

The U.S. DOE Exploration & Production R&D Program

DOE Sponsored Student Researchers

Publications and Presentations

September 2012



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Notes:

- Information on students sponsored and publications of the National Methane Hydrate R&D Program can be found at:
<http://www.netl.doe.gov/technologies/oil-gas/publications/Hydrates/pdf/MHBibliography.pdf>.
- Information students sponsored and publications of the Section 999 Program will be available in the future.

Section I: Documentation of Support for Education

Students contributing to and receiving support from DOE-funded Non-Section 999 projects

Alabama, University of - Birmingham

- Esposito, Richard, Ph.D., 2010, Interdisciplinary Engineering
- Theodorou, Konstantinos, Ph.D., expected 2011, Interdisciplinary Engineering

Alaska, University of - Fairbanks (DE-NT0005683* & DE-NT0005641**)

- Bendlova, Tereza, M.S., in progress, Environmental Science*
- Davis, Jeremy, M.S., expected 2011, Geology**
- Demallie, J., B.S., 2012, Petroleum Engineering**
- Godabrelidze, Vasil, M.S. 2010, Petroleum Engineering**
- Levi-Johnson, Obi, M.S., 2010, Petroleum Engineering**
- Oraki-Kohshour, Iman, M.S., expected 2012, Petroleum Engineering**
- Sanders, Cheryl, M.S., expected 2012, Geology**
- Shimer, Grant, Ph.D., expected 2014, Geology**
- Shukla, Chinmay, M.S. 2011, Petroleum Engineering**
- Venepalli, Kiran, M.S., 2011, Petroleum Engineering**
- Wentz, Raelene, M.S., expected 2012, Geology**

Arkansas, University of

- Aseperi, Toyin, Ph. D., in progress, Chemical Engineering
- Taiwo, Michael, Ph. D., in progress, Chemical Engineering

Carnegie-Mellon University (in association with University of Pittsburgh)

- Pang, Juan, B.S., in progress, Civil and Environmental Engineering

Clemson University

- Alley, Beth, M.S., in progress, Environmental Engineering and Earth Science
- Beebe, Alex, M.S., in progress, Environmental Engineering and Earth Science
- Jurinko, Kristen, M.S., in progress, Environmental Engineering and Earth Science
- Pardue, Michael, M.S., in progress, Environmental Engineering and Earth Science
- Ritter, Tina, M.S., in progress, Environmental Engineering and Earth Science
- Spacil, Mike, M.S., in progress, Environmental Engineering and Earth Science

Colorado School of Mines (DE-NT0005663*, DE-NT0005672** & DE-NT0006554)***

- Acikalin, Elif, M.S., 2011, Geological Engineering***
- Akeredolu, Babajide, M.S., 2011, Chemical Engineering *
- Almanza, Adrian, M.S., expected 2012**
- Angster, Stephen, M.S., 2010**
- Ansley, B.S., expected 2012, Geological Engineering***
- Das, Agni, Ph.D., 2010, Geophysics*
- Gantyno, Alan, M.S., 2010**
- Garret, Jordan, M.S., expected 2012, Geological Engineering***
- Havens, Jesse, M.S., expected 2012**
- Jin, Hui, Ph.D., expected 2012**
- Kowalski, Rebecca, M.S., 2010**
- Mba, Kene, M.S., 2010**
- Minnick, Matthew, Ph.D., expected 2012, Geological Engineering***
- Nekhorosheva, Vasilisa, M.S., expected 2012**
- Saidan, Milad, Ph.D., expected 2014, Petroleum Engineering*
- Simenson, Andrea, M.S., 2010**
- Stroud, John, M.S., 2010**
- Theloy, Cosima, Ph.D., expected 2012**
- Vickery, James, M.S., 2010**
- Wu, Wenwui, M.S., 2010, Petroleum Engineering*
- Zhang, Chenru, M.S., 2010, Chemical Engineering*

