



GEO-velopment: The Role of Geological and Geotechnical Engineering in New and Re-development Projects

CALL FOR PAPERS

2008 COLORADO GEOTECHNICAL SEMINAR

**November 7, 2008
Sheraton Denver West Hotel
Lakewood, Colorado**

Abstract Deadline: January 23, 2008

The Geotechnical Group of the Colorado Section of the American Society of Civil Engineers (ASCE), the Rocky Mountain Section of the Association of Environmental & Engineering Geologists (AEG), and the Colorado Association of Geotechnical Engineers (CAGE) have sponsored a one-day geotechnical seminar every other year since 1984. The theme of the 2008 seminar will be "GEO-velopment: The Role of Geological and Geotechnical Engineering in New and Re-development Projects." **The seminar will focus on past, present, and future development and re-development projects in Colorado and the Rocky Mountain Region.**

The papers accepted for the 2008 Colorado Geotechnical Seminar will again be published by ASCE as a Geotechnical Practice Publication (GPP). The ASCE Geo-Institute has developed the GPP for use by local sections, branches, and others as a vehicle for publishing their proceedings within an appropriately short timeline using a simplified review process.

Noting the focus on Development and Re-Development Projects, potential topics for papers include, but are not necessarily limited to, the following:

Geotechnical / Geological Investigation

- Field methods in urban environments
- Instrumentation
- Laboratory testing
- Research and analysis of old foundation records
- Identifying potential problems in new and re-development locations
- Old mines including waste issues, subsidence, and reclamation

Challenging Geology

- Swelling soils
- Subsidence
- Water erosion
- Ground improvement
- Slope stability/landslides
- Sinkholes

Mining/Alpine Engineering

- Rockfall
- Avalanche engineering
- Pipeline/roadway/tunnel/town construction in alpine environment
- Mining /geotechnical challenges for early miners, current projects, and developers

Water Resource Engineering

- Geotechnical tools for water resources to allow development/re-development
 - Ditches/canals
 - Dams, dam raises, and dam rehabilitation
 - Water tunnels & pipelines
 - Reservoirs

Transportation

- Historic transportation projects (railroads, tunnels, etc.)
- Fastracks
- Bridges
- Tunnels
- Corridor expansion
- Airports

State-of-the-practice Technical Approaches in Geotechnical Analysis and Design

- Three-dimensional modeling
- Soil-structure interaction
- Dynamic deformation analysis
- Rock mechanics analysis
- Seismic studies, seismotectonics, and retrofitting
- Risk assessment and dam safety as downstream development progresses
- Interaction of new and old foundations
- Shoring of existing infrastructure
- Forensic engineering
- Geophysics
- Geochemistry
- Geo-modeling software
- LRFD

Innovative Geotechnical/Construction Methods, Infrastructure/Population Expansion

- Design and construction in developed areas
- Resource management
- Floodplain issues
- Archeological issues
- Grouting for protection and remediation

Environmental issues

- Surface and groundwater remediation and rehabilitation
- Environmental site remediation
- Wetlands
- Colorado groundwater supply and aquifer recharge
- Energy development issues

Case Histories of Geotechnical/Geological Problems

- Unique local projects: Colorado/Rocky Mountain experience (recent and historical)
- Successes, failures, and lessons learned
- Large scale Colorado projects

Geo Education Development

- K-12 interest
- ABET accreditation
- ASCE policy 465
- Licensure
- Effectiveness of recent graduates in industry
- Interaction with government

The Geotechnical Seminar Steering Committee requests that individuals interested in preparing and presenting a paper submit a brief (approximately 200-word) abstract. **Please email your abstract (MS-Word or PDF format) to Christoph Goss at Christoph.goss@deereault.com by 5:00 PM Mountain Time on January 23, 2008.** With the abstract, please indicate your name, your role in the subject matter, your daytime telephone number, and your return email address. This abstract is for informal Steering Committee review, not for publication. Selected authors will be notified by **February 15, 2008**, and will be given a set of simple guidelines and a template for developing an electronic version of the paper. An electronic draft of the paper is due **by May 9, 2008** for review by ASCE. Review comments on the draft paper will be provided to the author by **June 20, 2008**. The revised electronic copy of the **final paper** is due **by July 11, 2008**. The collection of papers will be published by ASCE as a national Geotechnical Practice Publication, which will be provided to the Geotechnical Seminar attendees. Approximately twelve of the published papers will be chosen by the committee to be presented at the conference. Individuals presenting their GPP paper should prepare a PowerPoint presentation and plan to speak for 20 to 30 minutes.

Thank you in advance for your interest.

The Geotechnical Seminar Steering Committee