Presenter Biographies

Thomas M. Johnson, CPG, Moderator - Alpha Geoscience, Inc.
email: tjohnson@alphageoscience.com
Tom Johnson is a hydrogeologist and Vice President of Alpha Geoscience in Clifton Park, NY. He has been a member of AIPG since 1987, is a licensed geologist in Washington, and a certified professional geologist in Virginia. He is an active member in the NYS Council of Professional Geologists and the Hudson-Mohawk Professional Geologists Association. Tom received a BS degree in geology from SUNY Cortland and a MS degree in geology from SUNY Fredonia. He recently assisted in preparing a technical report for developing natural gas using horizontal drilling and high volume hydrofracturing in support of the NYSDEC Supplemental Generic Environmental Impact Statement (SGEIS). His career as a consultant also includes providing a wide range of geologic, hydrogeologic, and environmental evaluations, primarily for private sector clients.

Peter Muller, PhD, CPG, Moderator - Alpha Geoscience, Inc.
email: pmuller@alphageoscience.com
Peter Muller is a geologist with Alpha Geoscience in Ardmore, PA. Prior to his recent move to Alpha he was a professor of geology at the State University of New York at Oneonta for 27 years, teaching undergraduate and graduate courses in structural geology and tectonics, engineering geology, map and field geology, mineral resources, physical geology, and waste management. Peter received his BS in geology from Bucknell University and his PhD from Binghamton University. He has extensive field experience in a wide range of domestic geologic settings including the Pennsylvania and Maryland Piedmont, Mesozoic basins, and Valley and Ridge; the Appalachian Plateau and Adirondacks of New York; the Laramide ranges of southwest Montana and internationally, in the Betic Cordillera of southern Spain; Caribbean-North American plate boundary zone in Guatemala; and the western Zagros of Iran. He recently assisted in preparing a technical report for developing natural gas using horizontal drilling and high volume hydrofracturing in support of the NYSDEC Supplemental Generic Environmental Impact Statement (SGEIS). He also has conducted considerable research for, and participated in, a successful demonstration project to treat frac water from the Marcellus shale. Peter is a CPG and serves on the new AIPG Student Outreach Committee.

John P. Martin
email: jpm@nyserda.org
In 1993, John joined the New York State Energy Research and Development Authority to manage its Subsurface Resources Program and developed a portfolio of more than 100 projects with total funding in excess of $50 million. In addition, he completed the initial research on the natural gas potential of New York's Utica Shale that helped stimulate significant industry investment in this resource. John regularly lectures and publishes on such diverse topics as the development of shale gas reservoirs, carbon capture and sequestration, compressed-air energy storage, renewable energy resource development, and research policy. He holds a Ph.D. in Urban and Environmental Studies, an M.S. in Economics and a B.S. in Geology, all from Rensselaer Polytechnic Institute. He also holds an M.B.A. from Miami University and completed graduate work in mineral economics at West Virginia University.

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Mark W. Eisner, PG - Advanced Land and Water, Inc.
email: meisner@alwi.com
Mr. Mark W. Eisner, P.G. is President of Advanced Land and Water, Inc. (ALWI). Possessing more than twenty-three years experience in environmental and hydrogeological consulting, Mr. Eisner directs hydrogeologic and hydrologic investigations for both private and public sector clients. Mr. Eisner's foremost technical expertise in matters relating to water resources, including the occurrence, movement, use and management of both groundwater and surface water as a natural resource, its susceptibility and properties when contaminated, and in methods for its safe and sustainable development, and when necessary, its remediation. He is a licensed Professional Geologist in all Mid-Atlantic states that have such regulatory licensure and certification programs (DE, PA, and VA). On numerous occasions, Mr. Eisner has testified as an expert on matters related to groundwater resources, surface water resources, hydrogeological conditions, environmental contamination and due diligence studies. Specific areas of his technical expertise include mathematical modeling of hydrogeologic systems, pumping tests, and groundwater contamination investigation and remediation. Presently his consulting practice concentrates on the following: Water Resources Exploration and Development in the Mid Atlantic Region, Environmental Investigation and Remediation, Project Management, and Regulatory Affairs.