Houston, University of (in association with Colorado School of Mines)

- Yao, Q., Ph.D., 2011, Geoscience

Kansas State University

- Kendrick, Clint, M.S.M.E., 2011, Mechanical Engineering
- Toema, Mohamed, Ph.D./Post Doc, 2010, Mechanical Engineering

Kansas, University of

- Ahmed, Shahab, M.S., 2011, Petroleum Engineering
- Liu, Zhijun, M.S., 2011, Chemical Engineering
- Senior, Peter, M.S. 2011, Geology

New Mexico Institute of Mining & Technology (DE-NT0005227* & DE-NT0006555**)

- Akanni, Olatokunbo, M.S., 2010, Petroleum Engineering**
- Asemsro, Hilda, M.S, 2009, Civil and Environmental Engineering*
- Baily, Siona Curtis, B.S., 2010, Biology*
- Birbahadur, Naitram, M.S., 2011, Mechanical Engineering*
- Daly, Seth, withdrew*
- Dwyer, Christine, B.S., 2009, Civil and Environmental Engineering*
- Ferraro, Danny, withdrew*
- Garner, Rick, B.S., 2010, Mechanical Engineering*
- Gonzales, Sarah, 2009, B.S., Civil and Environmental Engineering*
- Kwame, Opong, 2009, M.S., Petroleum Engineering**
- Luders, Ian, B.S., 2010, Mechanical Engineering*
- Morgan, Harry, B.S., expected 2012, Chemical Engineering*
- Sarpong, Gedion, M.S., 2010, Civil and Environmental Engineering*
- Turner, Chris, M.S., expected 2011, Mechanical Engineering*

North Dakota, University of

- Bangen, Kyle, B.S., expected 2013, Geological Engineering
- Blanksma, Derrick, B.S., 2011, Geological Engineering
- Boock, Alssa, M.S., 2009, Geology
- Brieger, Anthony, B.S. expected 2013, Technology
- Fast, Derek, B.S., 2010, Technology
- Feilen, Harry, B.S., expected 2013, Mechanical Engineering
- Huffman, Ben, B.S., 2009, Geology
- Jabbari, Hadi, Ph.D., expected 2013, Geological Engineering
- Lauer, Benjamin, B.S., 2011, Technology.
- Montgomery-Holwerda, Jillana, B.S., 2009, Civil Engineering
- Munson, Nathan, B.S., 2009, Geology
- Ostadhassan, Mehdi, Ph.D., expected 2013, Geological Engineering
- Pei, Peng, Ph.D., expected 2012, Geological Engineering
- Ries, Adam, B.S., 2010, Geological Engineering
- Smith, Daniel, B.S., 2009, Geological Engineering
- Thaden, Courtney B., B.S., 2009, Electrical Engineering
- Wang, Yunyong, Ph.D., 2010, Mining Engineering
- Zhou, Xuejun, Ph.D., 2011, Geological Engineering

Pittsburgh, University of

- Barbot, Elise, Post Doc, in progress, Civil and Environmental Engineering
- Henrickson, Mary Kate, B.S., in progress, Civil and Environmental Engineering
- Kumar, Pradeep, B.S., in progress, Civil and Environmental Engineering
- Li, Meng, B.S., in progress, Civil and Environmental Engineering
- Novitsky, Theodore, Post Doc, in progress, Civil and Environmental Engineering

Texas, University of - Austin

- Ayoub, Daniel, M.S., 2011, Petroleum Engineering
- Doorwar, Shashvat, Ph.D., expected 2014, Petroleum Engineering
- Kumar, Rahul, Ph.D., expected 2012, Petroleum Engineering

Texas, University of - San Antonio (in association with Colorado School of Mines)***

- Barrera, Bonnie, M.S., 2011, Geology***
- Le, Tuan, Ph.D., expected 2012, Environmental Science and Engineering***
- Muhlestein, Keith, Ph.D., 2011, Environmental Science and Engineering***

