Inside this issue:
February 2017 Dinner Meeting.........1
January 2017 Dinner Meeting.........2
Announcements ........................3-4
Job Posting ............................5
Events and Conferences ..............6-7
Sponsors and Universities ............8-11

February 2017 Dinner Meeting
SPEAKER: Christopher L. Meehan, Ph.D., P.E.: University of Delaware

TOPIC: Construction and Performance Monitoring of a Geosynthetic Reinforced Soil Integrated Bridge System

DATE: Tuesday, February 21st, 2017

LOCATION: Valley Forge Casino Resort Hotel, Parkview Ballroom
1160 First Avenue, King of Prussia, PA 19406

TIME: 5:30 PM Social Hour, 6:30 PM Dinner and 7:15 PM Presentation

***Registration and Payment Online at http://www.dvgi.org/ ***

The Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS) is a composite bridge structure built using GRS abutments and prefabricated bridge superstructure elements. This accelerated bridge construction technology has been developed and promoted by researchers and engineers from the United States of America’s Federal Highway Administration (FHWA). GRS-IBS technology has proven itself useful for rapid, cost-effective bridge construction in other regions of the United States. Consequently, the Delaware Department of Transportation (DelDOT) constructed the first GRS-IBS in the state of Delaware (Br. 1-366) in 2013 to explore the effectiveness of this technology for use within their own bridge inventory. This presentation provides an overview of the construction and monitoring process for this structure. Recorded performance data for the structure from the time of construction, live load testing, and over three years of in-service operation were collected using different types of instruments and analyzed.

ABOUT THE SPEAKER:
Christopher L. Meehan, Ph.D., P.E. is a professor of civil engineering at the University of Delaware, with a specialty focus in soil mechanics and geotechnical engineering. Dr. Meehan holds a B.S. in Civil Engineering from the University of New Hampshire, and M.S. and Ph.D. degrees in Civil Engineering (Geotechnical) from Virginia Tech. He has 16 years of experience in geotechnical engineering research, practice, and education. His areas of particular research and teaching focus include soil shear strength, slope stability, earth dam and levee engineering, foundation engineering, and ground improvement. He has published more than 60 refereed journal and conference papers, as well as numerous technical reports. He typically advises 5-10 graduate students at any given time, and oversees a large and diverse portfolio of research projects. He is the Director for the Delaware Center for Transportation, holder of the honorary Bentley Systems Incorporated Chair of Civil Engineering at UD, and is a Fulbright Scholar. He is also an active member of the United States Universities Council on Geotechnical Education and Research, ASCE’s Geo-Institute Committee on Embankments, Dams, and Slopes, and the Transportation Research Board’s Soil and Rock Properties Committee.

One Professional Development Hour (PDH) will be provided for this dinner meeting.
Case Histories and Lessons Learned in Geotechnical Engineering
Moustafa A. Gouda, P.E., D.GE, F. ASCE

This 60-minute presentation was packed with information with various geotechnical successes and failures. The case histories included fascinating work and new foundation systems employed by the speaker to solve challenging geotechnical problems. The speaker also addressed risks in practicing engineering and how to avoid litigation.

ABOUT THE SPEAKER:
Mr. Gouda is well-known in the industry for his innovative approach to problem solving. Over the course of his fifty-year career, he has worked extensively on numerous large domestic and international Geotechnical Projects. Mr. Gouda is currently a senior consultant with Maser Consulting in their Red Bank, New Jersey office. Mr. Gouda earned a Bachelor of Science in Civil Engineering and Master of Science in Geotechnical Engineering from Cairo University. He also earned a Master in Civil Engineering from New Jersey Institute of Technology. Mr. Gouda was named the Philadelphia Civil Engineer of the Year in 1987 for his work on the sinking homes of in the Logan Section of Philadelphia. His other accolades include the Distinguished Civil Engineer of the Year by the New Jersey ASCE Central and South Branches in 1995 and 1999 as well as the Delaware Council of Engineering Societies 1999 Lifetime Achievement Award in for his services to the engineering communities.
ANNOUNCEMENTS

Earn PDHs at 2016-2017 DVGI Events

Upcoming Dates for 2016-2017 Dinner Meetings and events are as follows:

- **February 21st**: Chris Meehan, Ph.D.
  “Construction and Performance of a Geosynthetic Reinforced Soil Integrated Bridge System”
- **March 23rd**: Student Night @ Villanova
- **March 25th**: GETT Expo @ West Chester High School
- **April 6th**: Joint Meeting with ASCE
- **April 8th**: Mid-Atlantic GeoWall Competition @ University of Maryland
- **May 16th**: Joint Meeting with SEI
- **June TBD**: DVGI Golf Outing

*One PDH will be awarded for most dinner meetings that you attend. If you are interested in presenting at one our monthly meetings, please get in touch with a DVGI board member.*

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 tandrejack@gmail.com.

