



**GEO-
INSTITUTE**
**Delaware Valley
Chapter**

DELAWARE VALLEY GEO-INSTITUTE

DVGI October 2024

Volume 24 Issue 7

Inside this issue:

Oct 2024	1
Sept 2024.....	2-3
Announcements	4-9
Corporate Sponsors	10-13
Universities	14

2024-2025 Board of Directors

Chair

Theresa Andrejack Loux,
Ph.D., P.E.

Past Chair

Jim Beideman, P.E.

Vice-Chair

Bob Crawford, P.E.

Treasurer/Announcements

Lei Gu, P.E.

Secretary/Sponsorship

Jeremy Brown, P.E.

Newsletter Editor

Neil Scafonas, P.E.

Web Advisor

Michael Bennett, P.E.

Director of Scholarship

Daniel Marano, P.E.

Academic Liaison

Robert Swan, Jr., Ph.D.

ASCE Liaison

Russ Preuss, P.E.

Board Advisors

Craig Calabria, Ph.D., P.E.

Social Media

Kayla Nelson, E.I.T.

At-Large Member

Conrad Cho, P.E.

October 2024 DVGI Dinner Meeting

SPEAKER: Mark Gallagher, Vice President Princeton Hydro

TOPIC: The Status of Coastal Resilience Designs in Our Region

DATE: Thursday October 17, 2024 – 5:30 PM to 8:30 PM EST

WHERE: Valley Forge Casino– Parkview Ballroom, 1160 1st
Ave, King of Prussia, PA 19406

COST: \$60 Standard, \$30 Government/Retired, \$10 Students

MEETING ABSTRACT:

The threat to humans and biodiversity is prevalent in every geographic region of the planet and felt especially heavily on the planet's coasts. The threats include sea level rise and inundation, increased coastal storm surges, land subsidence, and habitat loss. When these threats operate synergistically, substantial economic damage and biodiversity loss is often the outcome. In order to stem the damage associated with current climate related issues, society needs to make difficult decisions and must look to change our current approaches to issues such as coastal resilience and flood management.

While there are very controversial and heavy engineering approaches, such as levees and storm surge barriers, it is also important that humans begin to understand the value that natural systems have relative to enhancing resiliency and sustainability along our coasts as well as inland areas.

This presentation will review the current threats that we all face due to climate change and the highly developed landscape in which we live and will offer examples of existing and pending resilience projects. Much of the presentation's focus will be on natural solutions along the coast and riverine systems that focus on the design and construction of nature-based features, such as the construction of dunes, thin layer placement of dredged material in marshes, installation of living shorelines and living breakwaters, the reclamation of lands lost to coastal erosion, and floodplain wetland and creation and enhancement.

ABOUT THE SPEAKER:

Mr. Gallagher is the Vice President of Princeton Hydro, a water resources-oriented consulting firm. He holds a Bachelor of Science Degree in Biology from Moravian College and Master of Science Degree in Plant Ecology from Rutgers University. He has over 39 years of experience in environmental consulting, much of which has been devoted to habitat restoration.

Please register at dvgi.org by October 10th



**GEO-
INSTITUTE**
**Delaware Valley
Chapter**

2024 SEPTEMBER DVGI - Dinner Meeting

Speakers : Eli Brinker, E.I.T. and Elisabetta Iannetti, E.I.T. of Pennoni Associates

Topic: 2023-2024 DVGI Project of the Year Winner “SPARK – Gene Therapy Innovation Center

MEETING ABSTRACT:

Pennoni Associates is proud to lead the engineering efforts for Spark’s groundbreaking \$575M Innovation Center in Philadelphia’s University City, adjacent to Drexel University and the Schuylkill River. This state-of-the-art facility, spanning over 90,000 square feet, will house six stories of advanced manufacturing and research laboratories, along with below-grade parking. The center, set to become a global flagship for Roche Pharmaceuticals, is designed to enhance gene therapy production and expand into various disease categories. Scheduled for completion in 2026, it will be a landmark of scientific innovation, emphasizing sustainability and latest technology.

The project presented significant geotechnical challenges due to its proximity to the 100-year floodplain and complex subsurface conditions. Pennoni’s team conducted a comprehensive investigation, revealing the complex geology characterized by sporadic alluvial deposits on the eastern side and shallow decomposed rock to the west. The findings revealed a 25-foot dip in rock elevation from east to west. To address these challenges, drilled piers were selected for their capacity to manage axial and tension loads, and a seepage analysis using pump test data was performed to optimize design against hydraulic uplift pressures, leading to a cost-effective design modification with varied floor slab thicknesses across the site. Additional geotechnical solutions included underpinning a retaining wall along Chestnut Street to support the wall during excavation and installing an underground stormwater basin with rock anchors to provide uplift support without stressing the basement slab.