Utah, University of

- Bokil, Mukul, M.S., 2010, Mechanical Engineering

Section II: Publications Related to the Program's Efforts with Universities and Other Research Institutions

With private companies, state and local governments, universities, and research institutions

Membrane Technology for Produced Water at Lea County, NM (DE-NT0005227)

New Mexico Institute of Mining & Technology

Theses/Dissertations

Asemsro, Hilda, 2009. "A Forward Osmosis-Based Treatment Process for High TDS Oilfield Produced Water." M.S. Thesis. New Mexico Tech.

Sarpong, Gedion, 2010. "Recapture of Ammonia and Carbon Dioxide in a Forward Osmosis Based Treatment." M.S. Thesis. New Mexico Tech.

Presentations

Ghosh, A.K., 2011. "Desalination of Produced Water." *AWRA Annual Water resources Conference*, Albuquerque, NM, November 2011

Ghosh, A.K., and P. Fairchild, 2011. "Desalination of High TDS Oilfield Produced Water." *Emergent Technologies, Inc.*, Hobbs, January 21, 2011.

Ghosh, A.K., B. C. Panda, G. Sarpong, H. Morgan, and M. Hensley, 2010. "A Pilot Scale Treatment Process for High TDS Oil Field Produced Water." *17th Annual International Petroleum & Biofuels Environmental Conference*, San Antonio, TX, USA.

Ghosh, A.K., 2010. "Desalination of High TDS Oilfield Produced Water." *Eldorado Biofuels*, March.

Ghosh, A.K., 2010. "Desalination of High TDS Oilfield Produced Water." *Hydration Technologies Innovation*, Albany, OR, December, 23.

Ghosh, A.K., 2009. "Desalination of High TDS produced water." *New Mexico Water Research Symposium*, August 11, Socorro, NM, USA.

Ghosh, A. K., V. Romero, M. Hensley, and F. Yarger, 2009. "A Hybrid Treatment Process for High TDS Oil-field Produced Water." *16th Annual International Petroleum & Biofuels Environmental Conference*, Houston, TX, USA.

An Integrated Water Treatment Technology Solution for Sustainable Water Resource Management in the Marcellus Shale (DE-FE0000833)

ALTELA

Presentations

- Bruff, Matthew and Sinisha Jikich, 2011. "Field Demonstration of an Integrated Water Treatment Technology Solution in Marcellus Shale." *Proceedings of the SPE Eastern Regional Conference*, Columbus, OH, August 17-19, 2011. Paper SPE-149466.
- Bruff, Matthew, 2011. "An Integrated Water Treatment Technology Solution for Sustainable Water Resource Management in the Marcellus Shale." *Ground Water Protection Council (GWPC) Spring Groundwater Summit*, Baltimore, Maryland, 2-4 May 2011.
- Bruff, Matthew, 2011. "An Integrated Water Treatment Technology Solution for Sustainable Water Resource Management in the Marcellus Shale." *Ground Water Protection Council (GWPC) UIC Conference*, Austin, TX, 24 January 2011.
- Bruff, Matthew, 2010. "An Integrated Water Treatment Technology Solution for Sustainable Water Resource Management in the Marcellus Shale." *Shale Gas Environmental Summit*, Houston, TX, 15 November 2010.
- Bruff, Matthew, 2010. "An Integrated Water Treatment Technology Solution for Sustainable Water Resource Management in the Marcellus Shale." *Water/Energy Sustainability Symposium*, Pittsburgh, PA, 28 September 2010.
- Bruff, Matthew, 2010. "An Integrated Water Treatment Technology Solution for Sustainable Water Resource Management in the Marcellus Shale." *17th International Petroleum & BioFuels Environmental Conference (IPEC)*, San Antonio, TX, 31 August 2010.
- Bruff, Matthew, 2010. "An Integrated Water Treatment Technology Solution for Sustainable Water Resource Management in the Marcellus Shale." *CWAG Water Law Conference*, Colorado Springs, CO, 29 April 2010.
- Bruff, Matthew, 2010. "An Integrated Water Treatment Technology Solution for Sustainable Water Resource Management in the Marcellus Shale." *National Energy Technology Laboratory Kick-Off Meeting*, Morgantown, WV, 12 January 2010.

