

The Official

AEG OREGON CHAPTER NEWSLETTER

<http://www.aegoregon.org>

MEETING DETAILS

February 2020

Date: Tuesday, Feb 18, 2020

Location: Old Market Pub

6959 SW Multnomah Blvd
Portland, OR 97223

Evening Agenda:

6:00 pm Social Hour

6:45 pm Dinner

7:30 pm Presentation

Reservations:

<https://aeg-or-2020-02.brownpapertickets.com>

\$25 Private Industry

\$20 Public Agencies

Students: Free

Deadline:

12 noon Monday, Feb 17, 2020

Advances in Rockfall Protection: A Preliminary Design Tool for Attenuators

Speaker: Tim Shevlin, P.G.

Attenuators are a passive rockfall protection solution sometimes described as a flexible rockfall barrier with a prolonged draped tail. To date there is no formal solutions to their design. In comparison to classical flexible rockfall barriers where only translational kinetic energy is considered and the rockfall is stopped completely;

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attenuators present a design challenge wherein both the rotational and translational component of rockfall must be considered. In addition, Attenuator Systems are not stopping the rockfall, rather changing the trajectory and moderating the velocity. In order to develop a dimensioning concept that addresses these dynamics, it is important to fully understand the attenuation process. A joint research program between Wyllie & Norrish Rock Engineers, Ltd. in Canada, Geobrugg North America, LLC, and Geobrugg AG, Switzerland investigated this process. The loading of the system, the attenuation processes and the importance of the rotational component have been analyzed in full-scale testing over a three-year period, on a site in British Columbia. This contribution provides insights into the analysis of the loading mechanisms acting on the attenuator system during rockfall impact. Rock motion dynamics are compared between those extracted from the accelerometer and gyroscope sensors embedded in the test blocks, high speed video analysis and rockfall simulations. These analyses provide the foundations with which a dimensioning tool has been created.

Biography:

Tim Shevlin is an Engineering Geologist with over 15 years of experience performing geotechnical and geologic investigations. Mr. Shevlin has a Bachelor of Science in Environmental Science from Allegheny College and a Master of Science in Geology from Kent State University. He is also a licensed Professional Geologist in the State of Pennsylvania and Oregon.

Prior to joining the Geobrugg team Tim worked on both public and private sector projects for nationally-known engineering consulting firms performing geotechnical investigations and designs. He has experience working on commercial development projects, water resource projects, and transportation/railroad projects.

UPCOMING MEETINGS:

Mar 17th Jahns Lecturer

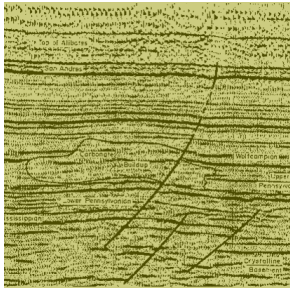
- Lucky Lab - Quimby
1945 NW Quimby St.
Portland OR 97209

Apr 21st TBD

(Share your knowledge)

May 19th Student Poster Night





Biography Continued...

Tim is Geobruigg's Regional Manager for Northwest USA & Hawaii and the Technical Director of Sales and Marketing; he works out of Salem, Oregon.

Geobruigg North America, LLC: Protecting people and infrastructure from Natural Hazards

Message from the Chair

Hello Oregon Chapter! We are full speed ahead with the new year and what an exciting year it is going to be with the Annual Meeting being held in Portland. I unfortunately was not able to make it to the joint ASCE meeting on January 8th, but I understand there was over 100 people in attendance. Thanks to those that supported our chapter. Thanks to Max Gummer and Stuart Albright for braving the crowds for a presentation on ODOT's current Geotechnical Engineering and Engineering Geology Disciplines.

We're looking forward to the February meeting. Tim Shevlin who is the Technical Director of Sales and Marketing and Regional Manager of Pacific NW and Hawaii for GeoBrugg North America will be presenting on Advances in Rockfall Protection: A Preliminary Design Tool for Attenuators. There will also be free beverages provided by GeoBrugg, so please join us on February 18th for some socializing and an interesting talk.

Exciting news from AEG National, there is a reworked website (www.aegweb.org). The site is friendlier to navigate and has some great resources. Take a moment to peruse the content and see how it can help you with your career or search for that first job opportunity.

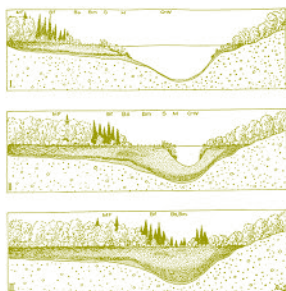
As we dig deeper into the new year it is great to start with a clean slate. Please take a moment to renew your membership for 2020. Our memberships help support the Chapter and keep the national organization vibrant. As always your support of the Chapter and AEG is appreciated.

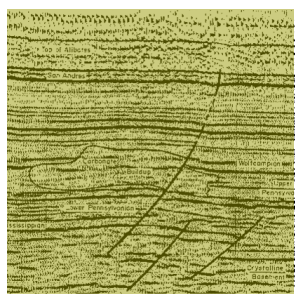
Lastly, the Annual Meeting is open for registration and accepting abstracts. If you have a good project or a presentation, then find your way to aegannualmeeting.org and submit an abstract. It would be great to have a strong local presence at the meeting.

Looking forward to seeing you at the meeting!

Ben George
Oregon AEG Chapter Chair

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





Portland 2020 Annual Meeting

Abstracts and Registration is now open! Head to aegannualmeeting.org to sign up!