ABOUT THE SPEAKERS:

Mr. Brinker is an Associate Engineer in the Pennoni Geotechnical Group in Philadelphia. Mr. Brinker is affiliated with ASCE and DFI.

Ms. Iannetti serves as a Staff Engineer in the Pennoni Geotechnical Group in Philadelphia. Ms. Iannetti is affiliated with ASCE, DFI, and ACE Mentor Program.



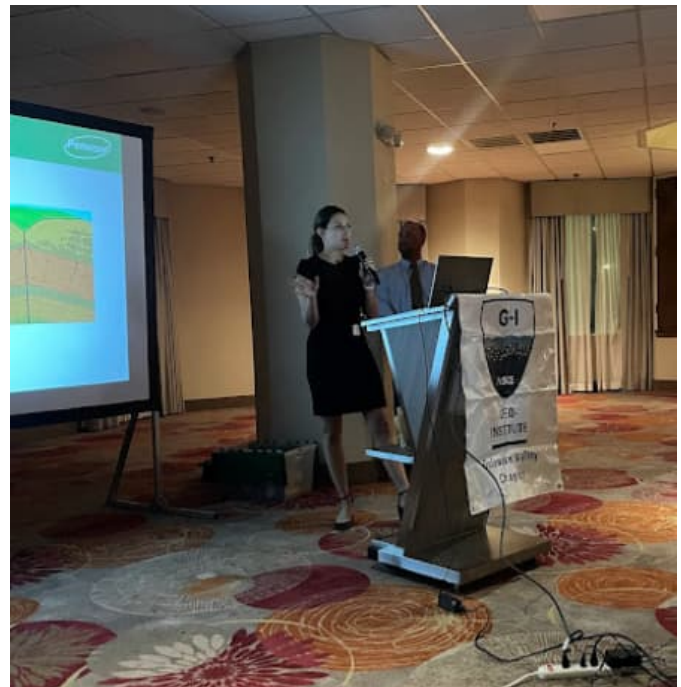
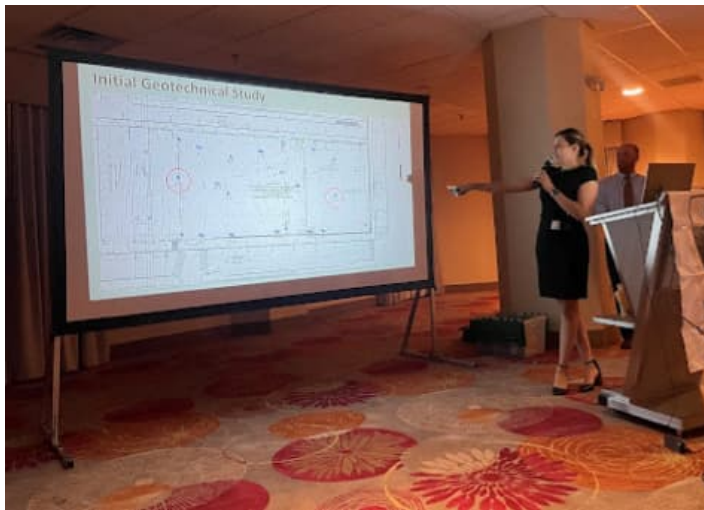


**GEO-
INSTITUTE**
**Delaware Valley
Chapter**

2024 SEPTEMBER DVGI - Dinner Meeting Photos

Speakers : Eli Brinker, E.I.T. and Elisabetta Iannetti, E.I.T. of Pennoni Associates

Topic: 2023-2024 DVGI Project of the Year Winner “SPARK – Gene Therapy Innovation Center





**GEO-
INSTITUTE**
Delaware Valley
Chapter

ANNOUNCEMENTS

The Keller advertisement features the company logo in the top left corner. The background is a vibrant, stylized illustration of a city with various buildings, including skyscrapers and residential structures, some of which are under construction. Yellow construction cranes are visible throughout the scene. The text 'THE LEADING GEOTECHNICAL SPECIALTY CONTRACTOR' is prominently displayed in the center. Below this, a list of services is provided, and the company's website and phone number are at the bottom right.

