

The Official

AEG OREGON CHAPTER NEWSLETTER

<http://www.aegoregon.org>

MEETING DETAILS

Date: Tuesday,
September 20, 2020

Location: Virtual
Link: [https://
us02web.zoom.us/meeting/
register/tZYvd-](https://us02web.zoom.us/join/join?from=addon=us02web.zoom.us/meeting/register/tZYvd-)

Evening Agenda:
6:00 pm Virtual Presentation

Deadline for registration:
October 19th, 2020

UPCOMING MEETINGS:

October: Andy Baird and Hans
van de Vrugt

November: TBD

December: Dr. Marino

January: TBD

February: TBD

March: TBD

April: TBD

May: TBD

June: TBD



Applications of Geophysics: A Non-Invasive Solution to Environmental and Engineering Challenges

Presented by: Hans van de Vrugt & Andrew Baird

The rapidly developing field of geophysics provides a cost effective and nonintrusive way to image the subsurface, reducing uncertainty and risk and ultimately creating a safer working environment for a wide array of projects. Discover real applications of geophysical methods, such as electromagnetics, seismics, ground penetrating radar (GPR), magnetics, electrical resistivity, and gravity, as we discuss case studies where such techniques have enabled the detection of illegal border tunnels, allowed for the imaging of slope failures and subsurface geometries, provided critical data to environmental assessment studies, and played crucial roles in forensic and unexploded ordnance studies.

Bio: Hans van de Vrugt, P.G., C.E.G., P.Gp.

Mr. van de Vrugt received a B.S. degree in Geological Sciences with an emphasis in Geophysics from SDSU in 1988, and a M.S. Degree in Geological Sciences specializing in Seismology from SDSU in 1995. He has been practicing engineering geology and geophysics since 1989. In 2004 he formed Southwest Geophysics, Inc. and in 2018 they were acquired by Atlas Technical Consultants. He is a registered Professional Geologist in California, Arizona, Missouri, and Washington; a Certified Engineering Geologist in California, and a registered Professional Geophysicist in California.



Mr. van de Vrugt's geotechnical, geological, and geophysical experience has included a variety of project types, including bridges, tunnels, highways, mines/quarries, hotels, pipelines, wastewater treatment facilities, landfills, power plants, and industrial, commercial, and residential developments. Projects have included fault hazard evaluations, landslide and slope stability studies, geologic reconnaissance evaluations, mineral resource studies, waste and contaminant delineation, groundwater studies, forensic evaluations, archaeological studies, and construction testing and inspection services.

*"The earth is large and
old enough to teach us
modesty."*

Hans Cloos

Bio: Andrew S. Baird

Mr. Baird received a B.S. degree with Honors in Geological Sciences from University College Dublin, Ireland in 2016. His introduction to practicing geophysics was with the School of Cosmic Physics at the internationally renowned Dublin Institute of Advanced Studies <https://www.dias.ie/>. He carried out research associated with teleseismic studies and assisted with the maintenance of the Irish National Seismic Network. He relocated to the USA to join Southwest Geophysics, and now is leading the northwest geophysical practice for Atlas Technical Consultants.



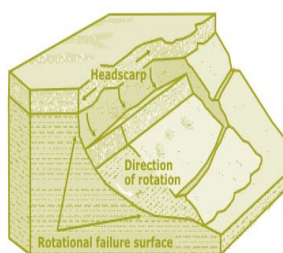
Mr. Baird's geological and geophysical experience has contributed to the advancement of a variety of projects within the industrial, academic, commercial, and residential sectors. Completed projects have included seismic tomography, unexploded ordnance studies, site characterization, landslide and slope stability studies, geologic reconnaissance evaluations, mineral resource studies, waste and contaminant delineation, groundwater studies, forensic evaluations, archaeological studies, and construction testing and inspection services.

Message from the Chair

We had a great meeting last month, the first of our most likely virtual year, with a great talk on east coast earthquakes by former AEG President David Fenster. I think the talk illustrated the difficulties in finding and interpreting earthquake related surface features. Dave gave his talk from the east coast. I look forward to the talks we are getting ready for you this year. The opportunity that isolating at home has provided us is a much larger pool of speakers and topics for us to enjoy. This month we will be looking at some geophysical methods presented by Hans van de Vrugt and Andy Baird of Atlas Technical Consultants LLC. December brings Dr. Gennaro G. Marino, P.E., D.GE who will be discussing Mine Subsidence - Cause, Effect, Mitigation. Be sure to not miss these sure to be great talks. If you have a talk idea or know of someone that gave a great talk that you would be interested in, please contact Jasmin Toro (email below) to coordinate. Give us a name and our dedicated volunteers can make the arrangements.

As the planets axis tilts us to cooler temperatures and the sun dims to a solar minimum, I hope to encourage everyone to start thinking about how you can bring light to your community in the coming dark and wet charitable season. A great way to give back and share your well-honed skills developed through your career is to volunteer about 3 or 4 hours a month with a non-profit organization. These groups through the kindness and dedication to the betterment of their community spend time volunteering to take notes, make phone calls, prepare emails, assembling

Continued . . .



