



International Association of Volcanology and Chemistry of the Earth's Interior



Scientific Assembly

Fostering Integrative Studies of Volcanism

Portland, Oregon, U.S.A.

General Schedule, Assembly Venues and Daily Schedule

General Schedule

| Dates | Activities |
|---------------------------|---|
| Monday August 7 to Sunday | Pre-conference field trips |
| August 13 | |
| Saturday, August 12 | Pre-conference workshops |
| Sunday, August 13 | Pre-conference workshops, conference icebreaker |
| Monday, August 14 | Opening ceremony, plenary, oral and poster sessions, lunch and evening events |
| Tuesday, August 15 | Award presentations, oral and poster sessions, lunch and evening events |
| Wednesday, August 16 | Mid-conference field trips, evening events |
| Thursday, August 17 | Plenary, oral and poster sessions, lunch and evening events |
| Friday, August 18 | Plenary and oral sessions, lunch, closing ceremony, and conference gala |
| Saturday, August 19 | Post-conference workshops |
| Saturday August 19 to | Workshop at Lassen and post-conference field trips |
| Friday August 25 | |

List of Plenary and Lunch Keynote Talks

Monday, August 14: OCC Oregon Ballroom 201-203

Plenary Keynote (8:30 to 10:30 am): Anita Grunder—Legacy of Cenozoic Volcanism in the Pacific Northwest: One of Myriad Versions

Plenary Keynote (8:30 to 10:30 am): Ray Wells—Cenozoic Tectonic Evolution of the Cascadia Convergent Margin, Western North America

Lunch Keynote (1:30 to 2:15 PM): John Pallister—*The Volcano Disaster Assistance Program* (VDAP): Humanitarian Assistance and Science Since 1986

Tuesday, August 15: OCC Oregon Ballroom 201-203

Lunch Keynote (1:30 to 2:15 PM): Jim O'Conner—Columbia River versus the Cascade Range Volcanic Arc—The Columbia River Gorge, Cataclysms, and Cultures

Thursday August 17: OCC Oregon Ballroom 201-203

Plenary Keynote (8:30 to 10:00 am): Brandon Schmandt—Advancing Volcano Seismology with Large-N Seismic Array

Plenary Keynote (8:30 to 10:00 am): Bill Chadwick—Axial Seamount: Recent Results from the Most Active Volcano in the US Pacific Northwest

Friday August 18: OCC Oregon Ballroom 201-203

Plenary Keynote (8:30 to 10:00 am): Vickie McConnell— Interfacing Science with Government: You Don't Always Get What You Want

Plenary Keynote (8:30 to 10:00 am): Peter Frenzen—Interfacing with the Public: Lessons Learned from 30 Years of Science Messaging at Mount St. Helens

Lunch Keynote (1:00 to 1:45 PM): Patricia Mothes—Lessons Learned from Six Volcano Crises in Ecuador by the IGEPN

Assembly Venues and Daily Schedules

Assembly Venues

Oregon Convention Center, (OCC), 777 NE Martin Luther King, Jr. Boulevard

Hilton Portland Downtown (Hilton), 921 SW Sixth Avenue

Buckman Public House, 1310 SE Stark Street

Crystal Ballroom, 1332 W Burnside Street

Lucky Labrador Beer Hall (Lucky Lab, Quimby Location), 1945 NW Quimby Street

Oregon Museum of Science and Industry (OMSI), 1945 SE Water Avenue

Portland State University, Department of Geology, Cramer Hall, 1721 SW Broadway Avenue

Portland State University, Native American Student and Community Center, 710 SW Jackson Street

