



Association of Environmental and Engineering Geologists

MEETING DATE

Thursday
October 14TH, 2010

TIME

5:45 p.m. Social Hour
6:30 p.m. Dinner
7:30 p.m. Presentation

LOCATION

American
Mountaineering
Center
710 10th St.
Golden, Co 80401
Conference Room A
See Map Below

COST

\$25 Members
\$27 Non-members

RESERVATIONS

meetings@aeqrms.org
or
WWW.AEGRMS.ORG

BY NOON,
TUESDAY
October 12TH

Challenging Geotechnical Conditions and Foundation Solutions at Colorado Treatment Plants

Steve Kuehr

Lyman Henn, a division of Brierley Associates, LLC

Over the past several years, Lyman Henn has provided geotechnical engineering services for several treatment plant sites where difficult and unusual subsurface conditions have been encountered. This presentation will provide an overview of these sites, a description of the difficult ground conditions, a discussion of the foundation system solutions that were considered, a summary of the foundation solutions that were implemented and the technical basis for the success of these systems.

STEVEN C. KUEHR, P.E. is a Senior Associate with Lyman Henn, a division of Brierley Associates, LLC, specializing in providing geotechnical engineering services to public infrastructure projects. He has over 30 years of progressive geotechnical engineering experience with highways, dams, levees, light rail, pipelines, reservoirs, treatment plants and pumping facilities projects. Mr. Kuehr holds a BSCE and MSCE both from Purdue University. He is a registered professional engineer in Colorado and California.



Words from the Chair



Last month I was afforded the opportunity to travel to Europe for a week for an educational seminar. While this unfortunately fell on the same week as the AEG annual meeting, I felt it was an experience not to be passed up. The seminar consisted of a group of about 45 American engineers, contractors, and owners touring four tunnel construction sites in Austria and the Czech Republic. The purpose was to expose Americans to how the Europeans go about building underground projects and to have an exchange of ideas between the two cultures. Aside from the fabulous beauty of the Alps and centuries-old cities, the trip was very enlightening with respect to the business climate in the US versus Europe. Here are a few of the more interesting highlights:

- In the next 20 years, an estimated 7,000 kilometers of tunnels for all types of uses will need to be constructed. While the focus was on tunnels, this number reflects a continued need for public and private infrastructure projects that will require advanced geologic skills across the globe.
- As we all know well, the legal climate in the US drives up costs and inhibits innovation. The US has one lawyer for every 265 people compared to Germany at 593 and France at 1,403. Japan is the toughest westernized country for a lawyer to find a job at just one lawyer for every 6500 citizens. Contractors I talked to in Austria say they are not overly concerned about lawsuits and legal fees to defend claims. The contracts appear to be more forgiving than in the US when it comes to changed conditions on a project.
- Europeans tend to spend more money and time on equipment maintenance and upkeep, while Americans spend more on equipment safety and safety training for workers. I did not notice any major safety concerns on the projects I saw, but I will admit that the equipment was immaculate.
- The trend in both regions is for more projects to go design-build versus the traditional design-bid-build. This is a positive movement in many ways, as it brings the owner, designer, and contractor together much earlier in the process.

For those of you who made to Charleston, I hope it was a fun and educational conference. I hope to see you at the next Section meeting.

Nate Soule,
Section Chair

Accepting Nominees for Chair-Elect

The section is currently in need of a Chair-Elect for this year. Normally the Chair-Elect serves one year and assists the Section Chair as needed and will subsequently serve as the Chair for the following year. If you wish to nominate someone or yourself, or if you simply have questions about the situation, please email the board at newsletter@aeqrms.org.



2010 COLORADO ASCE

GEOTECHNICAL SEMINAR PROGRAM

Geo-Trends: The Progress of
Geological and Geotechnical Engineering
at the Cusp of a New Decade

November 5, 2010

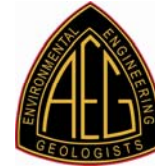
7:00 AM	8:00	REGISTRATION & CONTINENTAL BREAKFAST SPONSORED BY: TBD
8:00	8:30	KEYNOTE ADDRESS: Blaine D. Leonard, P.E., F. ASCE, President ASCE <i>Blaine will discuss the Thistle Mountain Landslide, which is the costliest landslide in US history. This slide and associated landslide dam devastated the town of Thistle, flooded two highways, and forced the relocation of a transcontinental rail line.</i>
SESSION 1 – Past, Present, and Future Topics		
8:30	9:00	Thirty Years of Excavation Shoring Design and Construction Progress in Denver, Colorado, Duncan
9:00	9:30	Colorado Earthquakes and Seismic Hazard, Mueller
9:30	10:00	Geotechnical Trends for Sustainable and Constructible Solutions, Bernhardt & Dornfest
10:00	10:30	EXHIBITS AND REFRESHMENT BREAK SPONSORED BY: A.G. Wassenaar
SESSION 2 – Foundations and Pavements		
10:30	11:00	Engineering Performance of Thermo-Active Foundations, McCartney, Rosenberg, & Sultanova
11:00	11:30	Helical Pile Capacity to Torque Ratios, Current Practice, and Reliability, Cherry & Souissi
11:30	12:00 PM	Case Study: Heave Potential Associated with Ettringite Formation in Lime Treated Materials for an Aurora, Colorado Roadway, Duran



