

NJSPE CONTINUING EDUCATION

Offering 6 PDH Credits for Professional Engineers.
Accredited by NJ, PA and NY for all Sessions!



MARCH 9

The Palace at Somerset Park
333 Davidson Avenue, Somerset NJ, 08873

- NJSPE EARLY Member Rate: \$275
- Non-Member EARLY Rate: \$325
- NJSPE LATE* Member Rate: \$300
- Non-Member LATE* Rate: \$360

NJSPE members from other States may take the NJ member rate.

* Rate increases take effect 7 days prior to the date.

APRIL 18

Cherry Hill Crown Plaza
2349 West Marlton Pike, Cherry Hill, NJ 08002

REGISTRATION INCLUDES:

Seminars, continental breakfast & lunch. Register early to avoid being closed out. On-Site Registrations are based on space availability with an additional charge of \$25.

JOIN NJSPE TODAY and use the member rate today! Call NJSPE at (609)393-0099 and speak to Membership Director, Kelly Biddle, or **CLICK HERE**

NOTE: Contributions and payments to 501(c)(6) organizations are not deductible as charitable contributions on federal income tax returns although they may be deductible as trade or business expenses.

Substitutions are permitted if you are unable to attend. Registrant must email to: jlombardi@njpsi.com 48 hours prior to the event with the name, address, phone and email of the person taking your place.

NJSPE will accept cancellations with refund up to one week prior to the date of the program. A cancellation fee of \$25 will apply. Refunds cannot be issued after that time but registration substitutions are permitted.

REGISTRATION IS ONLINE:
CLICK HERE

PROGRAM SCHEDULE

7:30 AM

Registration and Continental Breakfast

8:30 to 10:30 AM

Session: Professional Engineering Ethics 101

Accreditation: 2 PDH credits

Speaker: Lawrence Powers, Esq.

The learning objective is to expose the seminar participants to various engineering related professional and statutory codes of ethics in order to indoctrinate ethics awareness and an understanding of ethical standards common to all jurisdictions, including those of the participants, so that the participants understand the boundaries of ethical engineering behavior. The program is broken into three parts. Introduction to common statutory and regulatory ethics rules; review of the National Society of Professional Engineers Code of Ethics with examples of common ethics rules, illustrative case studies to consider, with particular emphasis on the similarities and difference between governmental and professional society sanctions; practical reasons for ethical practice, how unethical practice can present professional liability, legal, licensure and moral issues, public health, safety and welfare.

10:45 to 11:45 AM

Underground Stormwater Storage and Infiltration for Sites with Challenging Inverts and Limited Space

Accreditation: 1 PDH credit

Speaker: Adam Sapp, PE

When site conditions make it impractical to manage stormwater runoff with surface infiltration strategies such as rain gardens or permeable pavers, it will often be possible to use underground infiltration or detention. This approach preserves valuable land area and maintains predevelopment hydrology. If infiltration is not feasible at a given site than water can be stored in a wide variety of underground detention systems and either reused or released at a controlled rate. Many sites in NJ have very little vertical space available for underground storage. This presentation will focus on the Innovative Terre Arch underground storage system.

The Terre Arch is a modular, multi-chambered, precast concrete stormwater storage system that is engineered especially for underground installation. Using the ancient design principles of the Roman Arch, Terre Arch provides a sophisticated yet simple solution for stormwater detention and retention-recharge. Terre Arch's patented, fiber-reinforced design is lightweight, yet incredibly strong. With a load-bearing rating of

HS-25, each section can support heavy gross weight trucks and machinery with virtually no cover required, allowing installation equipment direct access to the site during installation, dramatically reducing installation time and labor. Each Terre Arch installs quickly, The TA26 adds 341 CF, and the TA48 adds 638 CF in a matter of minutes.

This presentation will provide detailed information on underground infiltration practices including project design examples, and highlight the various underground stormwater management treatment strategies that provide pretreatment and also TSS and enhanced nutrient removal.

11:45 PM to 12:45 PM

Lunch

12:45 to 1:45 PM

Digital Signatures and Seals – An Introduction

Accreditation: 1 PDH credit

Speaker: James J. Purcell, PE

Digital signatures and seals are now an improved method of signing and sealing engineering documents in the State of New Jersey and have been in many other jurisdictions for several years. This seminar will describe what digital signatures and seals are, discuss the history and legal basis for them, and demonstrate their practical application. A description of software solutions and vendors will be provided, identifying the many levels of service and cost.

2:00 to 4:00 PM

From the Ground Up: Geotechnical Engineering and Subsurface Investigations 101

Accreditation: 2 PDH credits

Speaker: Dr. Vatsal A. Shah, PE

The focus of this course is to educate engineers (including civil, environmental, structural, mechanical, and other related Professional Engineering fields) on the field of geotechnical engineering. The course will instruct students on the definition of a geotechnical engineer, the geotechnical engineer's role during the project lifecycle, and the value added by including a geotechnical engineer when performing subsurface-related designs or work.

