



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

#### PCPG 2024 Annual Meeting, Education Program, Networking

#### Thursday, February 29, 2024

The Best Western Central Hotel & Conference Center 800 East Park Drive, Harrisburg, PA 17111

8:30-9:30	Registration/Morning Refreshments/Networking (Pre-Function Ballroom A/B/C)
9:30-9:35	Welcome/Opening Remarks (Ballroom A/B/C) Jason Floyd, PG, President / Chief Hydrogeologist (Mountain Research, LLC)

**PCPG** President

9:40-10:40 State of the Survey 2024

Gale C. Blackmer, PhD, Pennsylvania State Geologist

With 50% new staff since 2021, the Pennsylvania Geological Survey is in an excellent position to provide the geologic information necessary to address the challenges of the energy transition and climate change. Dr. Blackmer will give an overview of the Survey's current initiatives. An interactive opportunity for audience input on use of Survey products is planned.

### 9:45 - 2:40 Student & Young Professional Session (Ballroom D/E)

Professional Development through Emotional Intelligence, Change Management,
Positive Assertiveness and Accountability

Dr. Scott Snyder (Samaritan Consulting)

10:40-10:55 Break

#### 11:00-11:45 Karst hazard remediation for civil land development projects

Sean Burns, P.G. (Barry Isett & Associates, Inc.)

Emphasis of presentation will be on reactive approach to remediation of karst hazards for civil land development projects. A brief overview of commonly employed remediation techniques in the industry will be discussed. Several case studies will be used to illustrate how a thorough understanding of proposed/existing development and subsurface conditions can be used to select, design, and implement a successful karst hazard remediation plan.

#### 11:45-12:45 Luncheon, Networking

# 12:45-1:00 PCPG Year in Review, Current and Planned Activities, Recognition of Special Guests (Ballroom A/B/C)

Jason Floyd, PG, President / Chief Hydrogeologist (Mountain Research, LLC) PCPG President

### 1:00-1:50 A "Brief" History of Carbon Sequestration in the US: What Does the Future Hold?

Bryan Guzman, Director Global Business Development & Technology

Since the 1970's CO2 has been utilized for enhanced oil recovery (EOR) projects in the US. In the 1980's the first carbon sequestration projects initiated. Since then, waves of government funded projects have been started all over the US with the inclusion of some commercial projects. Today, this pace has increased dramatically bringing with it new opportunities and challenges. These obstacles have placed individuals with subsurface experience front line and center to develop industry best practices for the fulfilment of both technical and regulatory requirements.



### **PCPG**

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

- 2 -

1:55-2:40 The role of the Pennsylvania Geological Survey in the search for rare earth elements, critical minerals, and novel geological resources

Adam Ianno, Section Head, Mineral Resource Analysis (DCNR PA Geological Survey)

The need for locally available and sustainable resources is ever increasing, and new resources are needed to satisfy new research and technology requirements. The Pennsylvania Geological Survey is pursuing multiple avenues of geological research to assess the presence of REE, critical mineral, and novel resources. This presentation will highlight collaborative geological mapping, geochemistry, and other research we have been pursuing toward these endeavors.

2:40-2:55 Break

2:55-3:40 I-99 Acid Rock Mineral Deposit, A look Back at the Historical Perspective and the Site Conditions 20 Years Later

Mark loos, PG, Senior Associate (Skelly & Loy, Inc., A Terracon Company)

In 2003 during the construction of the I-99 roadway atop Bald Eagle Mountain at Skytop situated west of State College, an unknown deposit of sulfide mineralization was encountered. Ultimately, the natural weathering of the pyritic minerals in the sandstone host rock created acidic and heavy metal laden seeps. This talk will provide information regarding background information regarding the I-99 project, a historical perspective of the construction activities, initial and long-term remedial response efforts, and a look at the current surface water/groundwater conditions 20-years after the roadway construction work.

3:40-4:30 What's Ahead in 2024: A Legal Perspective

Scott A. Gould, Member, Co-Chair Energy & Environmental Group (McNees Wallace & Nurick LLC)

Nurick LLC)

4:30 Announcements / Adjournment

4:30-6:00 2nd Annual Barb Dunst Memorial Bottle Auction Fundraiser & Continental Drifters

Reception



### PCPG

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

#### **About Our Speakers**

Gale C. Blackmer, PhD, Pennsylvania State Geologist (PA Geological Survey) - Gale holds a B.A. in Geology from the University of Pennsylvania, and M.S. and Ph.D. degrees in Geology from The Pennsylvania State University. At various points in her career, she worked for a geotechnical drilling contractor, a small environmental firm in Philadelphia, and a hydrogeological firm in State College. She also served on the faculty at West Chester University, Bloomsburg University, and Dickinson College. She started at the Pennsylvania Geological Survey in 1999, where her focus was on bedrock mapping in southeastern Pennsylvania. She has been Bureau Director and State Geologist since 2015. Gale also currently serves as Chair of the Mapping Committee for the Association of American State Geologists and as vice-chair of the 3DEP Subcommittee of the National Geospatial Advisory Committee.

