



ASCE SEATTLE SECTION GEOTECHNICAL GROUP DINNER MEETING

THURSDAY April 23rd, 2009

Topic: Application of Unsaturated Soil Mechanics for Assessment and Preventive Measures of Slopes against Rainfall

Time: 5:30 – Social Hour, 6:30 – Dinner, 7:30 – Program

Place: McCormick & Schmicks – 1200 Westlake Avenue North, Seattle, WA 98109

RSVP: Please RSVP with your dinner entrée preference (Marsala Cream Chicken Breast or Mushroom & Asparagus Risotto) via: Our website www.seattlegeotech.org, e-mail to rsvp@seattlegeotech.org; or phone to Shannon & Wilson at 206-695-6799 **by 4:00 PM on Tuesday April 21st, 2009 for the advance RSVP rate.** Please let us know in advance if you would like to cancel.

Cost: \$35 with advance RSVP. \$40 with reservations made after April 21st deadline or at the door. \$15 for non-reimbursed public agency employees and students. If you are a student and would like to be sponsored, please specify when you RSVP. You can pay via Paypal or credit card online, or at the door by cash or check payable to "ASCE Seattle Geotechnical Group"

Speaker: Dr. H. Rahardjo – *presenting live from Nanyang Technological University (NTU) in Singapore*

Abstract: Slope failures caused by rainfall are common occurrences in various parts of the world. Many soil slopes have a deep groundwater table with a significant thickness of unsaturated zone above the water table. The negative pore-water pressures contribute to the shear strength of unsaturated soils. Rainfall-induced slope failures involve infiltration of rainwater and subsequent changes in pore-water pressure and shear strength of soils that are mostly located in the unsaturated zones. Therefore, assessments of slope stability against rainfall require unsaturated soil mechanics principles which will be illustrated using examples of application for the characterization of soil properties and measurement of negative pore-water pressures; seepage and slope stability analyses. Engineered soil covers based on the principles of unsaturated soil mechanics can be used for preventive measures to reduce rainfall-induced slope failures.

Bio: Professor Rahardjo has conducted extensive research on unsaturated soil mechanics to solve geotechnical problems associated with tropical residual soils. His current research focus is on rainfall-induced landslides, one of the major environmental problems affecting many countries in tropical regions. This research activity has led to the development of unsaturated tropical soil engineering laboratory in NTU. He is the co-author of the first textbook on unsaturated soils "Soil Mechanics for Unsaturated Soils", by Fredlund, D.G. and Rahardjo, and over 200 technical publications. He has also presented his research work in many keynote / invited lectures and short courses in various countries. He is Core Member of the TC6 Committee of International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) on Unsaturated Soils and Member of the Asian Technical Committee on Geotechnical Natural Hazards (ATC3). He has served as a consultant on various projects in many countries.

Planning Committee Meeting: Monday, April 20th, at 12:00 PM at AMEC office in Bothel. We would like to see a representative from each organization at our planning committee meetings. Please email Carlo Evangelisti at carlo.evangelisti@amec.com no later than noon on Friday April 17th for a lunch reservation if you plan to attend.

ASCE Seattle Section Geotechnical Group – 2008-2009 Officers

www.seattlegeotech.org

Eric Heller, PE, LG President	Sean Caraway, PE President-Elect	Sarah Morgan, EIT Secretary	Jon Brown, PE Treasurer	Bo McFadden, PE, LEG Membership Chair	Michel Bouchedid, EIT Education Chair	Carlo Evangelisti, PE Public Relations Chair
GeoEngineers, Inc. 1101 S. Fawcett Ave. Ste 200 Tacoma, WA 98402	Seattle Public Utilities Materials Laboratory 707 S. Plummer Street Seattle, WA 98134	Golder Associates Inc. 18300 NE Union Hill Rd Suite 200 Redmond, WA 98052	Landau Associates, Inc. 130 2 nd Avenue S Edmonds, WA 98020	GeoEngineers, Inc. Plaza 600 Bldg 600 Stewart St, Ste 1700	CH2M HILL 1100 112 th Ave, Ste 400 Bellevue, WA 98004	AMEC Earth&Environmental 11810 North Creek Parkway North Bothell, WA 98011
(253) 383-4940 eheller@geoengineers.com	(206) 615-1547 sean.caraway@seattle.gov	(425) 883-0777 Sarah_Morgan@golder.com	(425) 778-0907 jbrown@landauinc.com	(206) 239-3228 bmcfadden@geoengineer.com	(425) 233-3286 michel.bouchedid@ch2m.com	(425) 368-1000 carlo.evangelisti@amec.com