Reservoir Characterization of Illinois Fields for ASP (DE-NT0005664)

University of Illinois

Other Publications

- Blakley, Curt S. J.P. Grube, P. Johaneck, V. Madhavan, N. Webb and B. Seyler, 2010. "Characterization of Pennsylvanian Bridgeport Sandstones in the Illinois Basin, Lawrence Field Illinois." *Institute of Natural Resource Sustainability*, University of Illinois, Illinois State Geological Survey.

- Damico, J., 2010. "Characterization of compartmentalized reservoirs for EOR pilots within the Illinois Basin." *AAPG 39th Annual Meeting*, Eastern Section Abstract with Programs, p. 54.
- Grube, J.P., J. Damico and B. Seyler, 2009. "Enhanced Oil Recovery and CO₂ Sequestration Potential of Chesterian (Mississippian) Sandstones in the Illinois Basin." *2009 Eastern Section Meeting of the American Association of Petroleum Geologists*, p. 38.
- Jikich, S.A., . Grube, J., Damico, J . Webb, N., Seyler B, , P" Illinois Basin Applications Demonstrating Potential of ASP EOR Technology", *The American Oil & Gas Reporter*, June 2012, Cover Story.
- Madhavan, V., N. Webb, J. P. Grube, C. S. Blakley, B. Seyler and P. Johanek, Reservoir Characterization for the Application of ASP Flood Technology in the Bridgeport Sandstone in Lawrence Field, Illinois, AAPG National Meeting, Houston, Texas, April 9-13, 2011.
- Seyler, B., J. Grube, B. Huff, C.S. Blakley, J. Damico, P. Johanek, V. Madhavan, and N. Webb, 2010. "Reservoir Characterization for Enhanced Oil Recovery in Middle Mississippian Cypress Sandstones at Lawrence Field, Illinois." *The American Association of Petroleum Geologists Annual Convention and Exhibition*, New Orleans, Louisiana, April 13, 2010.
- Seyler, B., J. Grube, B.G. Huff, C.S. Blakley, and P. Johanek, 2009. "Reservoir Characterization of the Mississippian Cypress Sandstone at Lawrence Field, Illinois." *2009 Eastern Section Meeting of the American Association of Petroleum Geologists* p. 50.

Presentations

- John P. Grube, Curt S. Blakley, James R. Damico, Philip Johanek, Vineeth Madhavan, Roland Okwen, Beverly Seyler, and Nathan D. Webb "Alkaline-Surfactant-Polymer Flood Application for Enhanced Oil Recovery Has Potential for Significant Recovery of Remaining Reserves in the Mature Lawrence Field, Illinois" presented at the National AAPG meeting held in Long Beach, California in April, 2012.
- Nathan D. Webb, John P. Grube, Curt S. Blakley, Beverly Seyler, and Vineeth Madhavan. "Reservoir Characterization of Lower Pennsylvanian Sandstones for the Application of ASP Flood Technology in Lawrence Field, Illinois" presented at the National AAPG meeting held in Long Beach, California in April, 2012.

Risk Based Data Management System (RBDMS) and Cost Effective Regulatory Approaches (CERA) Related to Hydraulic Fracturing and Geologic Sequestration of CO₂ (DE-FE0000880)

Ground Water Protection Council

Other Publications

- Ground Water Protection Council, 2011. *An Assessment of State Needs for Regulating*

Geologic Sequestration of Carbon Dioxide.