Jay N. Smith - Salt Water Solutions, LLC
email: jnswater@frontiernet.net
Mr. Jay N. Smith is the President of Salt Water Solutions, LLC. He graduated from Alfred University with a BS in Engineering in 1966 and graduated from Finger Lakes Community College with an AS in Computer Science in 1995. From 1989 to 2004 he worked at Culligan Water Conditioning as the General Manager of the local franchise at the time of the Retsof Mine Collapse in 1994 and worked as engineer and licensed operator for Akzo Nobel Inc. and Zurich Insurance on water problems resulting from the mine collapse.

From 2004 to present he has been a consultant for Zurich Insurance responsible for all phases of the Brine Mitigation Project including both construction and operation, which was designed to control the "mine squeeze" coming from the collapsed mine.

In 2009 he formed Salt Water Solutions, LLC with LMC Industrial Contractors and Alpha Geoscience to manufacture, maintain and operate crystallizers to operate on multi-chlorides generating beneficial products of high purity salt, high calcium products and distilled water.

Rich Nyahay - Gastem-USA and Strategic Environmental, LLC
email: rich.nyahay@gastemusa.com
Mr. Nyahay holds a BA degree in geology from SUNY College at Plattsburgh, NY. He has worked at the New York State Geological Survey and State Museum in the oil and gas office from 1983-2008. He joined GastemUSA as geology and geophysics manager in August of 2008.

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David Alleman - ALL Consulting
email: dalleman@all-llc.com
David Alleman is an Environmental Manager/Ecologist with ALL Consulting (www.all-llc.com). Mr. Alleman earned his Bachelor's degree in Wildlife Ecology and his Masters degree in Plant Ecology from Oklahoma State University. He has a long history of environmental research related to energy production in the United States. Mr. Alleman's energy and environmental experience includes conventional oil and gas production, both on-shore and off-shore, as well as coal bed natural gas, shale gas, oil shale, processing, and coal. As a research manager with the U.S. Department of Energy, he has been involved in many of the significant technical and regulatory environmental issues affecting industry over the last 20 years. He has been heavily involved in environmental issues pertaining to unconventional resource development and production. Mr. Alleman has served a major role on several significant projects involving unconventional resources; environmental considerations pertaining to shale gas development; produced water management and recycling; access to federal lands; and low impact natural gas and oil development.

Paula Ballaron, PG - Susquehanna River Basin Commission
email: PBallaron@srbc.net
Paula Ballaron is the Director of the Regulatory Program at the Susquehanna River Basin Commission (SRBC). The Regulatory Program is responsible for SRBC's regulatory functions; including withdrawal and consumptive water use application review; aquifer testing review and analysis; and the Approval by Rule Program.

Paula's duties at the SRBC include supervision of a professional team of geologists, hydrologists, environmental scientists, and biologists. The program's review activities are focused on using 'sound science' to formulate its recommendations for Commission action that strike a balance between beneficial development and safeguarding adequate flows for public water supplies, industries, agriculture and recreation, and protecting aquatic life, habitat and water quality. A goal of the water management program is the long-term sustainable utilization of the basin's shared water resources.

SRBC is the governing agency established under a 100-year compact signed on December 24, 1970, by the federal government and the states of New York, Pennsylvania, and Maryland to protect and wisely manage the water resources of the Susquehanna River Basin. The Susquehanna River starts in Cooperstown, New York, and flows 444 miles to Havre de Grace, Maryland, where the river meets the Chesapeake Bay.

