



The Official

OREGON SECTION AEG NEWSLETTER

It's The Annual AEG Student Night !

April Meeting Details

Date: Tues April 15, 2008

Location: PSU

1825 SW Broadway

Portland, OR

5:30 pm Social

7:00 pm Dinner

8:00 pm Presentation

Dinner: Burrito Bar

\$18 Dinner (\$9 Students)

Reservations:
mwegner@cornforthconsultants.com
with "AEG Reservation" in
the subject line or 971-222-
2047 by 4pm Thursday April
10th.

**There is a \$2 surcharge for
those who do not reserve by
the deadline.**

Upcoming Meetings:

- **May 20, John Clague,
Jahns Lecture**

The 6th annual Student Poster Night will be hosted by the PSU student chapter of AEG on April 15, 2008. A poster session will highlight the academic activities and research of both graduate and undergraduate students from Oregon universities. The structure of our event will be similar to the AEG Oregon Section along the lines that dinner and drinks will be served. However, rather than a single professional presentation following the dinner, a poster session will be held giving students a chance to shine. Students from all universities in Oregon and Idaho are encouraged to attend and submit a poster title. Participants are not required to be AEG members. Poster topics should preferably be within the field of applied geology and can range from term projects to thesis research for undergraduate and graduate students. The local AEG professional community will be attending the event; therefore a booklet of participants' resumes will be prepared and available for the professionals. A committee from the AEG Oregon Section and other professionals in the community will be judging and awarding several \$100 and \$200 prizes for outstanding posters. Please contact AEG Student Chapter President Scott Braunsten with any questions, sbb@pdx.edu

Event Details:

Date: April 15, 2008 at 5:30-9:00pm - Rooms: 327/328/329 of Smith Memorial Union at Portland State University, 1825 SW Broadway, Portland, OR 97201- Costs for Dinner: Student \$9.00, Non-student \$18.00 Beverages included. Free parking in Parking Structure 1 will be given to those who have submitted a reservation by 4 pm on April 10th. Enter the parking structure on 6th between SW Hall and Harrison. The parking attendant will have the name of those who registered by the due date. If you have any questions send them to aegeol@pdx.edu.

Poster Titles:

"Colloid Geochemistry and Mineralogy in the Little North Santiam, North Santiam River Basin, Oregon, with Potential for Mitigation of Storm Induced Turbidity Events." Tim Blazina

"Distribution of heavy metals and trace elements in soils of northwest Oregon" Darrick Boschmann

"Subsurface Structure in the Vicinity of Sheepy Ridge, Upper Klamath Basin, California, using gravity anomalies" Scott Braunsten

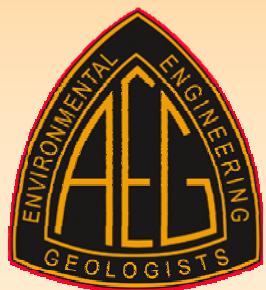
"Sulfur-rich Apatites in Silicic, Calc-alkaline Magmas: Inherited or not?" Cindy Broderick

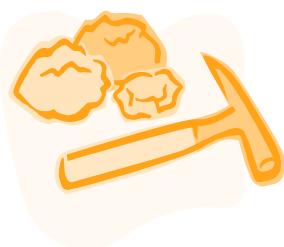
"Estimating Glacier Retreat as a Response to Rapid Ice Shelf Disintegration with a 2-D Finite Element Model" Adam Campbell, Christina Hulbe, and Ted Scambos

"GIS favorability analysis of geothermal resources in Central Alaska" Charles Cannon

"Evolution of phenocrysts as a result of magma mixing at Mount St. Helens Volcano, Washington" Karen Carroll and Martin Streck

(continued on page 3)





Message From The Chair

Since April Fool's Day is on a Tuesday (today! or am I just kidding?), the third Tuesday is as early as it can be – as is our next meeting, on April 15th. It's student poster night at Portland State, sponsored and organized by our AEG student chapter at the Geology Department. Instead of hearing about a single subject, as at our usual meetings (not that there's anything wrong with that), we get to be exposed to a broad variety of research topics in "pure" as well as applied geology. Make your reservation soon (free parking for pre-registrants) and come on downtown for science and socializing with the

next generation.