Presentations

- Jehn, P., 2010. "Data Needs for Resource Management. Ground Water Protection Council Annual Forum." *Water & Energy in Changing Climates*, Pittsburgh, PA, September 2010.
- Jehn, P., 2010. "RBDMS Water." *Ground Water Protection Council/National Ground Water Association Ground Water Summit*, Denver, CO, April 2010.
- Jehn, P., 2010. "RBDMS.net." *Ground Water Protection Council Underground Injection Control Conference*, Austin, TX, January 2010.
- Jehn, P., 2011. "Tracking Water with Risk Based Data Management System (RBDMS)." *Ground Water Protection Council Annual Forum*, Atlanta, GA, September, 2011.
- Jehn, P., 2011. "RBDMS HF Module." *Ground Water Protection Council Annual Forum*, Atlanta, GA, September, 2011.
- Nicklaus, M., 2010. "Workshop: Water Issues and Solutions Associated with Hydraulic Fracturing." *Ground Water Protection Council Annual Forum, Water & Energy in Changing Climates*, Pittsburgh, PA, September 2010.
- Nickolaus, M., 2010. "Using RBDMS to Track Well Stimulation." *International Petroleum and Biofuels Environmental Conference (IPEC)*, San Antonio, TX, August 2010.
- Nickolaus, M., 2011. "Workshop: Water Issues and Solutions Associated with Hydraulic Fracturing." *Ground Water Protection Council Underground Injection Control Meeting*, Austin, Texas, January 24-26, 2011.
- Nickolaus, M., 2011. "Workshop: Water Issues and Solutions Associated with Hydraulic Fracturing." *Ground Water Protection Council Annual RBDMS Training*, Sarasota, Florida, April 10-13, 2011.
- Nickolaus, M., 2011. "FracFocus: Overview of history, process and public research efforts." *Ground Water Protection Council Annual Forum*, Atlanta, GA, September, 2011.
- Nickolaus, M., 2011. "Implementing CO₂ Sequestration Programs." *Ground Water Summit*, Baltimore, Maryland, May 4, 2011.
- Paque, M., 2010. "Overview of Chemical Registry." *2010 IOGCC Annual Meeting*, Tucson, AZ, November 17, 2010.
- Yates, D., Daoust, J., 2010. "RBDMS Water." *Rocky Mountain Energy Epicenter*, Denver, CO, July 2010.
- Yates, D., 2011. "Revisions to the GWPC Report to the Nation." *Ground Water Protection Council Annual Forum*, Atlanta, GA, September, 2011.

Use of Polymers to Recover Viscous Oil (DE-NT0006555)

New Mexico Institute of Mining & Technology

Peer-Reviewed Publications

- Seright, R.S., Jikich, S.A., 2011. "Polymer Floods Move Into Viscous Oils", American Oil and Gas Reporter, February 2011, 115-123.
- Seright, R.S., Fan, T., Wavrik, K., and Balaban, R.C. 2010. "New Insights into Polymer Rheology in Porous Media." SPE Journal online
- Seright, R.S. 2010. "Potential for Polymer Flooding Viscous Oils." *SPE Reservoir Evaluation and Engineering*. August 2010, 730-740.
- Seright, R.S., Campbell, A.R., Mozley, P.S., and Han, P., 2010. "Stability of Partially-Hydrolyzed Polyacrylamides at Elevated Temperatures in the Absence of Divalent Cations." *SPE Journal*, June 2010, 341-348.