Rock Bottom Brew Pub, 206 SW Morrison Street

| Saturday, August 12 | | | | |
|--|--|--------------------------|--|--|
| Event | Contact/Convener | Time | Location | |
| Using GPS To Monitor Volcanoes: From Field Data to Modeling | Maurizio Battaglia, Mike Lisowski, Kyle Anderson | 8:30 am to 5:30 PM | Portland State University, Cramer Hall, room 69 | |
| State of the Hazard Map 3 | Jan Lindsay, John Ewert, Eliza Calder, Mary Anne Thompson | 8:30 am to 5:30 PM | Portland State University, Cramer Hall, S-17 | |
| MSNoise Workshop: From Noise to Data | Corentin Caudron, Thomas Lecocq | 8:30 am to 5:30 PM | Portland State University, Cramer Hall, room 287 | |
| Modeling Volcanic Processes Using MELTS | Guilherme Gualda, Mark Ghiorso | 8:30 am to 5:30 PM | Hilton Portland Downtown Forum Suite | |
| Promoting the Use of Satellite Observations at Volcano Observatories | Matt Pritchard, Juliet Biggs, Simon Carn, Francisco Delgado, Julie Griswold, Scott Henderson, Taryn Lopez, Paul Lundgren, Kevin Reath, Dave Schneider, Greg Vaughan, Christelle Wauthier | 8:30 am to 5:30 PM | Hilton Portland Downtown Council Suite | |
| The Magma Chamber Simulator: A Phase Equilibria Modelling Tool for Magma Recharge, Crustal Assimilation and Crystallization (RAFC) | Wendy Bohrson, Frank Spera, Jussi Heinonen | 8:30 am to 5:30 PM | Hilton Portland Downtown Directors Suite | |

| Sunday, August 13 | | | |
|---|---|--|---|
| Event | Contact/Convener | Time | Location |
| Communicating Science for Impact ¹ | Beth Bartel | 8:30 am to 12:00 PM | Portland State University, Native American Student and Community Center, room 110 |
| Statistics in Volcanology: Workshop on Volcanic Record Completeness | Susanna Jenkins, Mark Bebbington | 8:30 am to 5:30 PM | Portland State University, Cramer Hall, S-59 |
| Using GPS To Monitor Volcanoes: From Field Data to Modeling | Maurizio Battaglia, Mike Lisowski, Kyle Anderson | 8:30 am to 5:30 PM | Portland State University, Cramer Hall, room 69 |
| State of the Hazard Map 3 | Jan Lindsay, John Ewert, Eliza Calder, Mary Anne Thompson | 8:30 am to 5:30 PM | Portland State University, Cramer Hall, S-17 |
| MSNoise Workshop: From Noise to Data | Corentin Caudron, Thomas Lecocq | 8:30 am to 5:30 PM | Portland State University, Cramer Hall, room 287 |
| Using Small Unmanned Systems in Volcanology (Aka "The Drone Workshop") | Einat Lev, Christopher Hamilton, Mike James | 8:30 am to 5:30 PM | Hilton Portland Downtown Studio Suite |
| Modeling Volcanic Processes Using MELTS Promoting the Use of Satellite Observations at Volcano Observatories | Guilherme Gualda, Mark Ghiorso Matt Pritchard, Juliet Biggs, Simon Carn, Julie Griswold, Taryn Lopez, Sue Loughlin, Paul Lundgren, Dave Schneider, Greg | 8:30 am to 5:30 PM 8:30 am to 5:30 PM | Hilton Portland Downtown Forum Suite Hilton Portland Downtown Council Suite |
| The Magma Chamber Simulator: A Phase | Vaughan, Christelle Wauthier, Robert Wright Wendy Bohrson, Frank Spera, Jussi Heinonen | 8:30 am to 5:30 PM | Hilton Portland Downtown Directors |
| Equilibria Modelling Tool for Magma Recharge, Crustal Assimilation and Crystallization (RAFC) | Spera, o assi i i i i i i i i i i i i i i i i i | 0.00 1 11 | Suite |