The course will include a review of subsurface investigation techniques (such as soil borings, test pits, and field tests), when a geotechnical investigation is needed, and planning a subsurface investigation. A review of select applicable building codes relating to the planning and completion of a geotechnical investigation and available resources to determine the need for an investigation will be covered. Finally, the course will also present several case studies on previously completed geotechnical projects and lessons learned during investigation, design, and contract administration/construction.

SPEAKER BIOS

Lawrence P. Powers is Partner and co-chair of the Construction Litigation Department at Hoagland, Longo, Moran, Dunst & Doukas, LLP. Larry's practice is focused on handling complex, multi-party construction related professional liability claims. He has tried numerous complex construction cases to a jury verdict. Admitted in 1984, he has over 25 years of experience in litigating, arbitrating and mediating construction disputes, regularly handling difficult loss prevention and risk management assignments for all of the major professional liability insurers. Larry serves as general counsel to AIA-New Jersey, the New Jersey Society of Professional Engineers and ASLA-New Jersey. He regularly represents design professionals in disciplinary matters before the New Jersey State Board of Architects and Landscape Architects and the New Jersey State Board of Engineers and Land Surveyors. Mr. Powers has achieved a peer review rating of "AV", the highest mark given by other members of the legal profession. He is admitted to practice in the state and federal courts of New Jersey. He was named "Lawyer of the Year 2012" in the Construction Litigation category by Best Lawyers® for the Woodbridge, NJ Metropolitan area.

Adam Sapp, PE, is the Sr. Stormwater Consultant for Contech Engineered Solution covering Pennsylvania and New Jersey. Prior to this position, he served as Area Vice President of the South Central Region, Region Manager for Pennsylvania, New Jersey and Delaware and was a Stormwater Consultant for Contech's Stormwater Solutions products. Adam earned his B.S. degree in Civil Engineering Technology from the University of Pittsburgh.

James J. Purcell is a Professional Engineer with over 30 years of experience in consulting engineering, primarily in the design of highways and other infrastructure. A resident of Lawrenceville, New Jersey, Jim has been a member of the New Jersey State Board of Professional Engineers and Land Surveyors since 2005 and has served twice as the board president. He has served on a number of NCEES committees, including chairing the Committee on Law Enforcement and as NCEES Northeast Zone assistant vice president before accepting his commission as NCEES Northeast Zone Vice President in 2013. As vice president, Jim served on the NCEES board of directors and as the zone's administrative officer through 2015.

A licensed professional engineer since 1998, Jim is currently technical director of the New Jersey Asphalt Pavement Association and is an adjunct professor at The College of New Jersey, teaching courses in construction management, engineering economic analysis, and the fundamentals of engineering design. In his role as the Technical Director of the New Jersey Asphalt Pavement Association, he is responsible for representing the asphalt pavement industry as a liaison to government and private customers, assisting the members on technical issues, and providing continuing education to the members and the public. He also serves on the National Asphalt Pavement Association's Committee on Asphalt Research and Technology, Engineering Advisory Council, and on NAPA's Task Working Groups on Pavement Design and Product Category Rules / Environmental Product Designation.

Jim is a 1986 graduate of the University of Connecticut, receiving his Bachelor of Science degree in civil engineering. He is a member of several professional societies, including the National Society of Professional Engineers, the American Society of Civil Engineers, the American Society of Highway Engineers, and the Order of the Engineer

SPEAKER BIOS CONTINUED

Dr. Vatsal A. Shah is an energetic, young Professional Engineer with nearly 10 years of experience in civil (geotechnical) engineering. Don't let the age fool you- Vatsal has been in engineering and construction for year earlier and, at the age of 23, began a geotechnical group within Hatch Mott MacDonald's Environmental Management Division and headquarter office in Iselin, NJ. Since then, the group has grown to over 9 engineers and professionals and has completed hundreds of projects across the tri-state and United States, and several international projects. Vatsal's expertise has centered on geotechnical evaluations, as well as soil and geological investigations. He has been responsible for providing geotechnical recommendations for foundations, structures, retaining walls, slope stability, and other infrastructure improvements. Vatsal currently oversees and is responsible for geotechnical services rendered out of HMM's Iselin headquarters office.

Dr. Vatsal Shah has also provided geotechnical and civil engineering specialty services such as rock anchor and anchor bolt pull testing, micropile design, installation, and oversight, driven pile and wave equation analyses, soil boring oversight, on-site concrete and asphalt placement oversight and testing, and various construction testing services. He has performed soil property and classification tests in a laboratory environment to supplement engineering design requirements and specifications. He has been involved in monitoring and reporting of various remediation and Superfund sites, and has provided construction management services for a variety of projects.

Prior to joining HMM, Dr. Vatsal Shah spent over 4 years involved in construction and materials oversight, including the inspection of various soil and rock structures for public and private projects throughout the tri-state area. He has been nationally recognized by the American Society of Civil Engineers as the "Face of Civil Engineering" for 2013, as well as the Young Engineer of the Year by the New Jersey Society of Professional Engineers in 2012. Recently, Vatsal was recognized nationally by Engineering News-Record (ENR) as one of the Top 20 under 40 for the New York Metropolitan Region. Vatsal is also Vice President of the New Jersey Society of Professional Engineers, as well as an Adjunct Professor at the New Jersey Institute of Technology in Newark, NJ teaching Foundation Design.