



The Official

Newsletter

of the Oregon Section Association of Engineering Geologists

Serving Professionals in Engineering, Environmental, and Groundwater Geology

JAN 2005 SECTION MTG JOINT WITH ASCE GEOTECH

GUEST: DEREK CORNFORTH, PH.D., P.E., CORNFORTH CONSULTANTS

PRESENTATION: PELTON UPPER SLIDE: "DELAYED FAILURE" IN STIFF CLAY

This program will combine geology and geotechnical engineering on one of the more interesting landslides in Derek Cornforth's career. The slope failure was monitored by Portland General Electric from 1974 to 1988 by which time it had stopped moving. Then an attempt to make the slope safer resulted in the landslide moving faster than ever. The double wedge failure was ultimately stabilized by a cut and fill technique. Derek will discuss "delayed failure" in stiff clay and how the calculated static factor of safety varies (below 1.0) with the velocity of the landslide.

Dr. Cornforth is the Author of *Landslide in Practice: Investigations, Analysis, and Remedial/Preventative Options in Soil*, John Wiley & Sons, 2005. He is currently a staff consultant to Cornforth Consultants/Landslide Technology, a company that he founded and managed as President in Portland, Oregon. Dr. Cornforth was the Vice President of Shannon & Wilson, Portland, Oregon; Managing Director of Nuttall Geotechnical Services Ltd., near London, England; and Principal Engineer of Shannon & Wilson, Seattle, Washington and Portland, Oregon. He has 49 years of experience, 37 of those in the Pacific Northwest.

Dr. Cornforth's education includes Ph.D. in Civil Engineering

(Geotechnical), Imperial College of Science and Technology, London University, England; M.S. in Civil Engineering (Geotechnical), Northwestern University, Evanston, Illinois

(Fulbright Scholar); and B.S. in Civil Engineering, Durham University, England

Dr. Cornforth was a member of the NRC Committee on the Review of Landslide Hazards Mitigation



Strategy; Vice Chairman of the Embankment Dams and Slopes Committee, American Society of Civil Engineers; and Past President of the American Council of Engineering Companies of Oregon.

This Month's Meeting is on Tuesday January 17

**Sweetbrier Inn
7125 SW Nyberg Road
Tualatin, Oregon**

6:00 pm Social
7:00 pm Dinner
8:00 pm Presentation

Chicken Scallopini (medallions of chicken breast on pasta, fresh veggies w/ lemon caper sauce) or

Wild Mushroom Ravioli (in a gorgonzola cheese sauce)
\$30.00 (\$15.00 students)

E-mail <glenda.christman@amec.com> with "AEG Reservations" in the subject line, or call 503-639-3400, by 4 p.m. Thurs. Jan 12.

Cancel if you are unable to attend or be prepared to pay the full price.

MESSAGE FROM THE CHAIR

I hope everyone had a wonderful holiday season and a happy new year to you all. Although it seems like it took place a long time ago, I would like to thank Dr. Jack Spadaro from AMEC for his presentation that he gave in December: A Case Study on Coupling Electrical Resistive Heating and Bio-sparging to Treat Source Area Volatile Organic Compounds. As you all know, our organization recently changed our name to the Association of Environmental & Engineering Geologists to reflect the environmental services that many of our members provide, and Jack's presentation was a perfect example of this.

There are several conferences coming up in 2006 that I would like to bring to your attention. The first

one is the 100th Anniversary Earthquake Conference – Managing Risk in Earthquake Country. This conference commemorates the 100th anniversary of the 1906 San Francisco earthquake and is being advertised as an opportunity for earth scientists, engineers, policy makers, and emergency responders to take stock of how well they are protecting their communities and mitigating the dangers associated with earthquakes. The conference will be on April 18-22, 2006 in San Francisco, California. For more information visit their website at www.1906eqconf.org.

The next conference is the 40th Annual Symposium on Engineering Geology & Geotechnical Engineering on May 24-26, 2006, at Utah State University, in Logan Utah.

The theme is Landslides – Investigation, Analysis, and Mitigation. Abstracts should be submitted by January 20, 2006. For more information go to <http://www.isu.edu/engineer/geosym/>. In addition, we should all mark on our calendars the First North American Landslide Conference in Vail, Colorado, June 3-8, 2007. The abstract submission date is March 15, 2006. Information is available on the conference website: <http://www.mines.edu/academic/geology/landslidevail2007/>.

I hope to see you all on January 17 at the joint AEEG/ASCE meeting where Dr. Derek Cornforth will be presenting.

Brent Black

AEG Oregon Section Chair

THANKS FOR SUPPORTING OREGON AEG!

