



NASEO Clean Coal and Carbon Capture and Sequestration Study Tour and Workshop

Presenter Profiles

June 13 – 14, 2018
Houston, Texas

Mary Anne Alvin

Technology Manager, Rare Earth Elements Program, National Energy Technology Laboratory

Mary Anne Alvin joined the National Energy Technology Laboratory (NETL) in 2005, and since 2015 she has served as NETL's Rare Earth Element Technology Manager, responsible for validating the technical and economic feasibility for separation and recovery of salable, high purity, rare earth elements from domestic coal-based resources in conventional, prototype, and advanced operating systems.

Prior to joining NETL, Ms. Alvin had 30 years of experience at the Westinghouse Electric Corporation and at Siemens Westinghouse Power Generation, working in advanced energy systems. As a Fellow Scientist, she served as both program manager and principal investigator, leading advanced high temperature ceramic, intermetallics, and superalloy materials development for components used in domestic and off-shore, pilot- and demonstration-scale, land-based, power generation island wrap-around systems. Ms. Alvin currently holds 28 patents, with additional pending.

Jason Begger

Executive Director, Wyoming Infrastructure Authority

Jason Begger is the current Executive Director of the Wyoming Infrastructure Authority. He was raised on a family ranch in eastern Montana and after graduating from college, he moved to Washington, DC, working for two members of Montana's congressional delegation. In Washington, Mr. Begger staffed the 2002 Farm Bill debate and later the Energy and Water Appropriations Subcommittee, focusing on Bureau of Reclamation water projects and Department of Energy Office of Fossil Energy funding. In 2006, Mr. Begger accepted a position with the Petroleum Association of Wyoming, before becoming the Manager of Government affairs for Rio Tinto Energy America, which became Cloud Peak Energy. He started with the WIA in July 2015. Mr. Begger has a BA in History from Montana State University – Billings and a Master of Business Administration from the University of Denver.

Chris Dorrington

Administrator, Air, Energy, and Mining Division, Montana Department of Environmental Quality

Chris Dorrington is the Administrator of the Air, Energy and Mining Division of the Montana Department of Environmental Quality (DEQ). He is a Montana native and graduated in 1998 from Gonzaga University with a

BS in Mechanical Engineering. In 2010, Mr. Dorrington enhanced his academic profile by earning a Master's degree in Public Policy from George Mason University. He has held leadership positions in state government for the past 13 years. Prior to that Mr. Dorrington worked for six years in the telecommunication, financial services, and commercial construction industries.

Mr. Dorrington is a current appointee to the Colstrip Community Impact Advisory Group. The multidisciplinary and multijurisdictional advisory group is tasked with developing a transition plan that demonstrates appropriate and beneficial use of a 10 million-dollar Puget Sound Energy settlement for this Montana community, deeply affected by the planned shut-down of coal-fired power generating units.

Dr. Richard Esposito

Research and Development Program Manager, Geosciences and Carbon Management, Southern Company

Dr. Richard Esposito has over 27 years of experience in the electric utility industry in various roles and currently serves as Southern Company's Research and Development Program Manager of Geosciences and Carbon Management. He works with a wide range of energy-related issues including bulk energy storage, geothermal power, deep well disposal of wastewater, CO₂ utilization, and geologic storage. Dr. Esposito has both a B.S. and M.S. degree in Geology and a PhD in Engineering with a focus in CO₂-EOR.

Before Southern Company, Dr. Esposito worked as an environmental regulator at the Alabama Department of Environmental Management. He also serves as a research professor and graduate student advisor/committee chair in the Department of Mechanical Engineering at the University of Alabama at Birmingham and is an adjunct faculty member teaching energy-related courses at Samford University. Dr. Esposito has published extensively over the years and lectured both domestically and internationally on carbon capture and sequestration technologies.

Matthew Fry

Natural Resource Policy Advisor, Office of Wyoming Governor Matt Mead; Representative of Co-Convening Governors, State CO₂-EOR Deployment Work Group

Matthew Fry was born and raised in Staunton, Virginia. He has a Bachelor's of Science in Biology, with a minor in Chemistry from Davis and Elkins College, and a Master's in Natural Resource Law from the University of Denver – Sturm College of Law. He has worked in the natural resource field for approximately 20 years, in both the public and private sectors. Mr. Mead is currently a policy advisor for Wyoming Governor Matt Mead. He has worked for a number of fish and wildlife management agencies. Additionally, Mr. Mead has worked as an environmental professional in the manufacturing and transportation fields.

Dr. Susan Hovorka

Principal Investigator, Gulf Coast Carbon Center, Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin

Dr. Susan Hovorka is a Senior Research Scientist at the Bureau of Economic Geology, Jackson School of Geosciences, at The University of Texas at Austin. She has a BA in geology from Earlham College and an MA and PhD from the University of Texas. She has worked on diverse topics related to water quality protection, waste storage in bedded salt, and reservoir characterization. Dr. Hovorka's current research focuses on assessment of effectiveness of subsurface geologic sequestration of CO₂ as a mechanism for reducing atmospheric greenhouse gas emissions. She is the principle investigator of the Gulf Coast Carbon Center an industry/academic partnership working on economically viable approaches to geologic sequestration of CO₂. Dr.

Hovorka is the project lead for the " Early" test of the Southeast Regional Carbon Sequestration Partnership (SECARB) which has monitored injection of 3 million tons of CO₂ at Denbury's Cranfield Field. She has recently completed leading a research team in completion of the two-phase Frio Pilot, a first US field test of

storage of CO₂ in brine-filled sandstones also funded by DOE-NETL. Both of these projects have recently been recognized by the international Carbon Sequestration Leadership Forum. Dr. Hovorka is also active in facilitating exchange between applied scientists and the broader public, with a focus on pre-college students and teachers, and is co-investigator for the STORE education program.

