OHIO RIVER VALLEY SOILS SEMINAR XLVIII

ASCE CINCINNATI SECTION GEOTECHNICAL GROUP
48TH ANNUAL OHIO RIVER VALLEY SOILS SEMINAR
NOVEMBER 17, 2017
LOCATION: Hilton Netherland Plaza, 35 W 5th Street Cincinnati, Ohio 45202

CALL FOR PAPERS

TOPIC: "Infrastructure Innovation in Geotechnical Design"

With the American infrastructure scoring a D+ in the most recent ASCE's Report Card for America's Infrastructure, the push to invest in the same is bound to increase. For this investment to be fruitful, innovative and economical construction practices would be required. As such, infrastructure innovation in geotechnical design will become increasingly important. The Geotechnical Group of the ASCE Cincinnati Section is issuing this Call for Papers with emphasis on "Infrastructure Innovation in Geotechnical Design" for the 48th Annual Ohio River Valley Soils Seminar (ORVSS XLVIII) in Cincinnati, Ohio. Papers may include geotechnical design, instrumentation, investigation, construction, case histories, etc. of various types of infrastructure, which may include, but are not limited to, roads, bridges, tunnels, railway, dams and levees, power plants, etc. and should highlight innovative techniques or technologies. Papers will be selected to be presented during the one-day seminar with the papers distributed to the attendees as part of the seminar proceedings. The goal of ORVSS XLVIII is to provide geotechnical engineers, geologists, contractors, material suppliers, and other geotechnical practitioners an opportunity to share experiences on previous projects in the geotechnical aspects of infrastructure to continue the advancement of our professional field.

ORVSS XLVIII Keynote Speaker

Timothy D. Stark is a Professor of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign with an expertise in Geotechnical Engineering. Dr. Stark has been conducting interdisciplinary research and teaching on the static and seismic stability of natural and manmade slopes, such as dams, levees, floodwalls, and waste containment facilities, railroad geotechnics, geosynthetics and geomembranes, soil liquefaction during earthquakes, and stabilization and behavior of dredged material containment areas. He is currently researching three-dimensional slope stability, inverse analyses of landslides, heating events in waste containment facilities, and jet grouting. Dr. Stark has received a number of awards for his research, teaching, and service activities.

Dr. Timothy D. Stark, Professor
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Dr. Stark will be presenting on "2D and 3D Unsaturated and Transient Seepage Analyses for Landside Excavations near Levees and Floodwalls" (abstract below):

Levee and floodwall seepage models based on two-dimensional (2D) conditions can under-predict landside vertical hydraulic gradients and uplift pressures due to excavations and convex bends. The Sherman Island levee system is used to calibrate a three-dimensional (3D) seepage model to evaluate the effect of finite landside excavations and convex levee bends on landside seepage. The calibrated model shows that a 3D analysis is recommended for a landside excavation with an aspect ratio (length to width) less than 1L:1.5W. For drainage canals and ditches that parallel a levee or floodwall, e.g., in New Orleans along the Inner Harbor Navigation Canal, and are wider than 15 m, gradients at the excavation center are essentially equal to 2D vertical gradients but greater than 2D gradients near the excavation sidewalls. The Sherman Island calibrated seepage model also shows concave bends diverge seepage and yield lower vertical gradients than 2D models. Varying the degree of levee curvature indicates that sharper convex bends cause vertical gradients that can be about 150% greater than 2D analyses.