Presentations

- Kamaraj, K., Zhang, G., Liu, Y., and Seright, R.S. 2011. "Effect of Residual Oil Saturation on Recovery Efficiency during Polymer Flooding of Viscous Oils." *Arctic Technology Conference*, Houston, Texas, 7-9 February.
- Seright, R.S., Fan, T., Wavrik, K., Wan, H., Gaillard, N., Favéro, C., 2011. "Rheology of a New Sulfonic Associative Polymer in Porous Media" Offshore Technology Conference, Houston, 2-5 May, 2011.
- Seright, R.S., T. Fan, K. Wavrik, H. Wan, N. Gaillard and C. Favéro, 2011. "Rheology of a New Sulfonic Associative Polymer in Porous Media." Paper SPE 141355. *SPE International Symposium on Oilfield Chemistry*, The Woodlands, Texas, USA, 11-13 April 2011.
- Seright, R.S., Fan, T., Wavrik, K., and Balaban, R.C. 2010. "New Insights into Polymer Rheology in Porous Media." Paper SPE 129200. *SPE Improved Oil Recovery Symposium*, Tulsa, Oklahoma, USA, 24-28 April, 2010.
- Seright, R.S. 2010. "Potential for Polymer Flooding Reservoirs with Viscous Oils." Paper SPE 129899. *SPE Improved Oil Recovery Symposium*, Tulsa, Oklahoma, USA, 24-28 April, 2010.
- Seright, R.S., Zhang, G., Akanni, O.O., and Wang, D. 2011: "A Comparison of Polymer Flooding with In-Depth Profile Modification." *Proceedings of the 2011 CSUG/SPE Canadian Unconventional Resources Conference, Calgary, AB, 15-17 November*. Paper SPE-146087.

Integration of Water Resource Models with Fayetteville Shale Decision Support and Information Systems (DE-FE0000804)

University of Arkansas

Presentations

- Abouabdillah, A., M. Di Luzio, J. Cothren, M. Williamson, 2011. "Modeling water resources management in the Fayetteville Shale Area." *International Petroleum & BioFuels Environmental Conference*. Houston, TX, Nov 8-10, 2011.

- Cooper, C., Smith, P., Williamson, M. Cothren, J. 2011. "IPAS: An ArcGIS Server-based framework for oil and gas E&P decision support." Oklahoma South Central Arc Users Group annual meeting, Moore, OK, October 25, 2011.
- Cothren J., G. Thoma, M. Di Luzio, 2010. "Geospatial Decision Support for Reducing Environment Impact in Natural Gas Shale Operations." *Managing Fayetteville Shale Play Development Workshop*. University of Arkansas, Fayetteville, AR. Nov 16, 2010.
- Cothren, J., M. Williamson, G.Thoma, 2010. "Decision-Support System for Pad Siting." *West Slope Colorado Oil & Gas Association Environmental Summit*, Oct 28, 2010.
- Cothren J., G. Thoma, M. Di Luzio, 2010. "Water Modeling in the Fayetteville Shale." *17th International Petroleum & BioFuels Environmental Conference*. San Antonio, TX, Sep 1, 2010.
- Dennis, R., J. Popp, 2010. "Willingness to Pay for Water Availability in Northwest Arkansas." *International Annual Meeting of the Agricultural and Applied Economics Association*, Denver, CO. Jul 26, 2010.
- Oluwafemi, M. G. Thoma, J. Cothren, 2010. "Water Accounting in the Fayetteville Shale Play: an application of the depth-averaged Navier-Stokes equation to Hortonian overland flow." *17th International Petroleum & BioFuels Environmental Conference*. San Antonio, TX, Sep 1, 2010.
- Williamson M., J. Cothren, P. Smith, 2010. "Reducing Environmental Impacts in the Fayetteville Shale Play using Geospatial Decision Support. A Spatial Quest: Twenty Years of Mapping the Natural State." *Arkansas GIS User's Forum*, Hot Springs, AR. Oct 27, 2010.
- Williamson M., J. Cothren, 2010. "Geospatial Decision Support for Reducing Environment Impact in Natural Gas Shale Operations." *Opportunities and Obstacles to Reducing the Environmental Footprint of Natural Gas Development in the Uintah Basin*, Vernal, UT. October 14, 2010.

