

Max. 11.00 PDHs

Day 1 - up to 7.50 PDHs

Day 2 - up to 3.50 PDHs



The 8th Geo³T² Conference Program

Update: 3/30/2015

Program A - Geotechnical

Thursday – April 9, 2015

Program B - GeoEnvironmental/GeoPhysical

Thursday – April 9, 2015

7:00 am - 3:00 pm		Registration Desk Open (Early Check-in: 5:00 pm - 7:00 pm, Wednesday, April 8)		Registration Desk Open (Early Check-in: 5:00 pm - 7:00 pm, Wednesday, April 8)	
8:00 am - 8:10 am		Welcome - John Pilipchuk / Mohammed Mulla (Chimney Rock/Mendenhall/Exhibit Area)		Welcome - John Pilipchuk / Mohammed Mulla (Chimney Rock/Mendenhall/Exhibit Area)	
8:10 am - 8:15 am		Transition Break		Transition Break	
8:15 am - 10:00 am		Session 1A - Geotechnical I (Reynolds/Cameron/Smith) - Moderator: John Ledbetter		Session 1B - GeoEnvironmental I (Pinehurst) - Moderator: Kathy Roush	
1.75 PDHs	1A-1	G15-24_What's New with the NCDOT Geotechnical Engineering Unit? Scott A. Hidden, NCDOT	1B-1	G15-09_Gasoline... Diesel... What's Going on Down There? Current Approaches and the Need to Further Evaluate LNAPL Recoverability. Alex Culpepper, S&ME Inc.	
	1A-2	G15-01_Case History: Ground Improvement Test Section and Ground Improvements for Downtown Crossing Section 1, Louisville – Southern Indiana River Bridges Project. John E. Reinfurt, Jacobs Engineering Group; Mike Minton, Hayward Baker Inc.	1B-2	G15-11_Environmentally Sustainable Approach to Groundwater Remediation. Thomas C. Niver, NCDOT	
	1A-3	G15-44_Record Rainfall, the Effects of Long Term Annual Average on Slope Stability in WNC in 2013. Jody C. Kuhne, NCDOT	1B-3	G15-14_Land Application of Concrete Byproducts Promotes Environmental Sustainability. Rob Willcox, S&ME, Inc.; Robin Maycock, NCDOT	
	1A-4	G15-51_Design of Large Diameter Open-End Steel Pipe Piles for the New NY Bridge. Brian D. Keaney, HDR	1B-4	G15-16_Due Diligence and Contamination Management on Design Build Projects. Cyrus Parker, NCDOT	
10:00 am - 10:25 am		Refreshment Break - Exhibit Area (Blowing Rock)		Refreshment Break - Exhibit Area (Blowing Rock)	
10:25 am - 12:10 am		Session 2A - Geotechnical II (Reynolds/Cameron/Smith) - Moderator: Scott Hidden		Session 2B - GeoPhysical I (Pinehurst) - Moderator: John Stewart	
1.75 PDHs	2A-1	G15-52_Nondestructive Testing to Predict the Embedded Depth of Pile Foundations. Murthy Guddati and Vivek Samu, NCSU	2B-1	G15-37_A Simple Solution: 'Going under cover' at the US 17 Western Parkway in Jacksonville, North Carolina. Ken Daly and Shirshant Sharma, AMEC	
	2A-2	G15-50_Field Testing for Foundation Reuse at the Lake Mary Road Bridge, Arizona. Frank Jalinoos, FHWA	2B-2	G15-43_Keys to Successfully Using Geophysics to Detect Mine Voids and Covered Sinkholes or Subsurface Imaging of Mine and Karst Voids using Geophysics. Robert K. Davis and Brent B. Waters, Golder Associates	
	2A-3	G15-26_DIGGS: A Dream Becomes Reality: Implementation Status of a Standardized Geotechnical Data Management Concept. Robert C. Bachus, Geosyntec Consultants; Robert Schweinfurth, Geo-Institute of ASCE	2B-3	G15-03_Electrical Resistivity – Applications for Geologic Site Characterization and Void Detection. Eric Cross and Doug Canavello, Pyramid Environmental & Engineering, P.C.	
	2A-4	G15-25_Managing North Carolina's MSE Wall Assets through Design, Construction and Performance. Robert A. Gladstone, Association for Metallically Stabilized Earth	2B-4	G15-04_3D GPR Studies to Map Subsurface Voids. Ned Billington, ESP and Kevin Miller, NCDOT	
12:20 pm - 1:30 pm		Lunch - Provided (Chimney Rock/Mendenhall/Exhibit Area)		Lunch - Provided (Chimney Rock/Mendenhall/Exhibit Area)	
12:40 pm - 1:10 pm		Luncheon Presentation		Luncheon Presentation	
0.50 PDHs	L-1	Engineering for Performance – a Look to the Future. Scott Anderson, FHWA	L-1	Engineering for Performance – a Look to the Future. Scott Anderson, FHWA	
1:35 pm - 3:20 pm		Session 3A - Geotechnical III (Reynolds/Cameron/Smith) - Moderator: Khamis Haramy		Session 3B - GeoPhysical II (Pinehurst) - Moderator: Doug Canavello	
1.75 PDHs	3A-1	G15-06_Contact Free Elasto-Magnetic Sensors for Monitoring of Tension Forces in Pre-stressing Anchors and Compression Loads in Piles. Shahid Islam and Stephen Callies,	3B-1	G15-10_Subsurface Characterization for Directional-Drilling Projects Using MASW. Joel Daniel and James Whitt, Schnabel Engineering South, P.C.	
	3A-2	G15-20_Thermal Integrity Profiling. Jim Zammataro, PDI	3B-2	G15-22_Using Three-Dimensional GPR Data to Map Remnant Infrastructure and Interpret the Past. Keith C. Seramur, Seramur & Associate	
	3A-3	G15-33_Thermal Integrity Profiling (TIP) of Drilled Shafts in South Carolina. David Schoen and Gregory Canivan, S&ME	3B-3	G15-39_The Use and Limitations of Common Geophysical Methods in Determining Bedrock Depth. Kelly Plummer, GEL	
	3A-4	G15-49_Enhancing Reliability and Quality of Drilled Shafts through Thermal Integrity Testing. Matthew Silveston, Terracon	3B-4	G15-05_Remote Scour Monitoring Demonstration Project for Bonner Bridge. Ned Billington, ESP	
3:20 pm – 3:45 pm		Refreshment Break - Exhibit Area (Blowing Rock)		Refreshment Break - Exhibit Area (Blowing Rock)	