DVGI Merchandise Available for Purchase

Coffee mugs ($8) and lapel pins with the DVGI logo ($5) are available for purchase. See Russ Preuss if you are interested in purchasing either of these items.

ASCE/G-I Members:  
Read past and present issues of Geo-Strata magazine online at www.asce.org
ANNOUNCEMENTS

GEOSYNTHETIC INSTITUTE

GSI Webinars for 2017—(1.5 PDH/each)

From 11:30 AM—1:00 PM (Eastern Time)

Topics, Dates and Registration at [www.geosynthetic-institute.org/webinar.htm](http://www.geosynthetic-institute.org/webinar.htm)

Cost: GSI Members $200; Nonmembers $250

<table>
<thead>
<tr>
<th>Date</th>
<th>GSI No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 4</td>
<td>W-5</td>
<td>Geosynthetics in Hydraulic Applications</td>
</tr>
<tr>
<td>January 18</td>
<td>W-18</td>
<td>Pond Liner Design &amp; Performance</td>
</tr>
<tr>
<td>February 8</td>
<td>W-19</td>
<td>Geomembrane Wave (or Wrinkle) Management</td>
</tr>
<tr>
<td>February 22</td>
<td>W-20</td>
<td>Geonet and Geoserver Drainage Materials Connections and Attachments</td>
</tr>
<tr>
<td>March 8</td>
<td>W-9</td>
<td>Behavior &amp; Analysis of 20 Solid Waste Landfill Failures</td>
</tr>
<tr>
<td>March 22</td>
<td>W-10</td>
<td>Wet (Bioreactor) Landfills for Rapid Degradation of MSW Organics</td>
</tr>
<tr>
<td>April 12</td>
<td>W-11</td>
<td>Lateral &amp; Vertical Expansions over Landfills</td>
</tr>
<tr>
<td>April 26</td>
<td>W-6</td>
<td>Geosynthetics in Heap Leach Mining</td>
</tr>
<tr>
<td>May 10</td>
<td>W-12</td>
<td>Landfill Covers: Past-Present-Emerging</td>
</tr>
<tr>
<td>May 24</td>
<td>W-13</td>
<td>Beneficial Uses of Abandoned and/or Closed Landfills</td>
</tr>
<tr>
<td>June 14</td>
<td>W-14</td>
<td>Lifetime Predictions of Exposed &amp; Nonexposed Geosynthetics</td>
</tr>
<tr>
<td>June 28</td>
<td>W-21</td>
<td>A Brief Overview of Geosynthetics and Their Major Applications</td>
</tr>
<tr>
<td>July 12</td>
<td>W-15</td>
<td>In-Situ Stability of Soil Slopes Using Nailed GS</td>
</tr>
<tr>
<td>August 9</td>
<td>W-16</td>
<td>Sand Drains-to-Wick Drains to Sand Columns</td>
</tr>
<tr>
<td>September 13</td>
<td>W-17</td>
<td>Geosynthetics in Erosion Control</td>
</tr>
<tr>
<td>October 11</td>
<td>W-1</td>
<td>MSE Wall Failure Data Base (300 cases)</td>
</tr>
<tr>
<td>October 25</td>
<td>W-2</td>
<td>MSE Wall Back Drainage Design</td>
</tr>
<tr>
<td>November 8</td>
<td>W-3</td>
<td>MSE Wall Remediation and Monitoring</td>
</tr>
<tr>
<td>December 13</td>
<td>W-4</td>
<td>MSE Wall Field Construction Inspection Practices</td>
</tr>
</tbody>
</table>
JOB POSTING

Tenure-track faculty position in Geotechnical Engineering

Villanova University’s Department of Civil and Environmental Engineering seeks candidates for a full-time tenure-track assistant professor position in geotechnical engineering starting in the fall 2017 semester. The Department is recognized as a national leader in providing a distinctive broad-based civil engineering education grounded in Augustinian Catholic values, encouraging our students to have a strong commitment to service, and performing high-quality scholarly research.

