PTTC program in the Appalachian Basin, are excited about this new medium. Hopefully, you, the producers and users of information, will be, too. We believe that under the guidance of Michael Ed. Hohn, this new, on-line feature will offer information and timely news items of value to you. Please visit us often.

Although our involvement with PTTC goes back to 1993, we are approaching just our fifth anniversary of the date when we signed a subcontract that made us the Regional Lead Organization (RLO) for the seven-state Appalachian Region. During these five years, we have attempted to learn from you a little more about your technical needs, and then develop a series of focused technology workshops to address some of those needs. In addition, we opened a Regional Resource Center in the National Research Center for Coal and Energy (NRCCE) on the Evansdale campus of West Virginia University, and created a website, complete with a calendar of regional meetings as well as our workshops, links to oil and gas data, other links to oil and gas related groups, and information about PTTC. At various times we have considered publishing a conventional newsletter, to be mailed quarterly, but our PAG, or Producer's Advisory Group, did not think that a printed newsletter was necessary. Instead, they requested that we try this approach, which will allow us to reach you in a more timely manner.

Workshops have been at the very core of our program since its inception. At this writing, we have hosted 46 focused technology workshops at 15 locations in four states. These workshops have attracted more than 1800 registrants, of which an increasingly high percent are repeat customers, indicating some degree of satisfaction on their part with our products. We have offered geology, geophysics and petroleum engineering topics; even some environmental remediation and ways to survive in tough times. But, our customers seem to prefer workshops on current, hot plays or future plays. Workshops on the Knox, Trenton and coal bed methane last fall each drew around 100 registrants.

We are putting the final touches on our slate of workshops for 2000. Right now, we are negotiating for two data workshops, with emphasis on products that can be generated from them; two remote sensing workshops, featuring free data and software from the internet in one case; two core workshops, one with a focus on new technology, the other a focus on current and future gas plays; one on fracturing, with emphasis on coal beds; a full day coal bed methane workshop; and a workshop designed to teach you how to develop your own webpage. Watch for announcements of these and other events on this page, as well as summaries of workshops that have been held. We hope that you will not be reading about an event that you missed!

Douglas G. Patchen,



## OPI AND IOGA-NY HOST JOINT TECHNICAL CONFERENCE

The Independent Oil and Gas Association of New York and the Ontario Petroleum Institute Inc., in cooperation with the New York State Energy Research and Development Authority, hosted a joint three-day field trip and technical meeting in Niagara Falls, Ontario from November 3 to November 5, 1999. The meeting was held in the Sheraton Fallsview Hotel and Conference Center, which offered a great view of the falls and rapids at the end of the fall leaf season. "Creating Opportunities for the New Millennium" was designed to illustrate how technologies currently being developed will affect the bottom line in the near future and beyond, as well as to provide an overview of current and projected exploration efforts. In addition, the co-hosts offered a geology and wine tour of the area around the falls.

A full spectrum of technology topics was offered by the joint program and exhibit area. Chuck Brandenburg from the Gas Research Institute chaired the opening session, which focused on GRI's research to develop new technologies to affect the bottom line. Featured speakers included Steve Wolhart, who discussed recent advances in hydraulic fracturing; Bruce Marion, who discussed the application of crosswell seismic to solve problems created by rapid changes in the reservoir between wells; Ed Smalley, who illustrated the importance of technology in increasing the amount of information gained from mud logging; Scott Reeves, who discussed restimulation research

OPI and NYSERDA hosted concurrent technical sessions in the afternoon of the first day. OPI's program focused on obtaining data through logging and coring programs and aeromagnetic surveys, whereas NYSERDA's session featured presentations of funded research on a variety of problems and technology, including remote sensing, GIS techniques, soil gas surveys and lineament analysis.

Sessions on the final day were devoted to oil and gas exploration in the morning and Canadian natural gas supply and transportation in the afternoon. During the morning session, David Copley, MariCo Oil and Gas Corporation Inc., discussed the opportunities for hydrocarbon exploration in eastern Canada, including coal bed methane potential, and William Zagorski, Range Resources, presented an overview of four key trap types and associated exploration and development strategy in the Medina Sandstone Play in Ohio, Pennsylvania and New York. Kerry O'Shea followed with a discussion of alternative approaches to contaminated soil reclamation around oil and gas operations. The session concluded with discussions of megabin

funded by GRI and NYSERDA, and how wells are selected for restimulation; and Chuck Brandenburg, who opened the session with a discussion of four new technologies and the success stories that would follow. He began by showing a series of old quotes from noted, but unnamed authorities, that essentially said that what we were about to see would never happen.

versus conventional 3D seismic methods by Norm Cooper, and selecting drill bits for horizontal wells by Rick Young.