3:45 pm - 5:30 pm Session 4A - Geotechnical IV (Reynolds/Cameron/Smith) - Moderator: Brina Montoya		Session 4B - GeoEnvironmental II (Pinehurst) - Moderator: Robin Maycock	
1.75 PDHs	4A-1 G15-54_bioMASON employs natural microorganisms and chemical processes to manufacture biological cement-based masonry building materials (Growing Bricks). Ginger Krieg Dosier, bioMason	4B-1	G15-18_Vapor Intrusion in North Carolina. Genna K. Olson, Cardno ATC
	4A-2 G15-53_Increasing the Axial Load Capacity of Pervious Concrete Ground Improvement Piles Using Bio-modification. Muhannad T. Suleiman, Hai Lin, and Lusu Ni, Lehigh University	4B-2	G15-19_Accelerated Site Closure Achieved After System Optimization. Sheri Knox and Alex Mikszewski, AE&I
	4A-3 G15-55_Stabilization of Shallow Slope Failure on Expansive Clay using Recycled Plastic Pin. Sahadat Hossain and Mohammad Sadik Khan, UTA	4B-3	G15-27_Comparison between Method 6200B and QED on Site Analysis. Colin Green, QROS
	4A-4 G15-13_Soldier Pile Wall Rehabilitation Using Shored Geosynthetically Confined Soil Wall with Reticulated Micropiles in the Blue Ridge Mountains. Nate Beard and Matt Birchmier, GeoStabilization International	4B-4	G15-28_Brownfields, Battery Caps, and a Junkyard Dog of a Site. Matt Bramblett, Hart & Hickman and Gordon Box, NCDOT

6:00pm – 8:30 pm **Reception / Social Hour - (Chimney Rock/Mendenhall/Exhibit Area)**

6:30 pm - 7:15 pm Social Hour Presentation		Social Hour Presentation	
0.00 PDHs	SH-1 G15-30_“Investigation and Treatment of a Swallowette” aka: Sinkhole Remediation at the National Corvette Museum. Michael J. Marasa, Hayward Baker Inc.	SH-1	G15-30_“Investigation and Treatment of a Swallowette” aka: Sinkhole Remediation at the National Corvette Museum. Michael J. Marasa, Hayward Baker Inc.