#### Sean Burns, P.G. (Barry Isett & Associates, Inc.)

- Having over eight years of experience as a practicing geologist in the civil land development industry, Sean Burns has assisted with and managed numerous successful karst hazard remediation projects throughout eastern and central Pennsylvania. He has professional experience with construction materials testing, geotechnical engineering, and is familiar with principles of civil and structural engineering. With direct experience with unsuccessful remediation strategies he has analyzed failure modes. At Barry Isett & Associates, with access to an extensive archive of both successful and unsuccessful karst hazard remediation projects, Burns selected pertinent case histories for the presentation.

#### Adam Ianno, Section Head, Mineral Resource Analysis (DCNR Bureau of Geological Survey) -

Adam lanno serves as the head of the Mineral Resource Analysis section at the Pennsylvania Geological Survey after two years as their geochemist, where his work included USGS-supported research into critical mineral exploration in Pennsylvania, a search for limestones to use as cement in historical building restoration, and geochemistry of samples across the state supporting mapping projects. Prior to joining the PaGS, Adam's early career included time as an academic researcher, entrepreneur, and planetary science data consultant.

## Mark loos, PG, Senior Associate (Skelly & Loy, Inc., A Terracon Company) - As licensed

Professional Geologist, Mr. loos has over 36 years of experience dealing with regulatory and technical issues associated with environmental projects. This experience has been gained through the management and oversight of geological/hydrogeological studies and site characterization investigations; RCRA and UST investigations; sampling of soils, soil gases, surface water, sediments, and groundwater; drilling of borings and the installation of monitoring wells; conducting aquifer tests and data analysis; and the design, installation, and operation of soil and groundwater remediation systems. His experience also includes conducting geotechnical investigations, fluorescent dye tracer tests, geochemical groundwater studies, and groundwater resource investigations for the development of public water supplies. For the I-99 project, Mr. loos was involved with the preliminary environmental investigations for the construction of the highway and assisted in the monitoring of the surface water and groundwater conditions at the

# Scott A. Gould, Environmental Law & Toxic Tort Group (McNees Wallace & Nurrick LLC)

Scott is the Co-Chair of the Energy & Environmental Group at McNees Wallace & Nurick LLC. He focuses his practice entirely in the environmental law and toxic tort areas. He counsels business and industrial clients in all aspects of environmental law compliance, permitting, and remediation under all regulatory programs.

Scott works with business and real estate attorneys to effectively manage the environmental implications of business and real estate transactions. Scott is also a skilled trial attorney who practices before state and federal courts and administrative hearing boards

Scott is the Chair of the PBA Environmental & Energy Law Section, is the co-editor of the PBI Treatise Pennsylvania Environmental Law & Practice, is the author of the Storage Tank Compliance chapter of the Pennsylvania Chamber of Business and Industry's Environmental Compliance Handbook.

-continued-





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

#### **About Our Speakers-continued**

# Bryan Guzman, Director Global Business Development & Technology (Premier Corex) -

Bryan began his career as a geologist for Ingrain Inc in 2008 where he was an integral part of the company's validation period that led to the commercial launch of their product lines and subsequent sale to Halliburton. He is a technical expert in digital rock analysis and deployment of state-of-the-art technologies within the core analysis space. Recently, he has driven Premier's growth into the Carbon Capture and Storage market through participation in Department of Energy (DOE) funded projects, development of training courses that help subsurface teams satisfy federal and state regulations, and consulting with commercial entities on existing projects. Over his career he has held positions in operations, research & development, and sales & marketing. Bryan received his B.S. in Geology from the University of Texas at San Antonio in 2008 and his M.S. in Analytics at Texas A&M University in 2018.

#### Students and Young Professionals Session

Dr. Scott Snyder (Samaritan Consulting) - Scott has an extensive background in health care practice and administration, as well as in developing mentorship and organizational development programs for small businesses to Fortune 500 companies. He has a talent for launching innovative programs and services that generate multiple revenue streams while meeting needs of clients and providers. In his 30-plus years of experience, Scott has excelled at designing growth strategies, and developing mentorship and teammate engagement/retention programs that deliver longterm success. The ability to attract, mentor and retain employees in an organization while developing a defined workplace culture is especially important to Scott in his role as director of consulting at Samaritan. As part of his role as director, he provides consulting services for leadership growth, organizational development and executive searches.