MORE SUNDAY EVENTS NEXT PAGE

| Sunday, August 13 (continued) | | | | |
|--|---|--------------------|--|--|
| Event | Contact/Convener | Time | Location | |
| Navigating the Publication Process: Best Publishing Practices in Volcanology and the Physical Sciences for Early-Career Scientists | Nancy Riggs, Shan de Silva | 2:00 to 5:00 PM | Portland State University, Native American Student and Community Center, room 110 am | |
| Onsite Registration and Badge/Packet Pickup | | 2:00 to 6:00 PM | OCC Prefunction A | |
| Speaker Ready Room | | 2:00 to 6:00 PM | OCC A104 | |
| Pre-registration Package and Badge Pickup | | 3:00 to 7:00 pm | Hilton Foyer outside Pavilion Ballroom (Plaza Level) | |
| AV Training for Student Volunteers | | 3:00 PM | OCC A105 | |
| Meeting: IAVCEI Executive Board | Roberto Sulpizio (roberto.sulpizio@uniba.it) | 3:30 to 5:30 PM | Hilton Portland Downtown Executive Suite | |
| Conference Icebreaker | | 5:00 to 7:00 PM | Hilton, Pavilion Ballroom (Plaza Level) | |

¹ Interactive Workshop: Communicating Science for Impact

Effective communication skills enable scientists to engage non-experts, inform public opinion and policymakers, inspire the next generation of scientists and voters, and improve our own research process. This workshop takes a hands-on approach to learning the tricks of science communication, focusing on science communication as a conversation. The skills practiced can be applied to all channels of communication, from a public lecture to a social media feed.

| Monday, August 14 | | | |
|--|--|---------------------------|---|
| Event | Contact/Convener | Time | Location |
| Onsite Registration and Badge/packet Pickup | | 7:00 am to 4:00 PM | OCC Prefunction A |
| Speaker Ready Room | | 7:00 am to 5:00 PM | OCC A104 |
| Opening Ceremony and Plenary Session Anita Grunder—Legacy of Cenozoic Volcanism in the Pacific Northwest: One of Myriad Versions Ray Wells—Cenozoic Tectonic Evolution of the Cascadia Convergent Margin, Western North | Jon Major, Wendy Bohrson | 8:30 to 10:30 am | OCC Oregon Ballroom 201-203 |
| America Break | | 10:30 to 11:00 am | OCC Prefunction A |
| Oral Sessions | | 11:00 am to 1:00 PM | OCC A105, A106, A107- 109, B110-112, B113, B114-115, B116, B117-119, Oregon Ballroom 201- 203 |
| Lunch | | 1:00 to 2:30 PM | |
| Lunch Keynote: John Pallister—The Volcano Disaster Assistance Program (VDAP): Humanitarian Assistance and Science Since 1986 | Jon Major | 1:30 to 2:15 PM | OCC Oregon Ballroom 201-203 |
| Meeting: Cities and Volcanoes Commission | Graham Leonard (G.Leonard@gns.cri.nz) | 1:15 to 1:45 PM | OCC A106 |
| Meeting: Commission on Volcano Geodesy | Mike Poland (mpoland@usgs.gov) | 1:15 to 2:15 PM | OCC A105 |
| Hazagora Game Session ² | Sam Poppe (sam35poppe@gmail.com) Sophie Mossoux (sophie.mossoux@vub.be) | 1:15 to 2:15 PM | OCC A103 |