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Program A - Geotechnical

Program B - GeoEnvironmental/GeoPhysical

Friday – April 10, 2015

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7:00 am - 10:00 am Registration Desk Open

7:30 am – 9:00 am Continental Breakfast - Exhibit Areas (Room: Chimney Rock/Mendenhall)

8:00 am - 9:30 am Session 5A - Geo³T² Poster Session A/B (Mendenhall/Bellamy) Moderator: Eric Williams		Session 5B - Geo³T² Poster Session A/B (Mendenhall/Bellamy) Moderator: Saieb Haddad	
0.00 PDHs	5A-1 G15-56_Influence of Physicochemical Properties in Ohmic Resistivity of Clay Minerals. Golam Kibria, Drash; Sahadat Hossain, UTA	5B-1	G15-40_Required Suction Measurement Duration Using Tensiometers in the Field. Cheng Wang, Roy Borden, and Mohammed Gabr, NCSU
Poster Size: 3'x4' or 4'x3'	5A-2 G15-57_Behavior of Expansive Subgrade on a State Highway in North Texas. Sahadat Hossain, Asif Ahmed and Mohammad Sadik Khan, UTA	5B-2	G15-08_Dynamic Pile Driving Monitoring with Embedded Data Collectors (EDC). Shunyi C. Chen and Mohammed A. Mulla, NCDOT
	5A-3 G15-58_Site Investigation of Highway Slopes Using Resistivity Imaging Technique. Sahadat Hossain and Mohammad Sadik Khan, UTA	5B-3	G15-21_NCDOT's Experience with Hydraulic Settlement Gauges. Richard S. Webb, NCDOT
	5A-4 G15-41_Analysis and Performance of Temporary Slopes in Unsaturated Residual Soils. Jungmok Lee, Roy Borden, and Mohammed Gabr, NCSU	5B-4	G15-45_Numerical Assessment of Plate Anchors Capacity in Saturated Soils. Zahra Aghazadeh Ardebili, M.A.Gabr, and M.S. Rahman, NCSU
	5A-5 G15-48_Shear Wave Velocity Measurements in Triaxial Tests (Mechanical properties of microbial induced calcite precipitated cemented soil). Kai Feng and Brina Montoya, NCSU	5B-5	G15-60_NCDOT's "new" Project Special Provision for Prevention of Longitudinal Pavement Cracking in Roadway Embankments of high plasticity Soils. Dan Popek, NCDOT
	5A-6 G15-42_Unsaturated Soil Strength of Residual Soils from Greensboro, NC (Unsaturated Strength property in residual soil). Chien-Ting Tang, Roy Borden, and Mohammed Gabr, NCSU	5B-6	G15-47_Failure Modes of Suction Caisson in Sand under Axially Pullout Loading (A Novel Estimation of axial pullout capacity of suction caisson in sand). Jinfu Xiao, M.A.Gabr, and M.S. Rahman, NCSU
	5A-7 G15-46_Evaluating Subgrade Resilient Modulus by In-situ and Laboratory Tests. S. Hamed Mousavi, Mohammed Gabr, and Roy H. Borden, NCSU	5B-7	P15-03_Undrained Behavior of Silty Soil Improved with Microbial Induced Cementation. Atefeh Zamani and Brina Montoya, NCSU
	5A-8 P15-01_Improving the Resiliency of Coastal Sand Dunes using Microbia Induced Calcite Precipitation. Casey Shanahan and Brina Montoya, NCSU	5B-8	P15-04_Leaching Behavior of Bio-Mediated Fly-Ash. Seyed Shahin Safavizadeh and Brina Montoya, NCSU
	5A-9 P15-02_Contaminated Waste Minimization. Cyrus Parker, NCDOT	5B-9	P15-05_REES "Risk Estimator for Embankment Structures" Software. Amr Helal and Mohammed Gabr, NCSU
			5B-10

Poster Size: 3'x4' or 4'x3'