By now, you should have received the 2008 edition of the AEG Annual Report and Directory. Besides checking whether they spelled your name right (I always do – sometimes it isn't!) and to see who else lives in your town – it's loaded with information about the association: names and contact info for the officers (including your section's folks), committees, by-laws, policies, etc. (Quick quiz: how many years must we retain financial records under the Sarbanes-Oxley Act? This was an actual agenda item at last fall's board meeting.)

And if you can't get into the text, there are pictures from the annual meeting in Los Angeles – among them several of Oregon colleagues (including one BAD one). Scott Burns suggested that we bring our copies to the next meeting to have these "celebrities" autograph them – then maybe put them up for auction on eBay, and watch the big bucks roll in

Hope to see you on April 15th. And have a good spring – eventually.

Matt Brunengo

AEG Oregon Section Chair



AEG Washington and Oregon Section: 2008 Spring Field Trip, May 31, 2008 - Living with Active Faults in the Puget Lowland & America's favorite past time

Co-leaders: Kathy Troost, Univ. WA (AEG WA Section Chair), Tom Gurtowski, Shannon & Wilson, Inc, Tom Pratt, U.S. Geological Survey

AEG field trip for May 31st will be located in the Puget Sound/Seattle area. Kathy Troost and Tom Pratt will show evidence and features of the Seattle Fault and Tom Gurtowski will describe the foundations for the ball stadiums-built in the highly liquefiable deposits of the SODO area. Field trip will meet outside Safeco Field in Seattle, WA. We plan on wrapping the Seattle Fault related field trip portion up around 11:30-12:00 when we will then return to Safeco Field and meet up with family members, friends, and others that wish to attend the game. The field trip will continue into the afternoon directly in Safeco Field where we will take part in America's favorite past time and enjoy the Seattle Mariners taking on the Detroit Tigers. The Seattle fault portion of the field trip and baseball game are available as separate options. AEG members will have first opportunity to reserve a spot on the field trip until March 30, 2008. After this date the field trip reservations are open to all until bus capacity is reached. Family members and non-members are welcome to reserve a ticket for the game anytime.

The Charter Bus can accommodate 56 people. Currently we are holding 70 tickets for the game seated together, but can reserve more if needed before April 30, 2008. The deadline to make a reservation and payment for the field trip and baseball game is April 20, 2008.

Cost break down

Seattle Fault field trip and Baseball game- cost: \$50/person. Note: AEG members receive first priority to reserve a spot on the field trip until March 30, 2008. After this date the field trip reservations are open to all until bus capacity is reached.

Seattle Fault field trip-only option cost: \$30/person. The cost includes bus rental and guidebook.

Game only-option cost: \$20/person. Non-members and families are welcome.

Please make checks payable to AEG Washington Section and Mail to Marty Larsen no later than April 20, 2008.

"Keen observation is at least as necessary as penetrating analysis"

Karl Terzaghi



Annual AEG Student Night (continued)

"Andaman Sea volcanoes: possible evidence for shallow crustal contamination" Aspen Gillam

"Unusual features in a stony meteorite NWA 4859" Niina Jamsja

"Primitive Absarokites from Larch Mountain Oregon: Implications for subduction zone processes" Adam Jones

"Storm Unleashes Massive Debris Flows on Mount Hood, Oregon, November, 2006" Rachel Pirot

"Predicting Glacier Occurrence in the Pacific Northwest" Danielle Sitts, Rusty Griffin, and Ryan Cole

"Debris flow complex in Milk Creek, Mount Jefferson, Oregon, November 2006" Steven Sobieszczyk

"Determining Landslide Susceptibility along Natural Gas Pipelines in Northwest Oregon" Joshua Theule

Relevant PSU Spring 2008 Courses

Spring classes go from March 31 – June 6, 2008

G510 Environmental Geochemistry, Ben Perkins, MW, 11:30-12:35, 4 credits

G510 Coastal Geomorphology, Curt Peterson, MWF, 9-10:05, 4 credits

G571 Advanced Engineering Geology (Case Histories), Scott Burns, MW, 17:00-19:00, 4 credits

Geog 488 Intro to GIS, D. Banis, TuTh 10-12:00, 4 credits, plus lab

Geog 492 Advanced GIS, J. Duh, TuTh 16:00-17:30, 4 credits, plus lab

Geog 589 Building a GIS database with GPS, Martin LaFrenz, M, 17:30-21:10, 4 credits