AMEC
Columbia Geotechnical, Inc.
Cornforth Consultants, Inc.
DOGAMI

Geo-Tech Explorations, Inc.
GRI, Inc.
Kuper Consulting
Northwest Geophysical Assoc, Inc.
Oregon Department of Forestry

PBS Environmental
PSI, Inc.
Portland State University
Portland District COE

AEG OREGON CALENDAR

Feb 21: Ian Madin, DOGAMI, Digital Map Portland and Oregon
Mar 21: Steve Mumma, Geobrugg, Debris Flow Barrier Study at Oregon Test Site and San Bernadino
Apr 18: Student Night
May 16: Dr. Darrel Schmitz, topic to be announced

OREGON SECTION AEG NEWSLETTER is published monthly from September through May. Subscriptions are for members of AEG affiliated with the Oregon Section or other Sections, and other interested people who have requested and paid a local subscription fee of \$10.00. E-mail subscriptions are free.

News items are invited and should be sent to: Charlie Hammond, OR Section AEG Newsletter Editor, Cornforth Consultants, 10250 SW Greenburg Road, Portland, OR 97223, e-mail: <or.aeg.news@cornforthconsultants.com>, phone (503) 452-1100. Electronic media is preferred. Deadline for submittal is Friday three weeks before each meeting.

Advertising: business card \$10/mo, \$100/yr; ¼ page \$30/mo, \$200/yr; ½ page \$35/mo, \$350/yr.

Please notify Charlie if you have a change to your email or mailing address.

FIRST NORTH AMERICAN LANDSLIDE CONFERENCE

CALL FOR PAPERS

The "First North American Landslide Conference" will be held **June 3-8, 2007** in **Vail, Colorado**.

The Conference theme is **"Landslides and Society: Integrated Science, Engineering, Management, and Mitigation."** The Conference is designed to provide a stimulating forum for geoscientists, engineers, planners, economists, program managers, and other decision makers concerned with landslide hazards and their impact on North American society. Principal professional society sponsors of the Conference are the Association of Environmental and Engineering Geologists, the American Society of Civil Engineers, the American Rock Mechanics Association, the Canadian Geotechnical

Society, the Engineering Geology Division of the Geological Society of America, and the Transportation Research Board.

The Geo-Institute of ASCE will publish the Conference proceedings. ASCE standards for publication will be followed – a minimum of two independent reviews of each submission. Abstracts may now be submitted electronically at the conference web-site:

<http://www.mines.edu/academic/geology/landslidevail2007/>

Abstracts are due by March 15, 2006, but earlier submissions are encouraged. Decisions concerning acceptance of abstracts will be made within one month of receipt, and no later than April 15, 2006. Draft papers of approved abstracts

are due August 1, 2006. Paper reviews will be returned to authors by November 1, 2006.

Prospective authors are invited to submit abstracts of up to 500 words for papers to be considered for presentation/publication at the Conference. An individual may be a primary author and presenter for only ONE volunteered paper, but may co-author any number of abstracts/papers.

The abstract should include title of paper, names/affiliations of all authors and contact information for corresponding author, as well as which of the Conference topics/themes their paper specifically addresses. The website contains details of the conference themes and topics to guide those preparing abstracts.

PORTLAND STATE CLASSES

Below are some classes that AEG members might be interested in taking. Many are at night so "working" geologists can take them and also work. Winter quarter classes start January 9th and the quarter ends on March 22, 2006. If you have any questions, call Scott Burns, 503-725-3389.

G443/543	Groundwater Geology	4 credits	TuTh 16:40-18:30	CH69	Ben Perkins
G424/524	GIS for Natural Sciences	4 credits	TuTh 16:00-16:50	CH 1	Dave Percy
	Lab for G424/524	0 credits	Tu 17:00-20:00	CH 1	Dave Percy or
	Lab for G424/524	0 credits	Th 17:00-20:00	CH 1	Dave Percy
G470/570	Engineering Geology	4 credits	MW 16:40-18:30	CHS17	Scott Burns
	Lab for G470/570	0 credits	F 15:00-17:00	CHS17	Scott Burns
G618	Clay Mineralogy	4 credits	MWF 11:30-12:35	CH 69	Georg Grathoff
CE 410/510 Sec 2	Groundwater Contamination	4 credits	MW 14:00-16:00	SB2-148	Gwynn Johnson
CE 410/510 Sec 6	Water Quality Chemistry	4 credits	MW 18:00-20:00	CH 183	Bill Fish
CE 410/510 Sec. 7	Columbia River: Physical area	2 credits	W 16:00-18:00	SB2-139	David Jay
CE 410/510 Sec. 8	Slope Stability	4 credits	Tu 16:00-18:40	CH 259	Tom Braibish
CE 542	In Situ Soil Testing	4 credits	TuTh 12:00-14:00	SB2 148	Tom McCormack
ESR 527	Watershed Biogeochemistry	4 credits	TuTh 18:00-20:00	NH 358	Alan Yeakley

Note - if you are going to take the CEG exam in March, the G470/570 class is an excellent review!