Albert B. Yost II - Technology Manager for Exploration and Production Research, US Department of Energy, National Energy Technology Laboratory (NETL)
email: Albert.Yost@NETL.DOE.GOV
Albert Yost is currently Technology Manager for Exploration and Production Research at the Department of Energy's National Energy Technology Laboratory (NETL) in Morgantown, WV. In this position he provides oil and gas technical advice to the Director, Strategic Center for Oil and Gas at NETL and manages a multi-million dollar portfolio of research projects focused on accelerating the recovery of domestic unconventional oil and natural gas resources, enhanced oil recovery, and mitigating the environmental impact

of oil and gas E&P activities. Mr. Yost has more than 30 years of experience in the management of federal research related to drilling, well completion and stimulation, enhanced oil recovery using carbon dioxide, and natural gas storage, transmission, and distribution. He has authored and co-authored more than 30 publications related to unconventional gas and enhanced oil recovery. Mr. Yost has also served as Director, Oil and Gas Division at NETL where he developed and implemented multiple oil and gas R&D portfolios across various upstream and downstream petroleum areas. More recently, he served a three-year stint working with DOE and DHS Headquarters, helping to set up and implement a new program focused on energy assurance and homeland security. Al Yost received a B.S. in petroleum engineering in 1975 and an M.S. in petroleum engineering in 1982 from West Virginia University.

Jean M. Neubeck, Alpha Geoscience
email: jneubeck@alphageoscience.com
Jean M. Neubeck is a Senior Hydrogeologist with Alpha Geoscience. Jean has a B.S. in Geology from the State University of New York at Binghamton and is a Registered Professional Geologist in Arkansas and Wyoming. Ms. Neubeck has 27 years of experience assessing geologic and hydrologic conditions for a wide range of projects. She is experienced in environmental regulations and has reviewed and prepared Environmental Impact Statement documents for proposed activities under the NYS State Environmental Quality Review Act (SEQRA). Jean was among the consultants who provided technical support to the NYSDEC through NYSDERA to prepare the draft SGEIS for developing natural gas from low-permeability formations. She has performed many investigations and sampling of ground water quality and water supplies. Jean also is experienced in managing construction and remedial activities for hazardous materials and spill sites.

Allan Sattler - Sandia National Laboratories
email: arsattl@sandia.gov
Allan Sattler, Distinguished Member of Sandia Technical Staff, received his BS from UCLA (1954), his MS (1959), and Ph.D. in nuclear physics (1963) from Penn State. He served two years in the U. S. Army. He worked a year at General Electric Atomic Power Equipment Department. He spent a year studying nuclear physics in Holland on a Fulbright Grant. He has been at Sandia National Laboratories for 46 years, working in areas of radiation damage, the nation's weapons program, radioactive waste (which included a year at a German waste facility), unconventional oil and gas sources, continental scientific drilling, the Strategic Petroleum Reserve, geothermal drilling and exploration, recently working in carbon sequestration, and, for much of the last decade, reclaiming produced water from hydrocarbon production for alternative uses.

Matthew E. Mantell, PE - Chesapeake Energy Corporation
email: Matt.Mantell@chk.com
Matt Mantell is a Corporate Environmental Engineer with Chesapeake Energy working out of their headquarters in Oklahoma City, OK. Matt is responsible for produced water management, water treatment and reclamation, environmental issues with hydraulic fracturing, and water sourcing and supply development. His education includes a Bachelor of Science in Geography, a Master of Regional and City Planning, and a Master of Science in Civil Engineering (w/Environmental Emphasis) all from the University of Oklahoma. Matt is a licensed professional engineer in Oklahoma, Texas, and Pennsylvania. Prior to joining Chesapeake

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Energy in June 2008, he was a Staff Engineer in the water business group with the consulting firm, CH2M HILL, working out of the company's Oklahoma City office.