CE 537 Earthquake Engineering, TuTh, 14:00-16:00, P. Dusicka, 4 credits

CE 580 Chemistry of Environmental Toxics, MW 10-12:00, G. Johnson, 4 credits

PSU Geology Spring Seminar Series 2008

April 2, 2008 "Of elephants, earthquakes, caves, and hot Rock: recent engineering geology adventures", Ed Medley, Senior Consultant, Geosyntec, Oakland, California

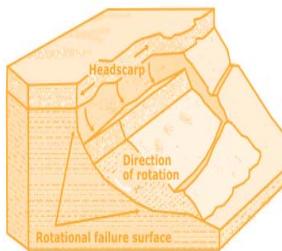
April 16, 2008 "Hunting Cascadia Faults with Airplanes, Shovels, and Canoes, Geology is Local", Rick Blakely, USGS, Menlo Park, California

April 30, 2008 "Petroleum Geology of the Mist Gas Field, Columbia County, Oregon", Jack Meyer, Retiring Head Geologist, Northwest Natural, Portland, Oregon

May 21, 2008 "Tsunamis – Stealth Killers", John Clague, Professor of Geology, Simon Fraser University, Vancouver, BC, Richard Jahns National Lecturer (GSA/AEG)

For information contact: Scott Burns, 725-3389, burnss@pdx.edu

Refreshments served and everyone is invited to attend!



Utah Geological Survey (UGS) Geologic Hazards Program Geologist and Project Geologist Positions

The Utah Geological Survey (UGS) is seeking candidates for Geologist and Project Geologist positions in the expanding Geologic Hazards Program to support geologic hazard mapping and outreach efforts within the state.

Geologist: The geologist will assist and perform mapping of geology and geologic hazards using GIS, assist cities and counties in using geologic hazard information, and perform site investigations, technical reviews, emergency response, and other duties. Geologic hazards will typically involve landslide, debris flow, problem soil, and paleoseismic hazards. The preferred candidate will have a working

knowledge of GIS (ArcGIS 9+) analysis and map production, an advanced degree, and/or previous experience in geologic hazards assessment, mapping, and analysis. The geologist position announcement closes on May 1, 2008.

Project Geologist: The project geologist will lead geologic hazard mapping projects in selected areas, assist cities and counties in using geologic hazard information, and perform site investigations, technical reviews, emergency response, and other duties. Geologic hazards will typically involve landslide, debris flow, problem soil, and paleoseismic hazards. The preferred candidate

will have an advanced degree, experience in engineering and Quaternary geology, geologic hazards assessment, mapping, and analysis, remote sensing, and/or a working knowledge of GIS (ArcGIS 9+) analysis and map production. A Utah Professional Geologist (PG) license is required within 1 year of appointment. The project geologist position closes on May 12, 2008.

For more information and to submit an application go to: statejobs.utah.gov. For information about the UGS and the Geologic Hazards Program, go to: geology.utah.gov.

The Oregon Section is also on the web at <http://www.aegoregon.org>
National AEG webpage: <http://aegweb.org>

Thanks For Supporting AEG !

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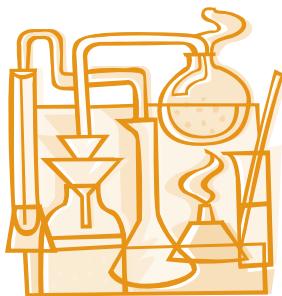


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"Keen observation is at least as necessary as penetrating analysis"

Karl Terzaghi



PSU Geology Advanced Engineering Geology - Case Histories Course, Spring 2008

This spring quarter 2008, Portland State University Geology Department is offering a course open to AEG members. The classes are held Monday and Wednesday nights, first talk at 5:00 PM and second talk at 6:00 PM in Cramer Hall S17, 1721 SW Broadway, Portland State University

Date, Speakers, and Topics

March 31 Scott Burns, Geology Dept., Portland State University "Introduction to the Course" & "Geologic Provinces in Oregon" Bob Miller, Robert Miller Consulting, West Linn "Environmental cleanup of a major truck stop, Portland, OR"

April 9 David Scofield, US Army Corps of Engineers, Portland "Bonneville Fish Hatchery Wellfield, Columbia Gorge; A Case History of Groundwater Interaction" TBA

April 14 Steve Mumma, Geobrugg Corporation, Portland "Anchored slope stabilization with high strength steel wiremesh at Boulder Creek, California & Rockfall/debris flow hazard" TBA

April 16 Kim Marcus, URS Corp., Portland "Site evaluation and design considerations of a sheet pilewall, Portland Harbor" TBA