The Department has fifteen full-time faculty members, approximately 230 undergraduate students, and 125 graduate students. Degree programs offered through the Department include B.S. (Civil Engineering), M.S. (Civil Engineering and Water Resources/Environmental), and Ph.D. degrees. We are acknowledged as a premier program known for our outstanding pedagogy and curricula, international opportunities, and personal attention to students at both the undergraduate and graduate levels. Additionally, we strive for research excellence while integrating the outcomes into the education of our undergraduate and graduate students.

The Department is looking for a geotechnical engineering faculty member that can contribute to and enhance our research strengths in transportation infrastructure and systems, effective stormwater management, geoenvironmental applications, and/or resilient building systems. The Department has built excellent infrastructure to support teaching and scholarship, including soils, structural, environmental, fluids, and water resources laboratories. In addition, the campus is home to multiple instrumented stormwater control measures that form an outdoor laboratory. Additional laboratory facilities maintained by other departments within the College of Engineering are also available for multi- and cross-disciplinary work.

Requirements include a Ph.D. in Civil Engineering or a related field (must be completed at the time of hire), work towards professional registration, a dedication to teaching excellence at both the undergraduate and graduate levels, a commitment to high-quality and visible scholarship, and a commitment to impactful engineering service. The successful candidate will be expected to develop and teach undergraduate and graduate courses, develop a strong research program, and perform service within and beyond the academic community.

Applications must be completed online at https://jobs.villanova.edu/ (Posting number 2016339F). Application packages must include curriculum vitae; academic transcripts; statements on teaching philosophy, research interests (specifically detailing how these interests will align with our existing research strengths), and design experience; and the names and contact information of three references. Review of applications will begin on January 15, 2017 and continue until the position is filled.

Villanova University is ranked in the top 50 of the nation’s best colleges and universities by US News & World Report in its 2017 “Best Colleges” rankings. The university is located 12 miles from Philadelphia along the historic Main Line. From its founding in 1842 to its position today as a leading Roman Catholic university, Villanova University has forged a path of academic excellence.

Villanova is sponsored by the Augustinian order. Diversity and inclusion have been and will continue to be an integral component of the University’s mission. Villanova is an Equal Opportunity/Affirmative Action employer. The Department of Civil and Environmental Engineering values dynamic and diverse faculty members who are committed to teaching, scholarship, and service — and who can contribute to the University’s conversation regarding truth, community, values, and social justice.

Please feel free to contact Dr. Kristin Sample-Lord (kristin.sample-lord@villanova.edu), Co-chair of the search committee, if you have questions regarding the position.
SAVE THE DATE FOR GETT 2017

Girl’s Exploring Tomorrow’s Technology (GETT) is a free, fun, informational event for middle and high school girls in grades 5 through 10 and their parents that features successful women in technology. Attendees learn the facts about how technology careers can be fulfilling, fun and rewarding personally, professionally and financially.

DVGI participated in last year’s Expo, with more than 1,000 in attendance (including 622 girls in grades 5-10 and 176 parents and educators). We provided interactive activities illustrating principles of shallow and deep foundation design and liquefaction using every-day items such as cool whip, gelatin, wood sticks, legos, sand and a colored water. We’re looking to participate again in 2017 and welcome volunteers and/or ideas for new and interesting hands-on demonstrations.

GETT 2017 is scheduled for March 25, 2017 at West Chester East High School. For information about registering a parent, student, and/or educator, or to participate in the expo as an exhibitor independent of DVGI, visit www.gettpa.org.

If you’d like to volunteer at GETT 2017 as a representative as of DVGI, or have suggestions for demonstrations, please contact Theresa Andrejack Loux (tandrejack@gmail.com), Melissa Gillespie (mgillespie@trcsolutions.com), or Kolleen Backlund (kbacklund@DiGioiaGray.com).