MORE MONDAY EVENTS NEXT PAGE

| Monday, August 14 (continued) | | | | |
|--|---|--------------------|--|--|
| Event | Contact/Convener | Time | Location | |
| Oral Sessions | | 2:30 to 4:30 PM | OCC A105, A106, A107- 109, B110-112, B113, B114-115, B116, B117-119, OCC Oregon Ballroom 201-203 | |
| Poster Sessions | | 4:30 to 6:30 PM | OCC Exhibit Hall A | |
| Meeting: IAVCEI Commissions Meeting with Executive Committee | Shan de Silva (desilvas@geo.oregonstate .edu) | 6:30 to 7:15 PM | OCC A106 | |
| Meeting: IAVCEI Commission on Volcano Geoheritage and Protected Volcanic Landscapes (VGPL) | Thomas Casadevall (tcasadevall@usgs.gov) | 6:45 to 8:15 PM | OCC A105 | |
| Early Career Social | Mike Poland (mpoland@usgs.gov) | 7:00 to 9:00 PM | Hilton Skyline Ballroom, 23 rd Floor | |
| Meeting: Kawah Ijen | Kim Berlo (kim.berlo@mcgill.ca), Corentin Caudron (corentin.caudron@gmail. com), Heather Wright (hwright@usgs.gov), Peter Kelly (pkelly@usgs.gov) | 7:00 to 9:00 PM | Lucky Lab, Quimby Location | |

² HAZAGORA is an educational board game that raises awareness about geological hazards. The game aims to let people discover key information about hazards; to increase awareness about the impacts of the hazards and the importance of resources accessibility; and to let them experience different risk reduction strategies. During the game, players embody a community living on the island that they have to feed, develop and protect against geological hazards (earthquake, tsunami, lava flow and volcanic ash fall). In this context, players virtually experience the hazard impacts and they are directly confronted with the implications of decisions taken during the game. Moreover, players come to realize that what they lived in the game reflects situations in real life and that prevention measures are important to take both at a personal and at a community level. If you want to see if you can also survive the next disaster, please, join us to play and try HAZAGORA!

| Tuesday, August 15 | | | |
|---|---|------------------------|---|
| Event | Contact/Convener | Time | Location |
| Onsite Registration and Badge/Packet Pickup | | 7:30 am to 4:00 PM | OCC Prefunction A |
| Speaker Ready Room | | 7:00 am to 5:00 PM | OCC A104 |
| Awards Ceremony | Shan de Silva | 8:30 to 10:30 am | OCC Oregon Ballroom 201-203 |
| Break | | 10:30 to 11:00 am | OCC Prefunction A |
| Oral Sessions | | 11:00 am to 1:00 PM | OCC A105, A106, A107-109, B110- 112, B113, B114- 115, B116, B117- 119, OCC Oregon Ballroom 201-203 |
| Lunch | | 1:00 to 2:30 PM | |
| Interactive Workshop: Communicating for the Public ³ | Beth Bartel (bartel@unavco.org) | 1:15 to 2:15 PM | OCC A103 |
| Meeting: COMSOL Multiphysics in Volcanology ⁴ | James Hickey (J.Hickey@exeter.ac.uk) | 1:15 to 2:15 PM | OCC A105 |
| Lunch Keynote: Jim O'Conner—Columbia River versus the Cascade Range Volcanic Arc—The Columbia River Gorge, Cataclysms, and Cultures | Jon Major | 1:30 to 2:15 PM | OCC Oregon Ballroom 201-203 |
| Oral Sessions | | 2:30 to 4:30 PM | OCC A105, A106, A107-109, B110- 112, B113, B114- 115, B116, B117- 119, OCC Oregon Ballroom 201-203 |
| Poster Sessions | | 4:30 to 6:30 PM | OCC Exhibit Hall A |