Tracy L. Bank - Department of Geology, University of Buffalo
email: tlbank@buffalo.edu

Andrew J. Lombardo, CHP - Safety and Ecology Corporation
email: alombardo@sec-tn.com
Vice President of Professional Services, Safety & Ecology Corporation
Mr. Lombardo has over 28 years of experience in radiation protection/health physics and the management of radioactive material sites including radiological engineering, hazardous and radiological waste characterization, project management, decontamination and decommissioning, and environmental remediation. Mr. Lombardo currently serves as the program manager for SEC's professional services/nuclear services practice providing a broad range of radiological services to government and commercial clients. He has a Master of Science degree from the University of Pittsburgh in Health Physics and is certified in the practice of comprehensive health physics by the American Academy of Health Physics. Mr. Lombardo is an industry expert in the characterization and management of naturally occurring radioactive material (NORM) and technologically enhanced NORM (TENORM).

Cliff Frohlich - University of Texas at Austin
email: cliff@utig.ig.utexas.edu
Cliff Frohlich is an earthquake seismologist and Associate Director at the University of Texas Institute for Geophysics (UTIG), where he has been employed since 1978. He is the word's leading authority on Texas seismicity, a coauthor of the book Texas Earthquakes, and a co-author on the recent paper in Leading Edge describing the 2008-2009 Dallas-Fort Worth earthquakes. However, being the world's leading authority on Texas earthquakes is not a full-time job, and he is better known internationally for his research on deep-focus earthquakes, moonquakes, and tsunamis. In 2008 he was chosen as a Distinguished Lecturer for the Incorporated Research Institutions for Seismology (IRIS) and the Seismological Society of America (SSA).

Daniel Tormey, PhD, PG - ENTRIX Inc.
email: dtormey@entrix.com
Dr. Tormey is a geologist, geochemist, and engineer with well-developed skills in framing and analyzing environmental issues, and in communicating complex ideas to a wide range of audiences. He has been project manager or technical lead for over one hundred projects requiring fate and transport of chemicals in the environment, including analysis, fate and transport modeling of chemicals in groundwater and surfacewater, study of linked groundwater-surfacewater systems, sediment transport analysis, quantification of adsorption/desorption kinetics, air dispersion modeling, among others. His work with contaminants also includes site assessment, forensic geochemistry, risk assessment, feasibility study, and site remediation. Dr. Tormey has served as a technical expert in fate and transport issues supporting either litigation or agency testimony involving petroleum, solvents, metals, pesticides, and plastic components. In addition, he has been a task manager and technical lead for fluid injection projects, including water injection, steam injec-

tion, and slurry injection in oilfields. Dr. Tormey has a B.A. in Civil Engineering and Geology from Stanford University and a Ph.D. in Geology and Geochemistry from MIT.

Paul Washington, PhD - SUNY Oneonta
email: paul.washington@gmail.com
I am a soft-rock structural geologist specializing in the deformation along the outer edges of the northern and central Apalachians. My recent work focuses on the structure of the Nittany Valley and adjoining edge of the plateau ... which has led to some of the conclusions I will be presenting at the conference.
Degrees: B.S. Allegheny College (Meadville, PA), M.S. SUNY Albany, Ph.D. University of Connecticut.
Although I have been teaching at SUNY Oneonta this academic year, I am an independent geologist working out of the Lock Haven (PA) area.

Thomas Doe, PhD, LG, LEG, LHG - Golder Associates, Inc.
email: TDoe@golder.com
Thomas Doe received his PhD from the University of Wisconsin-Madison in Geology and Mining Engineering in 1980. He is a specialist in fluid flow in fractures and hydraulic fracturing for in situ stress measurement, with applications in oil and gas reservoirs, radioactive waste disposal, hydroelectric power, and groundwater hydrology. He is part of the FracMan Technology Group of Golder Associates in Redmond WA, is a past president of the American Rock Mechanics Association and former member of the National Academy of Sciences Committee on Geological and Geotechnical Engineering.

Kirby Walker - Schlumberger
email: walker26@slb.com
Kirby Walker received his B.S in Petroleum, Natural Gas Engineering from The Pennsylvania State University in 1993. He has worked his entire career for Schlumberger in many different operational, management and technical capacities in South Texas, Alaska, Venezuela, Russia as well as here in the Appalachians. Throughout his career his concentration has been on production engineering and stimulation techniques with his most recent focus being the Marcellus shale of the Appalachian basin. He also manages the development of Schlumberger's microseismic business, StimMAP, for the Appalachians.

