

## Geotechnical Seminar – Thursday September 27, 2012 – INST 207 – 9:30 to 11:00

This Thursday (September 27), Dr. Brian Anderson from Auburn University will be visiting and giving a lecture to the Analysis of Earth Structures course (CEE 6441). Since the topic is likely of interest to many and is based on a research study he recently completed, I am inviting any interested geotechnical students and faculty to join us. Additional information is provided below.

**Title:** Estimation and Measurement of Earth Pressure in Piedmont Residual Soils

**Abstract:** This presentation will describe some of the findings of a research project on the estimation and measurement of earth pressure in piedmont soils. Field measurements were made on instrumented sheet piles. The presentation will describe the findings of the study as well as present a perspective on local residual soils.

**Biographical Sketch:** J. Brian Anderson is an associate professor of civil engineering in the Samuel Ginn College of Engineering at Auburn University. He holds Ph.D. and Master of Engineering degrees in Geotechnical Engineering from the University of Florida. His research activities have focused in the areas of foundation engineering, earth retaining structures, soil stabilization, scour geotechnics, soil property determination, and public policy. Much of his research is field based. At his previous appointment at the University of North Carolina Charlotte, he managed Department of Transportation research for foundations, retaining structures, and pavement subgrades. Dr. Anderson is active in professional service and development. He has taught outreach courses through the University of Florida, American Society of Civil Engineers, the Pile Driving Contractors Association and the US Army Corps of Engineers. He is a Member of the American Society of Civil Engineers, the Geo-Institute and currently chairs the Deep Foundations Technical Committee. Dr. Anderson is affiliated with the International Association for Foundation Drilling and the Pile Driving Contractors Association. Anderson is a native of North Carolina and holds a Bachelors Degree from NC State University. He maintains affiliations with the North Carolina and Florida Departments of Transportation, the Federal Highway Administration Southern Resource Center, and the University of Florida, as well as geotechnical consulting firms throughout the United States.

### *Selected Publications*

- Anderson, J.B. and Babalola, M.R., 2011. Lateral load testing micropiles to evaluate the impact of threaded joints and casing embedment on short micropiles in shallow rock, *DFI Journal*, Vol. 5, No. 2. December.
- Burrage, R.E., Anderson, J.B., Pando, M.A., Ogunro, V.O., and Cottingham, M.A., 2011. A cost effective triaxial test method for unsaturated soils, *ASTM Geotechnical Testing Journal*, Vol. 35, No. 1. January.
- Anderson, J.B. and Townsend, F.C., "Load Testing and Settlement Prediction of a Shallow Foundation", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE. Vol. 133, No. 12, 2007.
- Anderson, J.B., Ogunro, V., Starnes, J.R., and Detwiler, J.M., "Field Monitoring of Two Research Sheet Pile Walls During Excavation", TRB 86th Annual Meeting of the Transportation Research Board, Washington, D.C., January 21-25, 2007.
- Anderson, J. B., Townsend, F. C., and Grajales, B., "Case Histories Evaluation of Laterally Loaded Piles," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 129, No. 3, pp 187-196, 2003.
- Anderson, J. B. and Townsend, F. C., "A Laterally Loaded Pile Database," *Deep Foundations 2002, An International Perspective on Theory, Design, Construction, and Performance*, ASCE GSP 116, M. W. O'Neill and F. C. Townsend Eds., ASCE, pp 262-271, 2002.
- Anderson, J. B. and Townsend, F. C., "SPT and CPT Testing for Evaluating Lateral Loading of Deep Foundations," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 127, No. 11, pp 920-925, 2001.
- Anderson, J. B., Grajales, B., Townsend, F. C., and Brown, D., "Validation of P-y Curves from Pressuremeter and Dilatometer Tests at Auburn, Alabama," *Behavioral Characteristics of Residual Soils*, ASCE GSP 92, Bill Edelen ed., ASCE, pp 77-87, 1999.
- Anderson, J. B. and Townsend, F. C., "Validation of P-y Curves from Pressuremeter Tests at Pascagoula, Mississippi," XI Panamerican Conference on Soil Mechanics and Geotechnical Engineering, 1999.
- Hand, R., Bloomquist, D. G., and Anderson, J. B., "Development of a Cemented Sand Module for the Electronic Cone Penetrometer," *Transportation Research Record* 1675, National Research Council, Washington, D.C., pp 10-16, 1999.
- Pinto, P. L., Anderson, B., and Townsend, F. C., "Comparison of Horizontal Load Transfer Curves From Strain Gages and Slope Inclinometer: A Case Study," *Symposium on Field Instrumentation for Soil and Rock, ASTM STP 1358*, G.N. Durham and W.A. Marr, Eds., American Society for Testing and Materials, pp 3-15, 1999.