MORE TUESDAY EVENTS NEXT PAGE

| Tuesday, August 15 (continued) | | | |
|--|--|--------------------|------------------------------------|
| Event | Contact/Convener | Time | Location |
| Meeting: Large Igneous Provinces Commission | Cole Kingsbury (thecgkings317@gmail.com) Ingrid Ukstins-Peate (ingrid-peate@uiowa.edu) | 6:45 to 7:45 PM | OCC A107-109 |
| Meeting: Improving Geochemical Databases/Chemistry of Earth's Interior | Phillipp Ruprecht (pruprecht@unr.edu), Benjamin Andrews, (andrewsb@si.edu) | 6:45 to 7:45 PM | OCC A105 |
| Early Career Mentoring Fair | Mike Poland (mpoland@usgs.gov) | 7:00 to 8:00 PM | Rock Bottom Brew Pub |
| Meeting: IAVCEI Commission on Volcano-Ice | Christopher Hamilton (hamilton@lpl.arizona.edu) | 7:00 to 9:00 PM | OCC A106 |
| Interactions ⁵ OMSI: Nature's Fury: Living with Active Volcanoes ⁶ | Elizabeth Westby (lwestby@usgs.gov) | 7:00 to 9:00 PM | OMSI, \$5 donation suggested |
| IAVCEI Townhall: New Volcano Initiatives from the Academic Community, USGS, National Academy of Science and NASA ⁷ | Terry Plank (tplank@ldeo.columbia.edu) Michelle Coombs (mcoombs@usgs.gov) Michael Manga (manga@seismo.berkeley.edu) | 7:00 to 9:00 PM | Lucky Lab, Quimby Location |
| | | | |

³ Interactive Workshop: Communicating for the Public

A discussion about how and why to communicate science with the public. Bring your ideas, questions, and experiences for this informal session on conveying scientific information with a non-expert audience, from the general public to community leaders, emergency response personnel, and policy makers. Students are welcome!

⁴ Meeting: COMSOL Multiphysics in Volcanology

Informal meeting for users of COMSOL multiphysics in volcanology to network, discuss future targets, and share experiences, advances and benchmarks.

⁵ Meeting: IAVCEI/IACS Joint Commission on Volcano-Ice Interactions

The IAVCEI/IACS Joint Commission on Volcano-Ice Interactions will meet to discuss a range of issues, including commission objectives, recent events, and future workshop planning, as well as to develop discussions between members, old and new.

MORE TUESDAY EVENTS NEXT PAGE

⁶ OMSI: Nature's Fury: Living with Active Volcanoes

Amazing stories told by three renowned scientists who share their experiences studying and responding to volcanic eruptions. Hear how advances in volcano science and lessons learned are applied globally and at our Cascade volcanoes. Special presentations by Marta Calvache, Director of the Colombian Geological Survey's Natural Hazards Program, Richie Robertson, Director of the Seismic Research Centre at the University of the West Indies, and John Ewert, USGS-Cascades Volcano Observatory. (omsi.edu/sciencepub). Doors open at 5 pm with food and drink available for purchase in the OMSI Cafe. \$5 suggested donation. No reservations. Come early as the event will likely sell-out.

⁷ IAVCEI Townhall: New Volcano Initiatives from the Academic Community, the USGS, the National Academy of Science and NASA

The past year has seen the academic community, the USGS, NASA and international partners joining to further volcano science, particularly at subduction zones, with the following initiatives and reports:

- National Academy of Science Report: ERUPT, Volcanic Eruptions and Their Repose, Unrest, Precursors, and Timing
- SZ4D Initiative: Understanding the Processes that Underlie Subduction Zone Hazards in 4D
- USGS Report: Reducing Risk Where Tectonic Plates Collide—A Plan to Advance Subduction Zone Science
- NASA's New Decadal Survey

This Townhall would seek to gather volcano scientists, including early career scientists and students, to discuss future funding and coordination activities in furthering volcano science.

| Wednesday, August 16 | | | |
|---|--|--------------------------------------|----------------------------------|
| Event | Contact/Convener | Time | Location |
| Mount St Helens Mid- Conference Field Trip | Cynthia Gardner, Jon Major, Mike Poland | Check in times 7:00 to 9:45 am | Outside Holladay lobby of OCC |
| Mount Hood Mid- Conference Field Trip | Cynthia Gardner, Jon Major, Mike Poland | Check in times 7:00 to 9:45 am | Outside Holladay lobby of OCC |
| Columbia River Gorge Mid-Conference Field Trip | Cynthia Gardner, Jon Major, Mike Poland | Check in times 7:00 to 9:45 am | Outside Holladay lobby of OCC |
| Meeting: Commission on Submarine Volcanism ⁸ | Adam Soule (ssoule@whoi.edu) | 7:00 to 10:00 PM | Buckman Public House |
| Meeting: Collapse Caldera Commission | Shan de Silva desilvas@geo.oregonstate.edu) | 8:00 to 10:00 PM | Lucky Lab, Quimby Location |

All buses leave between 7:30 am and 10:15. Specifics for each participant are printed on the back of the conference badge. Questions directed to Mike Poland.