The featured luncheon speaker was Dr. Emory Kemp, Director of the Institute for the History of Technology and Industrial Archeology in Morgantown, WV. Dr. Kemp discussed the origins of the oil industry in Ontario, which pre-dates the earliest oil discoveries in the U.S. portion of the Appalachian basin.

For further information of these presentations, contact either the individual speakers, or one of the symposium organizers, Douglas Gilbert, Executive Director of OPI; Bradley Gill, IOGA-NY; Chuck Brandenburg, GRI; or John Martin, NYSERDA.

---

## RECENT TRENTON DISCOVERIES ATTRACT INTERESTED PRODUCERS

Recent oil and gas discoveries in the Trenton and Black River carbonate section (Ordovician) in Ontario, Canada and New York, Ohio, West Virginia and Tennessee have created a great deal of interest among producers in the Appalachian basin and beyond. More than 90 interested parties attended a one-day workshop on "The Challenge of Drilling in the Ordovician Trenton-Black River Group, Breathing New Life into Older Targets in the Appalachian Basin," which offered a series of talks dealing with exploration methods and models, regional geology and how to drill, complete and produce wells in this emerging frontier play. The November 11th workshop was developed by the Department of Geology and Geography at West Virginia University, and hosted by the Petroleum Technology Transfer Council's Appalachian Region at the National Research Center for Coal and Energy at West Virginia University in Morgantown, WV.

Dr. Robert Shumaker presented a brief overview of the structural development of the older portion of

The middle portion of the workshop focused on summaries of recent discoveries in Ohio, Ontario and New York, current exploration in New York and Newfoundland and Quebec, and models of the Albion-Scipio Field in Michigan that may guide some of this exploration. Featured speakers included Larry Wickstrom, Ohio Geological Survey; Robert Trevail, Orion Resources Consulting Ltd; Ed Berg, Thomason Partner Associates, Inc.; and Mark Cooper, Distinguished AAPG Speaker.

The final portion of the workshop dealt with current technology that is making a difference in this emerging play. Bernie Rayner, Schlumberger Wireline and Testing, discussed technology breakthroughs in borehole imaging and processing that now allow interpretation of fracture orientation and openness,

the Appalachian basin, and resulting zones of structural weakness that may have produced enhanced porosity in fractured and dolomitized Ordovician carbonates. John Roen then presented a discussion of Ordovician black shale source rocks in close association with this carbonate section. Dr. Richard Smosna completed this introductory session with a presentation on the deposition of Trenton limestone and terrigenous mud during a period of basin subsidence in response to early plate collision. This resulted in deposition of carbonate and interbedded shales on a gentle ramp in a deepening upward sequence, until the ramp was overwhelmed and carbonate deposition ceased.

and the distinction between natural and drilling-induced fractures, which can be applied to this fractured reservoir play. Then, Roger Myers, BJ Services Company, discussed the challenge of drilling, casing, cementing and stimulating wells in these reservoirs. He concluded with a series of case histories from Ohio, Michigan and Ontario wells.

For further information on these presentations, contact the individual speakers, or the symposium organizers, Robert Shumaker and Kathy Bruner. And, watch this Newsletter Section of PTTC's Appalachian Region website for the final workshop report.

**Disclaimer:** The PTTC takes reasonable steps to ensure the accuracy of information disseminated by the PTTC and its affiliates or agents. Nevertheless, individuals and institutions utilizing such information are solely responsible for the consequences of such use and the PTTC and its affiliates or agents take no responsibility for the commercialization and/or utilization of any technology or process described herein. This includes, but is not limited to, the manufacture, use, sale, or export of products, processes, or services derived from the transferred technology

---

Mail comments concerning this newsletter to: [hohn@geosrv.wvnet.edu](mailto:hohn@geosrv.wvnet.edu)