April 21 Rich Rinne, Ash Creek Associates, Beaverton "Lessons learned from the Capes Landslide Reactivation, Tillamook County, Oregon" TBA

April 23 John Sager, Cornforth Consultants, Tigard "Engineering Geology of the Marmot Dam Removal, Sandy River, Oregon" Charlie Hammond, Cornforth Consultants, Tigard "Engineering geology of the Barney Reservoir Dam raise, Oregon Coast Range"

April 28 Sue Bednarz, Jacob Engineering, Portland "Design exploration program for the Portland Westside Big Pipe Project (CSO)" Bill Burns, DOGAMI, Portland "Improvements in regional landslide mapping using LIDAR"

April 30 John Kuiper, AMEC Earth and Environmental, Portland "TCE remediation of groundwater using recirculating wells with permanganate injection, Vancouver, WA" Frank Reckendorf, Reckendorf and Associates, Salem "Geologic hazards of development along the Oregon Coast"

May 7 Doug Anderson, Washington DOT, Olympia "SR6 Landslide Response, Raymond to Chehalis, Winter of 2007-2008" Jim Struthers, Washington DOT, Olympia "EB Slough Ground Motion and Liquefaction Design, Seattle"

May 12 Ken Shump, CH2MHILL, Portland "Remediation of the Railroad Tie plant in the Dalles, Oregon, a Superfund Site" Gary Peterson, Shannon and Wilson, Lake Oswego "Geotechnical Bridge Design of the Spencer Creek Bridge at Beverly Beach, Oregon"

May 14 Tom DeRoo, U.S. Forest Service, Mt. Hood National Forest "Debris flow hazards of Mt. Hood, Oregon" Matt Brunengo, DNR, State of Washington & PSU Geology "Translating information on landslides and debris flows into public policy in Washington"

May 19 Mavis Kent, Department of Environmental Quality, Portland "Basic geology is still important in cleaning environmental sites" Rick Kent, Geoenvironmental and Geologic Services, Battleground "Engineering geology study along Johnson Creek, Portland"

May 28 Anne McDonald, URS Corporation, Portland "A highway no longer runs through it; stream restoration along highways in Oregon" Jason Hinkle, Oregon Dept. of Forestry, Salem "Woodson Debris Flow near Clatskanie, Oregon, Dec. 11, 2007"

June 2 Jon Koloski, Principal, Geoengineers, Tacoma, Washington "Panama Canal Port Widening" Jon Koloski, Principal, Geoengineers, Tacoma, Washington "Snoqualmie Falls Electrical Power Generation Plant Retrofit"

June 4 Tom Kuper, Kuper Consulting, Tualatin "Officers Dam Repair, Izee, Oregon" Dorian Kuper, Kuper Consulting, Tualatin & National AEG Pres. "High walls to Highways: engineering geology case studies of Aggregate mining and reclamation"

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Photos of the Month

The April photo/image is from the Tom Horning. The site is Hug Point State Park, between Arch Cape and Cannon Beach. In the distance are light yellow-buff cliffs of pebbly coarse-grained Angora Peak sandstone of the Miocene Astoria Formation. In the foreground are young ferricrete deposits that rest on a wave cut terrace sculpted into the



Miocene sandstones. The ferricretes consist of fine-grained modern beach sands and minor rounded cobbles and pebbles that have been cemented by hematite and minor goethite. Soluble ferrous iron in groundwater meets oxygenated ocean water at the beach-terrace interface, converts to insoluble ferric iron, precipitates, and cements the beach sands. It is possible that the oxidation process is assisted by microorganisms. Ferricrete ridges and spines develop along bedrock fractures; towers and domes form at intersections of fracture sets. Small potholes are commonly eroded atop the towers by surf-entrained cobbles when the tops are first exposed by minor beach erosion. Large waves of the 2007-08 La Niña winter have caused unusual erosion along the Oregon coast, exposing not only the ferricretes, but also Pleistocene and Holocene tree stumps, plus two of three cannons from the 1842 wreckage of The Shark, which were discovered 400 yards south of this site this year. Cannon Beach was named for the first cannon discovered at this site in 1892. The ferricretes have been exposed by storms in the winters of 1998-99 and 2006-07.



To submit a photo, please email the picture in a JPEG or TIF format to bill.burns@dogami.state.or.us. Also include a short paragraph describing the photo and project.