Deadlines:

Receipt of typewritten one-page abstract:	August 18, 2017
Notice of acceptance:	August 25, 2017
Receipt of final papers:	September 30, 2017
Receipt of presentations for seminar:	October 31, 2017

Direct all correspondence to:

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Email: asaxena@geotechnology.com

Tentative Agenda – ORVSS XLVIII (November 17, 2017)

6:30-7:30 am	Exhibitor Registration and Setup
7:30-8:15 am	**Registration**
8:15-8:30 am	Welcome Remarks – Mark Salveter, PE, Geopier Foundation Company
8:30-9:10 am	"Case Studies on Geotechnical Instrumentation" – David Westendorf, PE, Terracon Consultants, Inc.
9:10-10:10 am	"Case Study – Vehicle Sustainment Brigade Complex TEMF Located at Fort Campbell, KY" – Steven W. Shifflett, PE, US Army Corps of Engineers – Louisville District
10:10-10:50 am	"Innovative Design for the Merchants Bridge West Approach Reconstruction for TRRA in St. Louis, MO" – Lyndsie Janbakhsh, PE and Kevin Kriete, PE, HDR, Inc.
10:50-11:05 am	**Break**
11:05-11:45 am	"Use of Small Diameter Micropiles to Mitigate Scour around Bridge Embankments" – Nathan Beard, P.E., GeoStabilization International
11:45-12:35 pm	**Lunch**
12:35-12:45 pm	Keynote Speaker Introduction – Akshat Saxena, EI, Geotechnology, Inc.
12:45-1:40 pm	Keynote: "Three-dimensional Levee and Floodwall Underseepage" – Timothy D. Stark, PhD, PE, University of Illinois, Urbana-Champaign
1:40-2:20 pm	"Asphalt Resurfacing After a Geohazard Repair" – Paul Travis, EI, PLS, and Justin Anderson, MS, PE, Geostabilization International
2:20-3:00 pm	"Geotechnical Challenges – The I-40/I-240 Interchange Project" – Ashraf S. Elsayed, PhD, PE, DGE, Geotechnology, Inc.
3:00-3:20 pm	**Break**
3:20-4:00 pm	"Seismic Hazards in the Memphis Area" – Ashraf S. Elsayed, PhD, PE, DGE, Geotechnology, Inc.
4:00-4:35 pm	"Dam Structures Improvements for a Transportation Project" – Richard L. Williams, PhD, PE, Stantec Consulting Services, Inc.
4:35-4:45 pm	**Closing Remarks**

REGISTRATION

Cost of registration (see form below) includes:

- Seminar admission and Exhibitor's Fair
- Coffee and pastries during registration
- Morning and afternoon refreshment breaks
- Lunch
- Bound copy of ORVSS XLV Proceedings
- Certificate for **7.5 PDHs**

Note: Pre-registration is essential to ensure receipt of bound proceedings and to facilitate morning registration. Also, Early Registration ends November 5, 2017 with Regular Registration beginning November 6, 2017.
Online registrations with credit card payments are available at http://orvss.com. See Registration Form below for prices and/or for registrations with check payments.

(tear off at line)

48TH ANNUAL OHIO RIVER VALLEY SOILS SEMINAR – REGISTRATION FORM
NOVEMBER 17, 2017 | HILTON NETHERLAND PLAZA, 35 W 5TH STREET CINCINNATI, OHIO 45202

Make check payable to **CINCINNATI GEOTECHNICAL GROUP** and mail with completed form to – Cincinnati Geotechnical Group, 1398 Cox Rd, Erlanger, KY 41018 Attn: ORVSS XLVIII. Registrations with credit card payments may be done online at http://orvss.com.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Company: _____

Phone: _____ Fax: _____

Email: _____

Note: Include additional copies of form or another sheet that include all attendees names and contact information if the enclosed registration amount is for more than one person.

Early Individual Registration (Postmarked by November 5, 2017)	$150.00 x	_____	_____
Regular Individual Registration	$200.00 x	_____	_____
Early Full-time Student Registration (Postmarked by November 5, 2017)	$40.00 x	_____	_____
Regular Full-time Student Registration	$50.00 x	_____	_____
Exhibitor Registration	$500.00 x	_____	_____
Additional Individual Registration with Paid Exhibitor (Limit 2 per paid Exhibitor Registration)	$100.00 x	_____	_____

Total Amount Enclosed: _____