KELLER

THE LEADING GEOTECHNICAL SPECIALTY CONTRACTOR

- Deep foundations • Environmental remediation • Ground improvement • Groundwater control
- Instrumentation & monitoring • Liquefaction mitigation • Releveling structures • Design-build
- Slope stabilization • Support of excavation • Underpinning

keller-na.com • 610-353-0600



HIGH STRAIN DYNAMIC PILE MONITORING AND ANALYSIS

- Data Collection and Monitoring
- Assessment of Bearing Capacity
- Calculation of Driving Stresses
- Onsite or Remote Analysis



GRL Engineers, Inc. | (610) 459-0278 | grl-pa@grlengineers.com

<https://bit.ly/3WZ9kZh>



**GEO-
INSTITUTE**
**Delaware Valley
Chapter**

ANNOUNCEMENTS

Upcoming Dates for 2024-25 Dinner Meetings and events are as follows:

10/17/2024– Thursday– Mark Gallagher, Vice President, Princeton
Hydro, The Status of Coastal Resilience Designs in Our Region

11/12/2024 – Tuesday– Dan Gleason and Sarah McInnes,
Majid Khabbazian I-95 Emergency Rebuild

01/21/2025 – Tuesday– Alex Ryberg, GRL

One PDH will be awarded for most meetings that you attend.

New DVGI.org WEBSITE

Check out our revamped website at DVGI.ORG!

A big thanks to our webpage advisor Michael Bennett, P.E.
for all the hard work!



Welcome to Delaware Valley Geo-Institute!

- [About Us](#)
 - [Awards](#)
 - [Corporate Ads and Sponsorship](#)
 - [Current Sponsors](#)
 - [Geotechnical Resources](#)
 - [Newsletter and Attendance](#)
 - [Students and Scholarships](#)
-



**GEO-
INSTITUTE**
**Delaware Valley
Chapter**

ANNOUNCEMENTS

SAVE THE DATE FOR GETT 2024!

The Girls Exploring Tomorrow's Technology[®] (GETT) Expo is an annual event for girls in grades 4-10, along with their parents and educators, to learn more about career opportunities in a broad scope of STEM related industries. The day is filled with exciting and enlightening experiences including hands-on activities lead by successful women in STEM fields.

Registration opens Wednesday September 4th. Due to the generous donations and support from our sponsors, we are able offer GETT as a free event to all students.

Adults will be charged a fee of \$10 to attend, to help us offset event costs and keep this event free for the girls! Pre-registration is required for admittance. Tickets will not be available at the door on the day of the event. Pre-registration is required in order to ensure that we do not exceed building capacity in efforts to create the most safe, comfortable and successful experience for everyone in attendance. Remember, you will only be admitted to GETT at the time designated on your ticket (as per your selection in your registration).

GETT 2024 is taking place at the The Greater Philadelphia Expo Center at Oaks, PA. Saturday, October 26, 2024. See the webpage for more details at <https://gettpa.org/>





**GEO-
INSTITUTE**
**Delaware Valley
Chapter**

ANNOUNCEMENTS

2024-2025 Board of Directors



Chair

Theresa Loux, Ph.D., P.E.
(tloux@aeroaggregates.com)

Newsletter Director

Neil Scafonas, P.E.
(neil.scafonas@aecom.com)

Director of Scholarship

Daniel Marano, P.E.
(dmarano@pennoni.com)

Past Chair

James M. Beideman, P.E.
(jbeideman@kleinfelder.com)

Web Advisor

Michael Bennett, P.E.
(mbennett@gfnet.com)

At-Large

Conrad Cho, P.E.
(ccho@langan.com)

Vice-Chair

Bob Crawford, P.E.
(bobc@jjaconstruction.com)

Academic Liaison

Robert Swan, Jr., Ph.D.
(rhs53@drexel.edu)

Social Media

Kayla Nelson, E.I.T.
(knelson@schnabel-eng.com)

Treasurer

Lei Gu, P.E.
(Lei.Gu@mbakerintl.com)

ASCE Liaison

Russ Preuss, P.E.
(rpreuss@hntb.com)

Secretary

Jeremy Brown, P.E.
(jbrown@schnabel-eng.com)

Board Advisors

Craig Calabria, Ph.D., P.E.
(crcalabria@msn.com)



**GEO-
INSTITUTE**
**Delaware Valley
Chapter**

ANNOUNCEMENTS



Geosynthetic Institute

GSI RECORDED WEBINARS

- Topics, and Registration at www.geosynthetic-institute.org/webinar.htm
 - Each Webinar Carries 1.5 Professional Development Hours
Upon Completion of a 10-Question Multiple Choice Test
 - Each presentation lasts approximately 90 minutes