⁸ Meeting: Commission on Submarine Volcanism

The newly-formed IAVCEI Commission on Submarine Volcanism invites you to a party to raise funds for the COSV website. Purchase a ticket (\$50) to receive dinner and volcanothemed cocktails along with a limited-edition COSV sticker. Tickets for dinner and drinks are limited, so contact Adam Soule (ssoule@whoi.edu) to reserve your spot. Those without tickets are welcome to come socialize, chat about submarine volcanism, and sign-up for commission membership. The party will be held at the Buckman Public House (~\$8 uber ride from the conference venue), which is a converted high-school science laboratory with a large outdoor patio. The party will be hosted by the COSV leadership (Rebecca Carey, Steffen Kutterolf, Mike Perfit, and Adam Soule).

| Thursday, August 17 | | | |
|--|---|----------------------------|---|
| Event | Contact/Convener | Time | Location |
| Onsite Registration and Badge/Packet Pickup | | 7:30 am to 4:00 PM | OCC Prefunction A |
| Speaker Ready Room | | 7:00 am to 5:00 PM | OCC A104 |
| Plenary Session Brandon Schmandt— Advancing Volcano Seismology with Large-N Seismic Array Bill Chadwick—Axial Seamount: Recent Results from the Most Active Volcano in the US Pacific Northwest | Dennis Geist | 8:30 to 10:00 am | OCC Oregon Ballroom 201- 203 |
| Break | | 10:00 to 10:30 am | OCC Prefunction A |
| Oral Sessions | | 10:30 am to 12:30 PM | OCC A105, A106, A107-109, B110- 112, B113, B114- 115, B116, B117- 119, OCC Oregon Ballroom 201- 203 |
| Lunch | | 12:30 to 2:00 PM | |
| Meeting: Commission on Statistics in Volcanology | Patrick Whelley (patrick.l.whelley@ nasa.gov) | 12:45 to 1:45 PM | OCC A105 |
| Townhall: Moving Forwards After the National Academy ERUPT Report ⁹ | Michael Manga (manga@seismo.berkeley. edu) Tobias Fischer (fischer@unm.edu) | 12:45 to 1:45 PM | OCC B117-119 |
| Panel Discussion: Scientific Communication During a Crisis | Mike Poland (mpoland@usgs.gov) | 12:45 to 1:45 PM | OCC A107-109 |
| Presentation by Esri: Harnessing the Geospatial Power of Drones Real-Time Dynamic Data Fusion ¹⁰ | Ken Gorton, Stephen Zahniser (SZahniser@esri.com) | 12:45 to 1:45 PM | OCC Oregon Ballroom 201- 203 |

MORE THURSDAY EVENTS NEXT PAGE

| Thursday, August 17 (continued) | | | |
|--|--|-----------------------|---|
| Event | Contact/Convener | Time | Location |
| Oral Sessions | | 2:00 to 4:00 PM | OCC A105, A106, A107-109, B110- 112, B113, B114- 115, B116, B117- 119, OCC Oregon Ballroom 201-203 |
| Poster Sessions | | 4:00 to 6:00 PM | OCC Exhibit Hall A |
| Meeting: IAVCEI Executive Board | Roberto Sulpizio (roberto.sulpizio@uniba.it) | 4:15 to 6:15 PM | OCC A106 |
| Networking: Scientists from Developing Countries ¹¹ | Victoria Miller (Victoria.Miller@ga.gov.au) | 6:30 PM | Lucky Lab, Quimby Location |
| Meeting: Commission on Volcanic Hazard and Risk | Eliza Calder (eliza.calder@ed.ac.uk) | 6:30 to 7:30 PM | OCC A105 |
| Screening: Into the Inferno by Werner Herzog and Clive Oppenheimer, followed by question and answer ¹² INTO THE INFERNO | Clive Oppenheimer (co200@cam.ac.uk), Shan de Silva (desilvas@geo.oregonstate. edu) | 7:00 to 9:30 PM | OCC Oregon Ballroom 201-203 |

