



Pennsylvania Council Of Professional Geologists 116 Forest Drive • Camp Hill, PA 17011 Phone (717) 730-9745 • pcpg.org

Annual Meeting Program

Wednesday, March 6, 2019 Holiday Inn Harrisburg Hershey 604 Station Road (Off Route 81) Grantville, PA 17028

8:00 - 10:00	Student Poster – Assisted	Set-Up	(Rovale I)

9:00 – 11:00 PCPG Board Meeting (Congressional)

11:00 – 11:30 Annual Meeting Registration / Arrivals (Grande Ballroom)

11:30 – 12:50 Annual Meeting Luncheon (Grande Ballroom)

- Opening Welcome (Martin Helmke, Ph.D., P.G., PCPG President)
- Board Introductions, Recognition of Past Service
- Current and Planned Activities
- PCPG Scholarship Poster Contest Overview (Richard Wardrop, P.G.)

12:50 – 1:20 News and Dialog with the Pennsylvania Geological Survey

Gale Blackmer, Ph.D., State Geologist (PA DCNR)

It's been a busy time at the Survey: staff turnover, new projects, and a fresh look at priorities for the Survey and DCNR as a whole. Gale will share the news, and give you a peek at the new strategic plan. One of the "pillars" of that plan is partnerships, including with PCPG. There will be plenty of time for your feedback on our services and discussion of ideas for the future.

1:25 – 2:15 The Intersection of Archaeology and Geology

Brian L. Fritz, Quemahoning, LLC

Archaeology is the study of past human cultures through the excavation of artifacts and material remains found within the ground. The soil that contains and preserves artifacts is a geological medium. The artifacts themselves are most often made from geological materials. Presented are some examples of how the study of landforms, sedimentation, soil formation, and historic mineral extraction have helped to inform archaeological studies. Archaeology and Geology occupy common ground, but archaeologists and geologists often do not speak a common language. Some suggestions for better communications between archaeologists and geologists are provided.

2:15-2:30 Break

2:30 – 3:20 Mapping and Monitoring Surface and Underground Mines and Mine Pools throughout Northeastern Pennsylvania

Robert E. Hughes, Executive Director

Eastern PA Coalition for Abandoned Mine Reclamation (EPCAMR)

The Eastern Pennsylvania Coalition for Abandoned Mine Reclamation (EPCAMR) works with coalfield communities facing significant environmental impacts from legacy abandoned

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mines. This talk will cover economic redevelopment of legacy landscapes for alternative energy projects, resource recovery of trace and rare earth metals, and georeferencing mine maps to locate points of infiltration, potential areas for subsidence, mine pool boundaries and elevations, and extents of mined-out areas. These projects help the public and businesses make informed decisions for land development and the need to purchase mine subsidence insurance for their own safety and peace of mind.

3:25 – 4:15 Using Compound Specific Isotope Analysis At Fulton Superfund Site Long Island NY Lisa Voyce, Senior Project Manager, HDR Engineering, Inc. Vincent Carbone, P.G., HDR Engineering, Inc.

This presentation discusses the use of Compound Specific Isotope Analysis (CSIA), a geochemical environmental forensic method in identifying volatile organic contamination sources. This technique has been used by the USEPA as a forensic tool to help to identify potentially responsible parties (PRPs) that may have been or are contributing to a commingled plume in the upper Glacial and Magothy aquifers in Long Island, as described in our case study. This presentation will provide an introduction to CSIA and information on an active investigation to illustrate how CSIA was used in combination of other characterization techniques to provide multiple lines of evidence to walk back plumes to potential source areas.

4:15 - 5:00 Announcements, Poster Scholarship Winners, Door Prizes, Annual Meeting Adjournment

5:00 – 6:30 Networking Reception

Please remember to sign-out, and pick-up your certificate of attendance prior to your departure.





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About today's speakers

Gale Blackmer, Ph.D., State Geologist (PA DCNR) - Gale Blackmer, Ph.D., State Geologist (PA DCNR) - Gale holds a B. A. in Geology from the University of Pennsylvania, an M. S. in Geology from Penn State, and a Ph.D. in Geology from Penn State. She ran through a few years with environmental companies and a series of temporary teaching positions before landing at the Pennsylvania Geological Survey in 1999, where her focus was on bedrock mapping in southeastern Pennsylvania. If pressed to identify a specialty, she would say structural geology and tectonics, although like most good mappers, she knows just enough about many disciplines to be dangerous. Gale worked her way up from Geologic Scientist to Manager of the Mapping Division. She was named Bureau Director and State Geologist in 2015.

Vincent M. Carbone, P.G., Senior Geologist (HDR Engineering) - Mr. Carbone is the Environmental Due Diligence Technical Service Lead for HDR and is a senior geologist at HDR with over 26 years of experience in the performance of site assessment and remediation for multiple market sectors. His experience encompasses brownfields redevelopment, NEPA reports, due diligence studies during FERC relicensing, mergers and acquisitions, site characterization assessments, remedial investigations, geophysical studies, feasibility studies, interim remedial measures, site management, operations and maintenance and monitoring. Mr. Carbone is responsible for the geologic and hydrogeologic interpretation.

Brian L. Fritz (Quemahoning, LLC) - Brian L. Fritz is an Adjunct Professor at Clarion University of Pennsylvania and the Owner/Principle Archaeological Investigator for Quemahoning, LLC, a cultural resources consulting business that specializes in applying principals of geology within the practice of archaeology. Mr. Fritz has earned a B.S. in geology and a B.A. in Anthropology from Clarion University of Pennsylvania, and an M.S. in Geology at the University of Akron.

Bobby Hughes, Executive Director (Eastern PA Coalition for Abandoned Mine Reclamation) - Robert E. Hughes has been the Executive Director of EPCAMR since 1997. He has over 25 years experience in abandoned mine reclamation, mine water pollution remediation, mine mapping of surface and underground mines, anthracite history, grant writing/management, and environmental education. Robert is a native of the Wyoming Valley, born on the historic Day of the Agnes Flood, June 23rd, of 1972, yet another watershed moment that helped to put an end to underground mining in the Anthracite Region. Hughes earned a BS in Environmental Resource Management, with a Technical Area of Water Pollution Control from The Pennsylvania State University, May of 1995.

Lisa Voyce, Senior Project Manager (HDR Engineering) - Lisa Voyce is a Project Manager and Professional Associate for HDR Inc., where she is involved with Superfund risk assessment and remediation. She is the PM for a \$5M Superfund RI/FS for USEPA Region 2 involving a major commingled TCE/PCE plume. She earned her M.S. in Environmental Engineering from NJ Institute of Technology, specializing in Hazardous Waste Engineering/Toxicology. Lisa has 30 years of experience as a regulator (with USEPA, North Carolina and NJ Highlands Council) and environmental consultant, having worked for several other firms prior to joining HDR. She supports a variety of federal, state and private client work involving site investigation and cleanup, regulatory compliance, permitting, the protection of public health and use of environmental forensics.