Virginia Tech
Center for Geotechnical Practice and Research
Annual Lecture Program

Thursday, March 3, 2011

Alumni Assembly Hall
Inn at Virginia Tech and Skelton Conference Center
Blacksburg, Virginia

8:00-8:45 **Richard R. Davidson, P.E., CPEng,** *URS Corporation*

"Hinze Dam Case History"

The Hinze Dam in Australia is a $400 million project that includes significant design and construction challenges. Technical issues include completing the dam raise under full reservoir, innovative converging chute spillway, unique on-site material processing and conditioning, deep abutment cutoff wall and grouting, and right abutment stability berms.

9:00-9:45 **Robert J. Werner, P.E.,** *Ardaman & Associates, Inc.*

"Staged Construction and Performance Monitoring of Levees and Impoundment Dams in South Louisiana"

Staged construction, in conjunction with the "observational approach" using geotechnical field instrumentation monitoring, is an effective technique that can be adopted to compensate for the difficult ground conditions in southern Louisiana. Case histories of levees and dams utilizing staged construction are presented to illustrate the benefits of the observational approach.

10:00-10:45 **Dr. Arturo Ressi de Cervia, Ph.D., P.E.,** *Kiewit Construction*

"Ohio River Construction of a Low Head Hydro Power Plant"

140-ft-deep cement-bentonite seepage barrier was installed with clamshell and Hydromill on the banks of the Ohio river for the construction of a low-head hydro power plant.

Keynote Speaker

11:00-12:20 **Dr. R. Kerry Rowe, P.Eng.,** *Professor and Canada Research Chair in Geotechnical and Geoenvironmental Engineering, Queen's University*

"Systems engineering the design and operations of municipal solid waste landfills to minimize contamination of groundwater "

Systems engineering approaches are needed to design and operate municipal solid waste landfills to account for interactions among different components and operations, including: liners, leachate collection systems, covers, construction quality, operating temperatures, and operation and management practices. By taking a systems engineering approach, the entire system as a whole can be made much more effective than the sum of the contributions of each of the individual parts.

12:25 **The lecturers, CGPR members, and Virginia Tech faculty and graduate students are invited to join us for lunch.**