Personal Bio

Vital Stats

Full Name: Sherif Adel Yahia Akl

Affiliation: Cairo University

Position: Assistant Professor of Geotechnical Engineering

Biography

Dr. Sherif Akl graduated from the Civil Engineering Department of the Faculty of Engineering, Cairo University, in 2003 with Honors and Distinction. Upon his graduation, he was appointed as a Teaching Assistant in the Soil Mechanics and Foundations Laboratory in Cairo University. This is where he got his Masters in Soil Mechanics in 2005 from the Public Works Department. His thesis characterized the dynamic properties of the Sand in the Pyramids Area in Giza using The Resonant Column Device. Dr. Akl was then awarded the MIT presidential fellowship in 2005 and went on to finish his PhD in Geotechnical Engineering from the Civil and Environmental Engineering Department in 2011. His research under the supervision of Prof. Dr. Andrew Whittle investigated the stability mechanisms of wellbores in Soft and Plastic Rock. This research project was funded by BP and comprised lab experiments using a thick walled hollow cylinder device and finite element modeling using the commercial software ABAQUS. The analysis used advanced constitutive models and calibration to sediments behavior under high consolidation pressures. He worked as a Research Geomechanicist in Shell till 2012 as part of the Rock Characterization Team. His work focused on bridging the gap between Geomechanics in the Civil Engineering Community and the Petroleum Industry Workflows. He is currently an Assistant Professor in the Soil Mechanics and Foundations Research Laboratory of Cairo University. His research focuses on modeling the anisotropic geomechanical behavior of sediments, and acoustic stimulation of depleted reservoirs.

Education

Massachusetts Institute of Technology — Cambridge, MA
PhD in Geotechnical Engineering — (Sept '05 – Nov '10)
Thesis title "Wellbore Instability Mechanisms in Soils."
Additional Courses in Real Estate Investment and Negotiation.

Cairo University — Cairo, Egypt
M.Sc. in Geotechnical Engineering — (Sep '03 – August '05)
Thesis title "Dynamic Characterization of Giza Sand Using Resonant Column Testing."
GRADE: 95/100.

Cairo University — Cairo, Egypt
B.Sc. in Civil Engineering — (Sept '98 – May '03)
Graduation Project "Planning and Construction Management of Naga-Hammadi Barrage, Egypt."
GRADE: 94.1/100, top 1% among 550 students.

Awards and Major Publications

Rabie, N. A., **Akl**, **S. A.** and Hussien, A. K. (2015) "Effect of parameter uncertainty on factor of safety calculations in a slope stability problem", Geotechnical Special Publication, vol. GSP 256, pp. 1842-1849.

Akl, S. A., and Louis, L. (2013) "Using Asymmetric Yield Surface to Model Material Anisotropy," 47th US Rock Mechanics / Geomechanics Symposium 2013, vol. 1, pp. 39-44.

Awards:

MIT Presidential Fellowship (2005), Cairo University Distinction Awards ('98/'99, '99/'00, '00/'01, '01/'02, '02/'03), Soil Mechanics and Foundations Research Laboratory Awards ('00/'01, '01/'02), Best Teaching Assistant, Students' of Cairo University Vote ('03/'04, '04/'05).