He is active in the Pittsburgh SPE chapter where he currently holds the position of Vice Chair. He has held client courses on Reservoir Management, Candidate Recognition and Hydraulic Stimulation Design.

John R. Hellmann - University of Pittsburgh
email: jrh3@ems.psu.edu
John R. Hellmann is Professor of Materials Science and Engineering and Associate Dean for Education in the College of Earth and Mineral Sciences. As a Penn State faculty member since 1986, he has also served as Associate Director of the Center for Advanced Materials (1986-1995), Chairman of the Ceramic Science and Engineering Program (1998-2001), and as Associate Head for Undergraduate Studies in Materials Science and Engineering (2001-2007). In addition to maintaining an active teaching and research portfolio, in his

position as Associate Dean he is responsible for curriculum, accreditation, recruiting and retention, scholarships, international internships, and outreach activities in the College of Earth and Mineral Sciences

His research interests concern the mechanical reliability and thermochemical durability of ceramics, metals, and intermetallic materials in severe thermal environments. He has active research programs in development and characterization of materials for gas turbines, advanced propulsion systems, and enhanced oil and natural gas recovery technology, as well as in the design and fabrication of laminated ceramic composites possessing engineered stress states for use as armor and cutting tools. He has published over one hundred peer reviewed papers on research supported by the Department of Energy, NASA, Office of Naval Research, National Science Foundation, and industry, and has supervised the research of over 120 graduate and undergraduate students, many of whom have received national and international awards for their work.

Professor Hellmann earned his bachelor and doctorate degrees in Ceramic Science at Penn State, followed by a five year stint as a member of technical staff at Sandia National Laboratories in Albuquerque, New Mexico prior to returning to the faculty at Penn State.

A Fellow of the American Ceramic Society, Professor Hellmann has also served on the Society's Board of Directors, as President of the Ceramic Educational Council, President of the National Institute of Ceramic Engineers, Associate Editor of the Journal of the American Ceramic Society, and was named the 2008 Outstanding Educator and a Distinguished Mentor by the Society for his role in advising and nurturing students and young professionals in the field of materials science and engineering.

Denise Tuck
email: Denise.Tuck@Halliburton.com
Ms. Tuck has over 27 years of experience in the environmental engineering field. She has worked for Halliburton for over 20 years in several positions within the Global Health, Safety and Environment group. Her current duties include participating on the Hydraulic Fracturing Team at Halliburton in regulatory support of its business activities. She has served on several API and SPE committees. She has a chemical engineering degree from Auburn University and is a registered engineer in Texas. She is a member of SPE, AWMA and Texas Association of Environmental Professional.

Jason Bryant - Halliburton
email: Jason.Bryant@Halliburton.com
Jason Bryant graduated from the University of Oklahoma in 1998 with a BS in chemical engineering. Shortly thereafter, he earned his MS and PhD in chemical engineering at Northwestern University in Evanston, Illinois where his research was primarily focused in the area of fluid rheology and non-Newtonian fluid mechanics. Afterwards, Jason joined Halliburton in 2004 working in projects related to stimulation fluid characterization and development. He currently resides as the friction reducer project lead.

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Elise Barbot, PhD - University of Pittsburgh
email: elisebarbot@gmail.com

Elise Barbot, Ph.D., currently holds a post-doctoral position at the University of Pittsburgh, department of Civil and Environmental Engineering, where she is performing research on sustainable management of flowback water from the Marcellus Shale basin. Understanding the chemistry of flowback water mixed with fresh water or acid mine drainage as well as membrane filtration are important elements of this work. Dr. Barbot holds a chemical engineering degree from the National Higher School of Chemical Synthesis, Process and Engineering, University of Aix-Marseille (France), a M.S. in Process Engineering and Physical-Chemistry, and a Ph.D. in Process Engineering from University of Aix-Marseille.