⁹ Townhall: Moving Forwards After the National Academy ERUPT Report
Brief review of report on ERUPT (Volcanic Eruptions and Their Repose, Unrest, Precursors and Timing) followed by discussion.

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¹⁰ Presentation: Harnessing the Geospatial Power of Drones Real-Time Dynamic Data Fusion

Presenters: Ken Gorton & Stephen Zahniser

Leveraging the power of Unmanned Aerial Vehicles (UAVs) to access remote and dangerous locations. UAVs can quickly capture multispectral imagery used to generate 2D, 3D products such as orthoimagery and 3d meshes that easily integrate with the ArcGIS platform. Use these professional quality imagery products to monitor environmental change, perform land analysis, and unlock the insights hidden in your imagery. As drones continue to revolutionize how we work today, Esri can help your organization gain the benefits of this emerging technology.

Expand your knowledge of the field site further by coupling your imagery with real-time sensor data streams. ArcGIS GeoEvent Server allows the tracking of dynamic data streams providing real-time situational awareness for coordinated field activities or community response. Detect and focus on the most important events, locations, and thresholds while accommodating multiple streams of data flowing continuously through filters and processing steps that you define. Perform real-time analytics on data streams to identify patterns of interest important to your organization.

¹¹ Networking: Scientists from Developing Countries

To encourage the development of networks across nations with similar considerations. Food and drink are available for purchase at the Lucky Labrador (Quimby location), and a small amount of pizza will be provided to inspire collaborations!

¹² Screening: Into the Inferno

"[INTO THE INFERNO] is an exhilarating trip, filled with strange stories, fascinating rituals and ethereally beautiful images of bubbling magma... Mr. Oppenheimer is a charming interlocutor and, with his easy manner... he soon becomes an emblem for scientific inquiry at its most accessible and exciting. He grounds the movie in science but he also helps give it a conversational lightness... It's a winning, sneakily warming division of labor partly because this is also a documentary about friendship." New York Times. 104 minutes, followed by question and answer.

| Friday, August 18 | | | |
|--|--|----------------------------|---|
| Event | Contact/Convener | Time | Location |
| Onsite Registration and Badge/Packet Pickup | | 7:30 to 9:30 am | OCC Prefunction A |
| Coat/luggage check | | 8:00 am to 6 PM | OCC A103 |
| Speaker Ready Room | | 7:00 am to 2:00 PM | OCC A104 |
| Plenary Session Vickie McConnell— Interfacing Science with Government: You Don't Always Get What You Want | Jon Major, Wendy Bohrson | 8:30 to 10:00 am | OCC Oregon Ballroom 201-203 |
| Peter Frenzen— Interfacing with the Public: Lessons Learned from 30 Years of Science Messaging at Mount St. Helens | | | |
| Break | | 10:00 to 10:30 am | OCC Prefunction A |
| Oral Sessions | | 10:30 am to 12:30 PM | OCC A105, A106, A107-109, B110- 112, B113, B114- 115, B116, B117- 119, OCC Oregon Ballroom 201-203 |
| Lunch | | 12:30 to 2:00 PM | |
| IAVCEI Volcanogenic Sediments Commission | Gabor Kereszturi (G.Kereszturi@massey.ac.nz) Eric Breard (eric.breard@eas.gatech.edu) | 12:45 to 1:45 PM | OCC A105 |
| Meeting: IAVCEI ECR- Net Committee | Sam Poppe (sam35poppe@gmail.com) | 12:45 to 1:45 PM | OCC A106 |
| Virtual Volcanology: The Influence of Volcanoes on Google Earth ¹³ | John Bailey (johnbailey@google.com) | 12:45 to 1:45 PM | OCC B117-119 |
| Meeting: Themes and Challenges for Volcanic Hazard/Risk Work in Developing Countries ¹⁴ | Victoria Miller (Victoria.Miller@ga.gov.au) | 12:45 to 1:45 PM | OCC B116 |