SAVE THE DATE

2017 Mid-Atlantic Geo-Wall Competition

Saturday, April 8, 2017
University of Maryland, College Park

We are looking for sponsors! $150 per firm. Name will be displayed at competition. Please contact Eric Backlund (ebacklund@kleinfelder.com) if interested.
EVENTS AND CONFERENCES

The Delaware River Deepening Project - A Thirty Year Journey (1 PDH)

The presenters will describe the history of the Delaware Deepening Project. Scientific and engineering studies performed and details of project construction, inclusive of geology, blasting, and rock removal will be discussed.

SPEAKERS: Anthony DePasquale, PE and Peter Gori, PG U.S.A.C.E. - Philadelphia District
LOCATION: Maggiano's Philadelphia, 1201 Filbert Street Philadelphia, PA 19107
DATE: Thursday, March 9th, 2017
TIME: 5:30PM Networking, 6:30PM Dinner, 7:30PM Presentation
COST: $40 members, $50 after March 3, 2017
$20 government employees/students
RSVP: [Link]

LESSONS LEARNED: What happens when stormwater management BMPs don’t work? (1 PDH)

Details: We've all been there. Soil testing is performed on the site, the design for stormwater management has been completed, and the reviews, revisions, and approvals received. Then comes construction of the facility, and something is wrong because it’s not working.

Now what? Join us for a discussion on infiltration stormwater management facilities from Testing and Design thru Construction. Three case studies will be presented where the constructed facility did not meet expectations, and approach taken to resolve the problem.

SPEAKERS: Sharon K. Dotts, P.E., and Matthew C. Hostrander, Gilmore & Associates
LOCATION: Michael’s Deli; 130 Town Center Rd, King of Prussia, PA
DATE: Thursday, February 23, 2017
TIME: 5:30 PM Networking, 6:00 PM Dinner
COST: $30 per person; $25 per student
RSVP: By February 20, 2017
[Link]

The International Conference on Solid Waste Technology and Management is an annual conference where researchers, educators, government officials, consultants, managers, community leaders and others meet to present and discuss topics related to all aspects of solid waste technology and management.

March 19-22, 2017
Warwick Hotel
Rittenhouse Square

http://www.georiskconference.org/
http://geosyntheticsconference.com/
GeoStructures, Inc.

Shana Carroll, P.E., LEED AP
Mid-Atlantic Regional Manager

10130 Old Frederick Road
Ellicott City, MD 21042
410.458.0289 • fax 443.267.0110
scarroll@geostuctures.com
www.geostuctures.com

HILLIS-CARNES

ENGINEERING ASSOCIATES

(484) 434-1000 | www.hcea.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.geostuctures.net

GZAL Engineering Services

Groundwater Control
Earth Retention
Deep Foundations
Grouting
Ground Freezing

GRL engineers, Inc.

Quality Assessment of Piles and Shafts
by the Foundation Testing Experts

- Pile Driving Monitoring (PDA, on location or w/ SiteLink®)
- Dynamic Load Testing (any foundation type, w/ APPLE)
- GRLWEAP Analysis (Wave Elevation)
- Foundation Integrity Testing (CSL, PIT and Thermal Profiling)
- SPT Hammer Calibration

Serving the Delaware Valley from...
Pennsylvania (800) 490-6078
Central Office (215) 490-6078

www.GRLengineers.com GRL-PA@GRLengineers.com

Gannett Fleming

100 years
of excellence delivered as promised
Geotechnical Engineering • Environmental Services
Transportation Planning • Highways • Bridges
ITS & Traffic Engineering • Transit & Rail
Water/Wastewater • Stormwater Management
Geographic Information Systems

Ara G. Mouradian, PE
Valley Forge Office • 610.650.8101
www.gannettfleming.com

ISO 2001:2008 CERTIFIED

Ground Engineering and Environmental Services
Offices across the Delaware Valley
Bristol, Pennsylvania
Mt. Laurel, New Jersey
Newark, New Jersey
(215) 826-1580
(856) 793-2005
(973) 845-1922
Engineering Earth’s Development. Preserving Earth’s Integrity.

www.golder.com
College of Engineering
TEMPLE UNIVERSITY

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.edu
www.temple.edu/engineering/cee

WHERE THEORY MEETS PRACTICE.

Learn more about Penn’s Master of Science in Applied Geosciences.

WWW.UPENN.EDU/MSAG

University of Delaware
Drexel University
Lafayette College
Widener University