Dr. Laura Nelson

Governor's Energy Advisor and Executive Director, Utah Office of Energy Development

Dr. Laura Nelson was appointed in May 2016 by Governor Herbert to serve as his Energy Policy Adviser. She continues to also serve as the Executive Director of the Utah Office of Energy Development, a position she has held since July 2014. Prior to joining Governor Herbert's Energy Office, Dr. Nelson served as the Vice President of Government and Regulatory Affairs for Potash Ridge, Corp., the Vice President of Energy and Environmental Development at Red Leaf Resources, and as the Energy Advisor to Utah Governor Jon M. Huntsman. She also served as the Energy Policy Advisor to the Idaho Public Utilities Commission and a Technical Consultant to the Utah Division of Public Utilities.

Dr. Nelson has been proactive in defining and supporting balanced and sustainable energy solutions, including providing Congressional testimony, participating in regional collaborations, working with counties and cities, and coordinating across diverse stakeholders. Dr. Nelson has over 20 years of experience working on energy and natural resource issues in both the public and private sectors. She has a solid track record of working collaboratively to deliver positive policy, regulatory, and commercial results. Dr. Nelson holds a Ph.D. in Economics from the University of Utah.

Traci Rodosta

Carbon Storage Technology Manager, National Energy Technology Laboratory

As the Carbon Storage Technology Manager, Traci Rodosta plans and implements current and new research and development (R&D) initiatives at the National Energy Technology Laboratory (NETL) for the U.S. Department of Energy's Carbon Storage Program. Her technical understanding of subsurface processes, coupled with previous experience from both NETL and industry, are instrumental in managing the complex R&D portfolio including coordinating and collaborating with many stakeholders in support of DOE Strategic Goals. Prior to NETL, Ms. Rodosta worked as both an exploration and development geoscientist characterizing reservoirs and conducting resource assessments on domestic and international assets for Texaco and Chevron Oil Companies. She is currently a Professional Geoscientist and received a B.S. in Geology and Geophysics from Louisiana State University and a M.S. in Geology with a focus on Structural Geology from the University of New Orleans.

David Terry

Executive Director, National Association of State Energy Officials

David Terry is the Executive Director of the National Association of State Energy Officials and has worked with NASEO in a variety of capacities since 1996. Mr. Terry leads NASEO's programs in support of the nation's 56 State and Territory Energy Offices. The organization communicates the states' views on virtually all national energy issues, including electricity policy, energy efficiency market transformation, renewable energy commercialization and deployment, industrial energy efficiency, energy assurance and reliability, building codes and efficiency, and climate oriented energy programs.

Mr. Terry has 20 years of experience working on a range of energy issues for such organizations as the Association of State Energy Research Institutions, Governors' Biofuels Coalition, National Academy of Sciences, and the U.S. Department of Energy. Prior to working in the energy area, Mr. Terry was a statistical analyst for a market research firm, an analyst with the National Academy of Sciences, and a researcher for The Washington Post. He received a BA degree from Bowling Green State University, Bowling Green, Ohio, and he has completed graduate coursework in statistics and marketing at Virginia Tech, Blacksburg, Virginia.

Eddy Hugh Trevino, P.E.

Manager, Texas State Energy Conservation Office, Texas Comptroller of Public Accounts

Eddy Trevino is the State Energy Program Manager for the Texas State Energy Conservation Office (SECO). He also manages the LoanSTAR revolving loan program and the Clean Energy Incubator initiative within SECO. Over the life of the LoanSTAR revolving loan program, fund value has increased to \$220 million with over 290 loans.

Mr. Trevino's professional designations include a registered Professional Engineer and a Certified Energy Manager. He has 27 years of engineering and management experience. While attending the University of Texas at Austin, Mr. Trevino earned the following degrees: Bachelor in Architectural Engineering (1980), an MBA (1986), and a Master in Technology Commercialization (2001). These degrees provided the technical education necessary to manage the SECO programs.

Jacob Wilkinson, P.E.

Engineer, Michigan Energy Office, Michigan Agency for Energy

Jake Wilkinson is an Engineer in the Michigan Energy Office (MEO) where he oversees several projects. Mr. Wilkinson was responsible for administering the two, recently closed, MEO LED lighting rebate programs for conversion of building and street lighting within the state. He also manages several grants in support of projects across the state including supporting the 2030 Districts in Grand Rapids and Detroit as well as development of an analytical and advisory software for water treatment facilities. Mr. Wilkinson is also in the process of starting a Codes Compliance Collaborative to improve compliance with current energy codes in Michigan. He has a Bachelor's degree in Chemical Engineering from Michigan State University and worked several years as a process engineer in manufacturing before joining the Michigan Energy Office.

Dr. Charles Zelek

Senior Economist/Team Supervisor, Energy Markets Analysis Team, National Energy Technology Laboratory

Dr. Charles Zelek is a senior economist with the U.S. Department of Energy's (DOE) Office of Fossil Energy (FE). In this capacity, he conducts energy market analyses to inform FE's fossil energy research, development, and demonstration programs and contribute to related policy and regulatory decision making. Dr. Zelek has worked in the field of energy economics for over 20 years across positions in academia and government. He has conducted research on terrestrial carbon sequestration internationally in the Philippines, supported formulation of the Energy Title of the 2008 Farm Bill as a senior economist for the U.S. Department of Agriculture, and evaluated the impacts of advanced energy technologies at DOE. Currently Dr. Zelek's research focuses on the energy-water-food nexus.