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12:00	1:00	<p><i>LUNCHEON SPONSORED BY:</i> Lyman Henn <i>a division of Brierley Associates</i></p>
SESSION 3 – Earth Retention and Slope Stability		
1:00	1:30	Utilizing “Grout Columns” for Soil Nail Wall Construction, Hart & Warnick
1:30	2:00	Micropiles for Slope Stabilization, Howe
2:00	2:30	Probabilistic and deterministic slope stability analysis by Random Finite Elements (RFEM), deWolfe, Griffiths, Huang
2:30	3:00	Excavation Support and Micropile Underpinning in Vail, Colorado, Robison
3:00	3:30	<p><i>EXHIBITS AND REFRESHMENT BREAK SPONSORED BY:</i> TBD</p>
SESSION 4 – Underground Projects		
3:30	4:00	The Use of Geophysical Methods to Detect Abandoned Mine Workings, Niehoff
4:00	4:30	Wine Caves in Colorado, Hawks, Hawks, & Howard
4:30	6:00	<p><i>RECEPTION WITH OPEN BAR SPONSORED BY:</i> Deere & Ault Consultants</p>



GeoTrends: The Progress of Geological and Geotechnical Engineering in Colorado at the Cusp of a New Decade

November 5, 2010

Dear Colleagues:

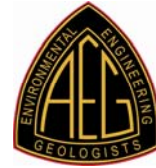
The Steering Committee for the 2010 Geotechnical Seminar would like to invite you to attend the upcoming geotechnical seminar titled "*GeoTrends: The Progress of Geological and Geotechnical Engineering in Colorado at the Cusp of a New Decade*". This seminar is a continuation of the biannual series presented by the Geotechnical Group of the ASCE Colorado Section, CAGE, AEG, and the ASCE Geo-Institute. It will be presented on Friday, November 5th, 2010 at the Sheraton Denver West Hotel located at 360 Union Boulevard in Lakewood. The goal of the seminar is to enhance the technical knowledge of local geotechnical engineers and geologists in areas of current regional interest. To increase the influence of the seminar, the proceedings will be published nationally by the Geo Institute of ASCE in a Geotechnical Practice Publication.

Please fill out and return the enclosed information to Mark Brooks at the address indicated on the form or via e-mail at mbrooks@semaconstruction.com. Pre-registration discounts are available through October 22, 2010.

For questions related to conference registration, exhibits, and/or sponsors, please contact Becky Roland (staff@coloradoasce.org) or Mark Brooks via the e-mail address indicated above. If you have questions with regards to the conference please contact Joe Kerrigan, (Joseph.Kerrigan@paccoast.com).

With best regards,

The Geotechnical Seminar Steering Committee



GeoTrends: The Progress of Geological and Geotechnical Engineering in Colorado at the Cusp of a New Decade

November 5, 2010

GEOTECHNICAL SEMINAR

Organization: _____

Please indicate (one form per registration):

- | | | |
|--------------------------|--|-------------|
| <input type="checkbox"/> | Early Registration (before October 22) | \$120 |
| <input type="checkbox"/> | Late Registration | \$150 |
| <input type="checkbox"/> | Student Registration | \$ 35 |
| <input type="checkbox"/> | Sponsor (includes 1 registration) | \$300 |
| <input type="checkbox"/> | Exhibitor (includes 1 registration) | \$500 |
| <input type="checkbox"/> | Add Lunch / Break Sponsor (in addition to sponsorship above) | \$400/\$200 |
| <input type="checkbox"/> | Corporate Registration (includes 2 registrations and sponsor)
(Additional Corporate registrations are \$115 per person) | \$550 |

Name: _____

Address: _____

Phone: _____

E-mail: _____

A check payable to "ASCE Geotechnical Seminar" – *Tax Identification Number (TIN): 84-0005100*

- Is enclosed
 Will be sent under separate cover by _____ (Date)

Please mail responses and checks to:

ASCE GEOTECHNICAL SEMINAR
c/o SEMA Construction, Inc.
ATTN: Mark Brooks
7353 S. Eagle St
Centennial, CO 80112

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***** Different meeting location this month !!!!! *****

A short reminder that this month's meeting will be held at the American Mountaineering Center, Conference Room A, 710 10th St. in Golden. This 20th century building will be a pleasant change of scenery and hopefully add a nostalgic feel to our meetings. There is a parking lot in the rear of the building as well as some street parking and parking lots within a block of the Center.