ALL WEBINARS WILL BE RECORDED AND CAN BE PURCHASED FOR VIEWING AT
YOUR CONVENIENCE

GSI/GMA Members \$200.00 USD per each Webinar

Follow Delaware Valley Geo-Institute @ <https://dvgi.org/>

ASCE/G-I Members:

Read past and present issues of Geo-Strata magazine online at www.asce.org



**GEO-
INSTITUTE**
**Delaware Valley
Chapter**

ANNOUNCEMENTS

HAVE DVGI PUBLISH YOUR ARTICLE, ADVERTISEMENT, OR JOB POSTING

- Do you have an interesting article on a project or individual in your organization that you would like to have published in the DVGI newsletter?
- Would you like to get the word out about a job opening, new venture, etc. to our membership via the newsletter?

Please submit your articles or news items for consideration in the next edition of the newsletter or get in touch about our reasonably priced advertising by contacting Neil Scafonas (neil.scafonas@aecom.com).

Member Spotlight

See link below for an interview of one of our newest DVGI Board Members, Michael Bennett, P.E. (NJ, PA), in the most recent issue of GeoStrata Magazine. Congratulations Michael!

https://www.readgeo.com/geostrata/april_may_2024/MobilePagedArticle.action?articleId=1967377#articleId1967377.

Follow our Social Media @ <https://www.linkedin.com/company/delaware-valley-geo-institute>





Creating a Better Future, **Together.**

Earth Sciences | Water Resources | Transportation | Geospatial
Construction Services

Ara Mouradian, PE, PEng | 610.715.2564 | amouradian@gfnet.com
gannettfleming.com



Ultra-Lightweight Foamed Glass Aggregate

85-90% Lighter than quarried aggregates
High friction angle
Excellent insulating properties

(833) 261-8499 aeroaggregates.com



Solving Infrastructure Challenges

610-696-6066
schnabel-eng.com



JAMES J. ANDERSON CONSTRUCTION COMPANY, INC.

6958 Torresdale Avenue, Suite 200
Philadelphia, PA 19135
215-331-7150

ROBERT CRAWFORD, P.E., M. ASCE
Structure Division Chief Engineer
e-mail: bobc@jjaconstruction.com



Geotechnical Engineers & Geologists

SHORING & UNDERPINNING DESIGN
RETAINING WALL DESIGN
CONSTRUCTION MONITORING AND SOILS LABORATORY

Corporate Headquarters
115 W Germantown Pike, Suite 200
East Norriton, PA 19401
610-277-0880

Full-Service Locations

West Berlin, NJ
856-768-1001
Mechanicsburg, PA
717-697-5701
Emmaus, PA
610-967-4540

*Service you can trust
Quality you can count on*

www.earthengineering.com



INNOVATIVE GEOSYNTHETIC SOLUTIONS AND APPLICATIONS

High Strength Reinforcement

Drainage
Lightweight Fill
Recycled Materials

Sediment Capping

Remediation
Geosynthetic Lining Systems
Sustainable Solutions



Archie Filshill, Ph.D. archie@inova-geo.com +1 215-416-7373



James M. Beideman, PE
Program Manager

jbeideman@kleinfelder.com

180 Sheree Blvd., Suite 3800
Exton, PA
19341

o | +1 610.594.1444
ext.109
m | +1 610.656.4419
f | +1 610.594.2743

kleinfelder.com



Integrated engineering and
environmental services

Jared Green, PE
Senior Associate

langan.com

1818 Market St #3300,
Philadelphia, PA 19103
(215) 845-8900

Technical Excellence · Practical Experience · Client Responsiveness

Philadelphia Branch - Media, PA
David Harmanos, PE, Regional Manager • dharmanos@hcea.com
Maryland • Washington, DC • Delaware • Pennsylvania • Virginia • Caribbean

HILLIS-CARNES
ENGINEERING ASSOCIATES

(484) 434-1000 35+ Years Experience hcea.com



Geotechnical specialty contractor

Matt Klanica
Vice President
610-353-0600 • mjklanica@keller-na.com

Martin McDermott, PG
Senior Business Development Manager
908-209-3914 • mmcdermott@keller-na.com

Philadelphia office: 610-353-0600

www.keller-na.com



*Design of Excavation Support, Ground Anchors,
Underpinning, Cofferdams, Micropiles...*

1220 Valley Forge Road, Suite 14, Phoenixville, PA 19460
Phone: (610) 933-8353 • Fax: (610) 933-8359
www.PeirceEngineering.com • Mail@PeirceEngineering.com



GeoStructures, Inc.