MORE FRIDAY EVENTS NEXT PAGE

| Friday, August 18 | | | | | |
|--|--------------------------------------|--------------------|---|--|--|
| Event | Contact/Convener | Time | Location | | |
| Lunch Keynote: Patricia Mothes—Lessons Learned from Six Volcano Crises in Ecuador by the IGEPN | Heather Wright (hwright@usgs.gov) | 1:00 to 1:45 PM | OCC Oregon Ballroom 201-203 | | |
| Oral Sessions | | 2:00 to 4:00 PM | OCC A105, A106, A107-109, B110- 112, B113, B114-115, B116, B117-119, OCC Oregon Ballroom 201-203 | | |
| Closing Ceremony | Martin Streck, Jon Major | 4:30 to 5:30 PM | OCC Oregon Ballroom 201-203 | | |
| Farewell Party Featuring Pink Martini | Dennis Geist (dgeist@uidaho.edu) | 7:00 PM | Crystal Ballroom (1332 W Burnside Street) | | |

13 Virtual Volcanology: The Influence of Volcanoes on Google Earth

When Google Earth was released in 2005, it presented a new forum through which to visualize the world around us. Its use for assessing field sites, viewing geospatial datasets, creating publication figures, is now an accepted norm, but over a decade ago few in the scientific community had heard of Google Earth. Meanwhile, even fewer in Google's domain connected with scientists and educators. Learn the story of how Google Earth developed into a scientific and educational tool, and about the key role played by the volcanological community.

John Bailey is a former University of Hawaii student (MS with Steve Self; PhD with Peter Mouginis-Mark), who was previously a postdoc and assistant professor at the University of Alaska/AVO. He is currently the Program Manager for Google Geo Education on the Google Earth Outreach team.

¹⁴ Themes and Challenges for Volcanic Hazard/Risk Work in Developing Countries

This meeting seeks to gather volcano scientists from developing nations and researchers supporting this work. With a focus on discussing common challenges and barriers to understanding and mitigating volcanic risk in developing countries and coming up with strategies to encourage the scientific community to incorporate these considerations in their work.

| Saturday, August 19 | | | | | |
|--|--|-----------------------|--|--|--|
| Event | Contact/Convener | Time | Location | | |
| Best Practices in Tephra Collection, Analysis, and Reporting: Leading Toward Better Tephra Databases | Kristi Wallace, Steve Kuehn, Marcus Bursik, Andrei Kurbatov | 9:00 am to 6:00 PM | Hilton Portland Downtown Forum Suite | | |
| Numerical Modeling with OpenFOAM for Volcanological Applications | Mattia de'Michieli Vitturi, Einat Lev, Hannah Dietterich, Tomaso Esposti Ongaro | 8:30 am to 5:30 PM | Hilton Portland Downtown Directors Suite | | |

| Saturday, August 19 to Thursday August 24 | | | | | |
|--|--|-----------------------|----------------|--|--|
| Event | Contact/Convener | Time | Location | | |
| Statistics in Volcanology: The Hazards of Lassen Volcano | Mark Bebbington, Chuck Connor, Sarah Ogburn, Patrick Whelley | Provided by conveners | Lassen Volcano | | |
| | | | | | |