Furthermore, consider nominating an AEG volunteer for the **Doug Piteau Award**. This award is for an outstanding volunteer under the age of 35. The level of volunteer activity can be at either the Chapter or Association level. This award was not given last year, because we received no nominations. Please consider nominating this year, so that we can acknowledge and show appreciation to our younger members in AEG.

Nominations are due March 1st to manager@aegweb.org.



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

Karl Terzaghi

Student Chapter News:

The Portland State University (PSU) AEG Student Chapter is looking for speakers for their Career Info Session Thursday February 27th! (See details below) If you are an actively working environmental geologist, engineering geologist, or work for a government agency they would like it if you would share your knowledge with the next generation during the career session. Ideally they would hear from someone from each discipline. Please think about volunteering your time so we can help students move forward with their careers as they move out of academia.

If interested, please contact [Stephanie Welch](mailto:Stephanie.Welch@pdx.edu) at sw22@pdx.edu and add "Career Info Session" in the subject line.

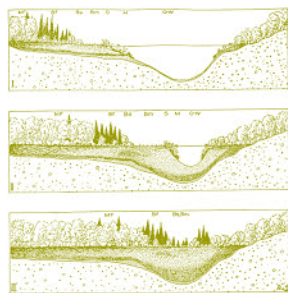
Career Info Session Details:

PSU Geology Department:

Thursday February 27th (3pm to 5pm)

3:00pm-3:45pm – Social Hour (Food and Beverages)

3:45pm-5:00pm – 15 min Guest speakers (**This could be you!**)



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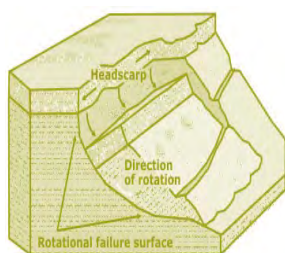
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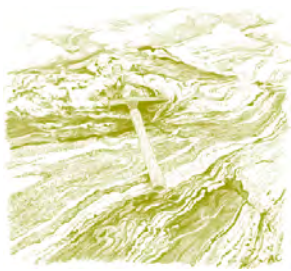
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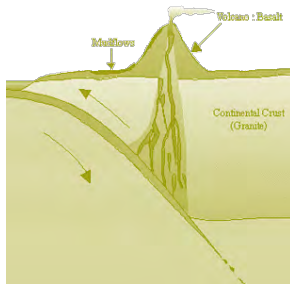


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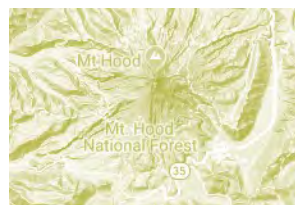
- Seismic Refraction/Reflection
- Shearwave Velocity Studies
- Electrical Resistivity Profiling
- Ground Penetrating Radar
- Magnetics/Electromagnetics
- Gravity
- Marine Geophysics

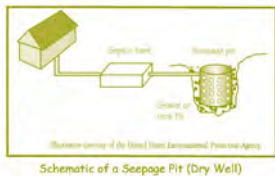
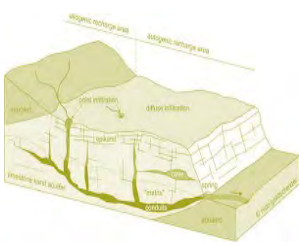
Vibration & Noise Analysis:

- Remote Vibration Monitoring
- Real-time Frequency Analysis
- Construction Monitoring
- Demolition Monitoring
- Blast Design and Monitoring
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Rock Mechanics:

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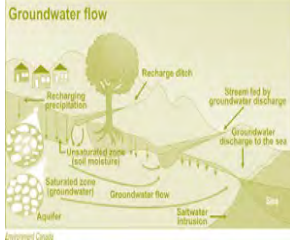
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"A soil adapted to the growth of plants, is necessarily prepared and carefully preserved; and, in the necessary waste of land which is inhabited, the foundation is laid for future continents, in order to support the system of the living world.."

James Hutton



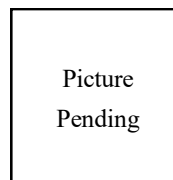
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bgeorge@ccilt.com



Program Chair:
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Aspect Consulting
jjamal@aspectconsulting.com



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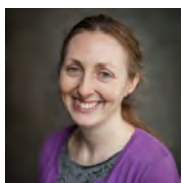
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**The Oregon Chapter is also on
the web at**

<http://www.aegoregon.org>

National AEG webpage:

<http://aegweb.org>



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sw22@pdx.edu



Past-Chair:
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The AEG Oregon Chapter Newsletter

The Association of Engineering Geologists (AEG) contributes to its members' professional success and the public welfare by providing leadership, advocacy, and applied research in environmental and engineering geology. AEG's values are based on the belief that its members have a responsibility to assume stewardship over their fields of expertise. AEG is the acknowledged international leader in environmental and engineering geology, and is greatly respected for its stewardship of the profession.

AEG OREGON CHAPTER NEWSLETTER is published monthly from September through May. Subscriptions are for members of AEG affiliated with the Oregon Chapter or other Chapters, 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: Ben George, AEG Oregon Chapter Chair-Elect, Cornforth Consultants, Inc., 10250 SW Greenburg Road, Suite 111, Portland, OR 97223, e-mail: bgeorge@ccilt.com, phone (503) 452-1100. Electronic media is preferred. Deadline for submittal is the 25th of the month. Advertising: business card size \$100/yr; ¼ page \$200/yr; ½ page \$350/yr; 1 page \$450/yr.