Geotechnical Engineering & Construction Material Testing

- drilling and CPT services
- laboratory testing
- petrographic examination
- foundation/retaining wall design
- real-time geotechnical instrumentation
- environmental assessments

King of Prussia, PA 610.265.1818 www.geostructures.net



menard
Ground Improvement Specialists

WHY SETTLE?™



Brandon Buschmeier, P.E.
Vice President
Menard USA
Direct (215) 971-2648
Mobile (513) 417-1986
BBuschmeier@menardusa.com

menardusa.com

**Low-Density Cellular Concrete**

Permeable / Non-Permeable

- ▲ Soft Soil Remediation
- ▲ Slope Stabilization
- ▲ Bridge Approach
- ▲ Utility Protection
- ▲ Annular Fill



610.398.7833
aerixindustries.com
info@aerixindustries.com
Allentown, PA



...For Trusted Quality and Service



Consulting
Engineers and
Scientists



GOLDER
MEMBER OF WSP

**GeoStructures**

a TERRATEST Company

Justin J. Smith, P.E.

Area Manager – located in Philadelphia

(814) 598-1775 • jsmith@geostructures.com
413 Browning Court • Purcellville, VA 20132
www.geostructures.com

**Kyle T. Plaza, P.E.**

Northeast Region Manager

Cell: 609.577.2724
Email: kyle.plaza@subsurfaceconstructors.com

SUBSURFACE CONSTRUCTORS, INC.

8919 NEW FALLS RD, SUITE 15, LEVITTOWN, PA 19054
www.subsurfaceconstructors.com



Pennoni
81 Highland Avenue
Suite 230
Bethlehem, PA 18017

www.pennoni.com

Frederick (Rick) Brinker, PEAssociate Vice President/
Geotechnical Division Manager

FBrinker@Pennoni.com

T: 610-422-2411
M: 484-894-8989

**Customized Solutions****Delaware Valley Locations**

Philadelphia | Exton | Lehigh Valley
Conshohocken | Mt. Laurel

610 868 4201 | colliersengineering.com

Accelerating success.



**Joseph Thomas Coe, Ph.D.**

Assistant Professor

Civil & Environmental Engineering

1947 N. 12th Street

Philadelphia, PA 19122-6018

t 215-204-6100 f 215-204-4696

e-mail joseph.coe@temple.eduwww.temple.edu/engineering/cee

VILLANOVA UNIVERSITY
Study part- or full-time.
www.vuengineering.com

Combine geotechnical courses with environmental, structural, transportation, or water resources courses or create your own interdisciplinary program.

PennMaster of
Science in
Applied
Geosciences**WHERE THEORY
MEETS PRACTICE.**Learn more about **Penn's
Master of Science in Applied
Geosciences.**WWW.UPENN.EDU/MSAG**LEHIGH
UNIVERSITY.****Muhannad T.
Suleiman, Ph.D.**
*Associate Professor*Department of Civil and
Environmental Engineering
STEPS Building
1 West Packer Avenue
Bethlehem, PA 18015-3001
(610) 758-2592 Fax (610) 758-6405
e-mail: mts210@lehigh.edu
<http://www.lehigh.edu/~incee>**Beena Sukumaran, PhD**
*Chairperson
Professor*Department of Civil &
Environmental Engineering
Rowan Hall
201 Mullica Hill Road
Glassboro, NJ 08028856-256-5324
856-256-5242 fax
sukumaran@rowan.edu**LAFAYETTE
COLLEGE**

Department of Civil and Environmental Engineering

Acopian Engineering Center
740 High Street • Room 319 • Easton, Pennsylvania 18042
TEL 610-330-5437 • FAX 610-330-5059**DREXEL UNIVERSITY
College of
Engineering****Robert H. Swan, Jr, PhD**
*Teaching Professor;
Associate Department Head
For Undergraduates*
*Department of Civil, Architectural and
Environmental Engineering*
3141 Chestnut Street
Alumni Engineering Labs 270J
Philadelphia, PA 19104
Tel: 215.571.4561
rhs53@drexel.edu
drexel.edu/engineeringDepartment of Civil
& Environmental Engineering**Christopher L. Meehan, Ph.D., P.E., FASCE**
*Associate Professor
Director, Delaware Center for Transportation*355 Du Pont Hall
Newark, DE 19716Phone: 302-831-6074
Fax: 302-831-3640
Email: cmeehan@udel.edu<http://udel.edu/~cmeehan/>

Widener University