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8:30 am - 10:15 am Session 6A - Geotechnical V (Reynolds/Cameron/Smith OR Tanglewood) - Moderator: Chris Kreider

9:00 am - 10:45 am

Session 6B - GeoEnvironmental III (Pinehurst) - Moderator: Cyrus Parker

1.75 PDHs	6A-1 G15-29_Rehabilitation of US-158 over Soft Organic Soils through Vibration Sensitive Historic Elizabeth City, NC. Michael Valiquette, NCDOT	6B-1 G15-35_Railroad Right of Entry: A Case Study. Brian Speight, HMM Group; Michael Branson, Solutions-IES
	6A-2 G15-34_Design and Construction of Micropiles Supporting I-73 Taxiway Bridge. Sharat Gollamudi, AMEC; Tom Morrison, Morrison Engineers	6B-2 G15-36_Risk-based Remedial Action at Contaminated Sites in North Carolina: History, Case Study, and Legislative Update. Jim Bateson, NCDENR; Joe Starr, Solutions-IES
	6A-3 G15-38_Geostructural Design and Construction Interfaces of I-73 Taxiway Bridge Design-Build. Bon Lien and Shane Johnson, AMEC	6B-3 G15-23_Beneficial Use of Coal Combustion Products. Christopher A. Peoples, NCDOT; Ellen Lorscheider, NCDENR
	6A-4 G15-32_Field Performance Evaluation of Low Volume Gravel Road Sealed with Bituminous Surface Treatment. Mark H. Wayne and Jay Kwon, Tensar	6B-4 G15-12_Geologic Data of the North Carolina Geological Survey – From Historic Data to Modern Detailed Geologic Mapping. Phil Bradley, NCDENR

10:30 am -11:00 am Refreshment Break - Exhibit Area (Blowing Rock)

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10:30 am - 12:15 pm Session 7A - Geotechnical VI (Reynolds/Cameron/Smith OR Tanglewood) - Moderator: Robert Gladstone

1.75 PDHs	7A-1 G15-17_Geotechnical Instrumentation and Monitoring System for I-20 Embankment in Kershaw County, South Carolina. Ming Zhu, Meena Viswanath, & Robert Bachus, Geosyntec Consultants; Ed Tavera, GeoStellar Engineering; Nathalia Chandler, SCDOT
	7A-2 G15-02_Anatomy of a Bridge Abutment Failure. Raymond A. DeStephen, Schnabel Engineering
	7A-3 G15-07_Slope Stability. Frank Milchuck, Platipus Anchors Inc.
	7A-4 G15-59_The Full Scale Mechanics of Slope Stabilization. Bob Lyne, Geobrugg North America

9:30 am - 1:00 pm Session 8A - Training - Geotechnical (Tanglewood OR Reynolds/Cameron/Smith; Break: 10:45-11:00) - Moderator: Sayed Sayed

3.25 PDHs	8A-1 Drilled Shaft Foundations, Construction & Inspection. Khamis Haramy, FHWA
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11:00 am - 12:30 pm

Session 8B - Training - GeoEnvironmental (Pinehurst)

1.50 PDHs	8B-1 Ultraviolet Fluorescence Petroleum Analysis for Managers. Felecia Owen, QROS
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Training and Thursday Lunch are Included in the Registration Fee (No Extra Charge)

SUMMARY:

Day 1: 8 Sessions, 34 Presentations (include Luncheon & Social Hour Presentations)

Day 2: 7 Sessions, 12 Presentations, 2 Trainings, 18 Posters

PDH Record

Session	Hours	
1A or 1B	1.75	Thursday
2A or 2B	1.75	Thursday
Luncheon Presentation	0.50	Thursday
3A or 3B	1.75	Thursday
4A or 4B	1.75	Thursday
6A or 6B	1.75	Friday
7A	1.75	Friday
8A	3.25	Friday
8B	1.50	Friday

Max. PDHs Can Be Claimed: 11.00 PDHs (see details below)

Thursday:

7.50 PDHs

(Sessions: 1A/1B, 2A/2B, 3A/3B, 4A/4B & Luncheon Presentation)

Friday:

3.50 PDHs (Sessions: 6A/6B & 7A)

or

3.25 PDHs (Session: 8A only)

or

3.25 PDHs (Sessions: 6B & 8B)