Sustainable Management of Flowback Water during Hydraulic Fracturing of Marcellus Shale for Natural Gas Production (DE-FE0000975)

University of Pittsburgh

Peer-Reviewed Publications

- Gregory, K., Vidic, R, Dzombak, D., 2011. "Water management challenges associated with the production of shale gas by hydraulic fracturing." *Elements* 7(3), 181-186.

Presentations

- Barbot, E., R. Vidic, 2011. "Flowback water management in the Marcellus Shale play: Treatment options and new water supply." *NGWA Ground Water Summit and GWPC Spring Meeting*, Baltimore, MD, May 1-5, 2011.
- Barbot, E., R. Vidic, 2011. "Potential for the use of abandoned mine drainage for hydro-fracturing in Marcellus shale." *Geological Society of America – Northeast/North-Central Section*, Pittsburgh, PA, March 20-22, 2011.

- Barbot, E., Li, M., Vidic, R., 2011. "Flowback water and abandoned mine drainage: Chemistry and potential reuse as fracturing fluid." *Proceedings of the American Institute of Professional Geologists Conference: The Marcellus Shale: Energy Development and Enhancement by Hydraulic Fracturing*, April 13-14 2011, Pittsburgh, PA.
- Barbot, E., M. Li, S. Peng, K. Gregory, R. Vidic, 2010. "Use of acid mine drainage in management of flowback water from the Marcellus shale." *2010 ACS Conference*, August 22-26, 2010, Boston, MA, USA.
- Barbot, E., M.K. Henrikson, M. Li, J. Peng, K. Gregory, R. Vidic, 2010. "sustainable management of flowback water during hydraulic fracturing of marcellus shale for natural gas production." *AIPG Marcellus Shale: Energy Development and Enhancement by Hydraulic Fracturing Conference*, May 4-5, 2010 Pittsburgh, PA.
- Barbot, E., M. Li, J. Peng, K. Gregory, R. Vidic, 2010. "Flowback water management in the marcellus shale gas play: treatment and new water supply." *Upstream Shale Gas & Environmental Summit, IQPC*, September 28-30, 2010 Pittsburgh, PA.
- Barbot, E., M. Li, K. Gregory, R. Vidic, 2010. "Evaluation of abandoned mine drainage as a water supply for hydraulic fracturing." *Water-Energy Sustainability Symposium 2010*, September 26-29, 2010, Pittsburgh, PA, USA.
- Gregory, K., Barbot, E. and Vidic, R.D., 2010. "Sustainable Water Management During Hydraulic Fracturing of Shale for Natural Gas Production." *International Conference on Environmental Challenges: A Global Concern (ICEC-10)*, Kanya Maha Vidyalaya, Janandhar, Punjab, India, October 15-17, 2010.
- McSurdy, S., 2011. "Utilizing acid mine drainage for Marcellus Shale activities in Pennsylvania." *Pennsylvania's 13th Annual Abandoned Mine Reclamation Conference*, Hazelton, PA, Aug 5-6, 2011.
- Vidic, R.D., 2010. "Water management options for Marcellus shale development." *Global Shale Gas Water Management Initiative 2010*, Dallas, TX, October 27-29, 2010.
- Vidic, R.D., 2010. "Looking towards the future of Marcellus Shale exploration." *ASCE/EWRI/CS4 Pittsburgh Regional Water Conference: Protecting and Utilizing our Greatest Asset*, Pittsburgh, PA, September 9, 2010.
- Vidic, R.D., 2010. "Frack Water Management - panel discussion." *Marcellus Shale Policy Conference*, Pennsylvania Environmental Council and Duquesne University, Pittsburgh, PA, May 3-4, 2010.
- Vidic, R.D., 2010. "Sustainable water management for Marcellus Shale development." *Marcellus Shale Natural Gas Stewardship: Understanding the Environmental Impact*, Temple University Summit, Philadelphia, March 18, 2010.