*"The earth is large and
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Hans Cloos

Chair Message Continued . . .

photos and text into documents, and generally help make things happen. Volunteering can fill you with joy and accomplishment. And may I suggest for a moment a great non-profit that would be worth your time. Consider raising your hand and volunteering for the Oregon Chapter of AEG. We need charitable individuals that are interested in putting a few hours each month into making this thing happen. Please contact me if you would like to offer your time to the group and support our mission.

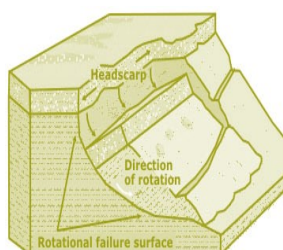
I hope to see you at our virtual October meeting.

Be well,

Mike

Interested in presenting for the Oregon Chapter?

The Oregon Chapter is looking for great topics and presenters to provide content to share with the chapter. As we continue to navigate the virtual world, we will be holding the next foreseeable meetings through webinars. We currently have opportunities to present in November and December. Please consider presenting your exciting project to the Oregon Chapter. We look forward to hearing from all of you and especially appreciative of those willing to present to the Chapter. If you are interested in presenting please feel free to contact any board member. Our contact information is at the end of the newsletter.



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old enough to teach us
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Hans Cloos



www.geobrugg.com/debris-flow

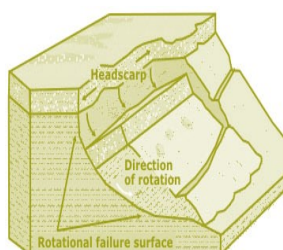
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Post-Wildfire Debris Flow Protection

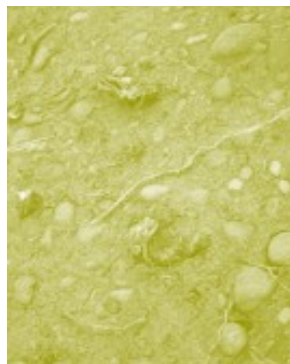
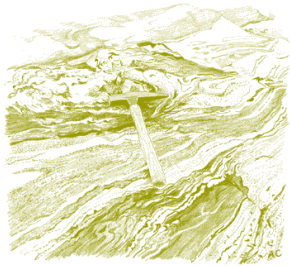
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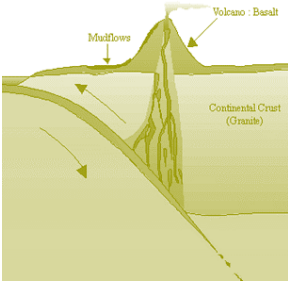
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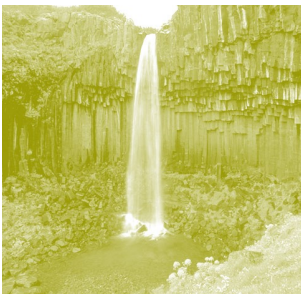
- Seismic Refraction/Reflection
- Shearwave Velocity Studies
- Electrical Resistivity Profiling
- Ground Penetrating Radar
- Magnetics/Electromagnetics
- Gravity
- Marine Geophysics

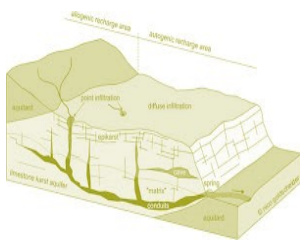
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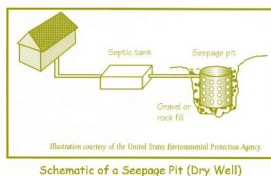
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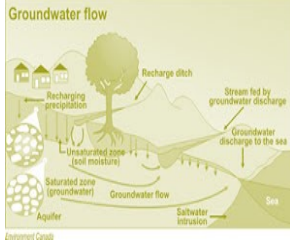
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"A soil adapted to the growth of plants, is necessarily prepared and carefully preserved; and, in the necessary waste of land which is inhabited, the foundation is laid for future continents, in order to support the system of the living world.."

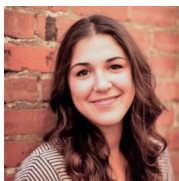
James Hutton



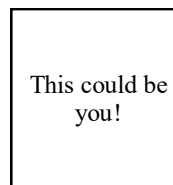
Chapter Officers & Committee Chairs



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Michael Marshall
GRI
mmarshall@gri.com



Program Chair:
Jasmin Jamal
Aspect Consulting
jjamal@aspectconsulting.com



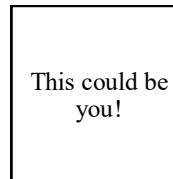
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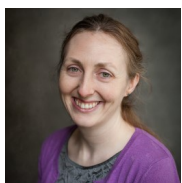
Chair –Elect:
Nancy Calhoun
DOGAMI
nancy.calhoun@oregon.gov



Field-Trip Chair:
Erin Dunbar
Geosyntec Consultants, Inc.
dunbar.erin@gmail.com



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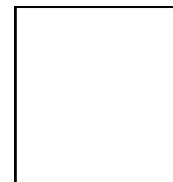
Secretary:
Bryon Free
Oregon Department of Transportation
Bryonfree@gmail.com

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

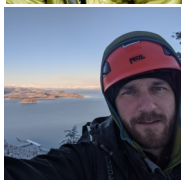
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The AEG Oregon Chapter Newsletter

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.

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