40TH ANNUAL SYMPOSIUM ON ENGINEERING GEOLOGY & GEOTECHNICAL ENGINEERING - CALL FOR PAPERS

May 24-26, 2006, Utah State University, Logan, Utah

Theme: Landslides - Investigation, Analysis, and Mitigation

See: <http://www.isu.edu/engineer/geosym/>

Overview of the Symposium

The goal of this symposium is to provide engineering geologists, geotechnical engineers, and government professionals with the opportunity to exchange information on state-of-the-art practices in landslide investigation, analysis, and mitigation. The symposium will consist of invited speakers, contributed papers, and poster sessions. Although the theme of the symposium is landslides, papers on all engineering geology and geotechnical engineering topics are encouraged.

Symposium Highlights

- Geotechnical Engineering Keynote Address Michael Duncan, Virginia Polytechnic Institute and State University
- Geological Keynote Address William Cotton, Cotton Shires and Associates
- Slope Stability Analysis Keynote Address Sunil Sharma, The University of Idaho
- Landslide Field Trip
- Latest Advances in Landslide Mitigation
- Selection of Strength Parameters for Analysis
- Seismic Slope Stability
- Recent Advances in Landslide Monitoring Technology
- Student Paper Contest
- Landslide Photograph Contest

University

Logan, Utah 84322-4110

Jim.bay@usu.edu

by January 20, 2006. Abstracts should be approximately 250 words and may be submitted by email. Authors will be notified of acceptance by e-mail by February 10, 2006. A camera-ready digital copy of the paper will be due by April 7, 2006.

Student Paper Contest

Students submitting papers for the student paper contest must be the first author of the paper, and the student must present the paper at the symposium. Indicate on the abstract if the paper is to be entered in the contest. Cash prizes will be awarded for winning papers.

Landslide Photo Contest

Landslide photographs for the photo contest must be submitted in jpg format by April 7, 2005. Include a brief caption describing the photograph. Photographs will be included in the symposium proceedings and displayed at the venue.

Call for Papers

Although the theme of the symposium is "Landslides -- Investigation, Analysis, and Mitigation", papers are welcome in all areas of engineering geology and geotechnical engineering. Case studies on landslides are especially encouraged. Abstracts should be submitted to:

James A. Bay
Department of
Civil and
Environmental
Engineering
Utah State

Geo-Tech Explorations, A Division of Boart Longyear Company

800-275-3885

Fax 503-692-4759

WWW.GEOTECHINC.COM

**Hollow Stem Auger/ Mud Rotary/ Air Rotary
Geoprobe/ CPT/ Sonic/ Bucket Auger/ Cable Tool
Reverse Circulation**



Providing Professional
Drilling Services since
1981 in:

- Geotechnical Investigations
- Environmental Investigations
- Construction Borings
- Large Diameter Water Wells
- Construction Dewatering
- Aquifer Tests

Please Contact Us Regarding Your Next Challenging Project

Registration

The registration for the symposium will be \$135. Student registration is \$35. Student banquet tickets will be an additional \$20. There will be an additional cost of \$35 for the field trip. This includes transportation, meals. Additional registration information can be found at <http://www.isu.edu/engineer/geosym/>.

Sponsors

The Utah Geological Society (UGS), The American Society of Civil Engineers (ASCE), The Association of Engineering Geologists (AEG), Utah State University, Idaho State University, The University of Idaho, Boise State University, The University of Nevada Reno, The University of Nevada Las Vegas, and Montana Technical University.

OREGON SECTION OFFICERS & COMMITTEE CHAIRS



Chair: **Brent Black**, Cornforth Consultants, Inc., (503)452-1100, bblack@cornforthconsultants.com



Chair-Elect: **Michael Zimmerman**, GRI, Inc., (503)641-3478, mzimmerman@gri.com



Secretary: **Matt Brunengo**, (503)534-0414, mbrunengo@aol.com



Treasurer: **Jason Hinkle**, (503)945-7406, jhinkle@odf.state.or.us



Past-Chair: **Rowland French**, Northwest Geophysical Associates, Inc., (541)757-7231, rowland@nga.com

Program Co-Chair: **Lisa Glonek**, AMEC, lisa.glonek@amec.com



Program Co-Chair: **Bill Burns**, DOGAMI, bburns@dogami.state.or.us

PSU Student Chapter President: **Marina Drazba**, medrazba@pdx.edu



Membership Chair: **Ruth Wilmoth**, Columbia Geotechnical, Inc., (360)513-2692, ruthwilmoth@comcast.net



Field Trip Chair: **Dave Scofield**, Portland District COE, (503) 808-4867, scofield@onemain.com

History Chair: **George Freitag**, GRI, Inc., (503) 641-3478, gfreitag@gri.com



Newsletter Editor: **Charlie Hammond**, Cornforth Consultants, Inc., (503) 452-1100, or.aeg.news@cornforthconsultants.com



Assistant Newsletter Editor: **Darren Beckstrand**, Cornforth Consultants, Inc., (503) 452-1100, dbeckstrand@cornforthconsultants.com



Legislature Chair: **Dorian Kuper**, Kuper Consulting, Inc., (503)638-9722, dkuper@cybcon.com

Continuing Ed. Liaison: **Andrew Harvey**, PBS Environmental, a.harvey@pbsenv.com