Innovative Water Management Technology to Reduce Environmental Impacts of Produced Water (DE-FC26-08NT0005682)

Clemson University

Peer-Reviewed Publications

- Alley, B., Beebe, A., Rodgers, J., and Castle, J., 2011. "Chemical and physical characterization of produced waters from conventional and unconventional fossil fuel resources." *Chemosphere*, Sep 2011, 74-82
- Spacil, M., Rodgers, J., Castle, J., and Chan, W., 2011. "Performance of a pilot-scale constructed wetland treatment system for selenium, arsenic, and low molecular weight organics in simulated fresh produced water." *Environmental Geosciences*, Sep 2011, 145.

Presentations

- Alley, B., 2012. "Water Depth and Treatment Performance of Free Water Surface Constructed Wetland Treatment Systems for Simulated Fresh Oilfield Produced Water." Clemson Hydrogeology Symposium, Clemson, SC, April 12, 2012.
- Alley, B., Castle, J. W., and Rodgers, J. H., 2011. "Chemical and physical characterization of produced waters from conventional and unconventional fossil fuel resources." Clemson Hydrogeology Symposium, Clemson, SC, April 7, 2011.
- Alley, B., Beebe, A., Rodgers, J. H., Jr., and Castle, J. W., 2010. "A Comparative Characterization of Produced Water from Conventional and Unconventional Fossil Fuel Resources." *The American Association of Petroleum Geologists Annual Convention and Exhibition*, New Orleans, Louisiana, April 13, 2010.
- Alley, B., Rodgers, J., Castle, J., 2011. "Performance of Constructed Wetland Treatment Systems Designed to Renovate Oilfield Produced Waters for Beneficial Uses." Geological Society of America 2011 Annual Meeting, Minneapolis, Minnesota, October 9-12, 2011.
- Beebe, A., Alley, B., Castle, J., Rodgers, J., 2012. "Potential for Beneficial Use of Coal-Bed Methane Produced Water in Western Alabama to Augment Water Supplies During Intense Drought." Southeastern Geological Society of America Section 2012 Meeting, Asheville, North Carolina, April 1-2, 2012.
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Colorado School of Mines

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Carbon Dioxide Enhanced Oil Production from the Citronelle Oil Field in the Rodessa Formation, South Alabama – EOR/CO₂ Breakout (DE-NT43029)

University of Alabama at Birmingham

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University of Texas Austin

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Nanoparticle-Stabilized CO₂ Foam for CO₂ EOR Application (DE-FE00005979)

New Mexico Institute of Mining and Technology (NMIMT)

Presentations

Jianjia Yu, Cheng An, Di Mo, Ning Liu, Robert Lee, 2012. "Foam Mobility Control for Nanoparticle-Stabilized CO₂ Foam." *SPE Improved Oil Recovery 2012 Symposium*, Tulsa, OK, April 15-18, 2012

Jianjia Yu, Cheng An, Di Mo, Ning Liu, Robert Lee, 2012. "Study of Adsorption and Transportation Behavior of Nanoparticles in Three Different Porous Media." *SPE Improved Oil Recovery 2012 Symposium*, Tulsa, OK, April 15-18, 2012

Use of Engineered Nanoparticle-Stabilized CO₂ Foam to Improve Volumetric Sweep of CO₂ EOR Processes (DE-FE00005917)

University of Texas

Presentations

Aminzadeh-Goharrizi, B., DiCarlo, D.A., Roberts, M., Bryant, S.L., Huh, C., "Mobility control through in-situ formation of nanoparticle stabilized foam", *SPE Improved Oil Recovery 2012 Symposium*, Tulsa, OK, April 15-18, 2012

NOTE: This document contains a listing of all published reports and professional presentations relating to work supported by DOE's Non-Section 999 program. While many of these reports are "shared" publications, with support being obtained from several funding sources, we have endeavored to include only those reports in which the DOE's contribution was meaningful and substantial.

