

Evening Talks at the University of Hawai'i at Hilo Wentworth Hall – Room # 1 ▪ 7:00 p.m.

For directions to Wentworth Hall (Bldg. 348), see the UHH campus map at:
http://hilo.hawaii.edu/images/maps/main_campus_map.pdf



Friday, January 7

What happened during Kīlauea's deadly 1790 eruption?

Many people died in 1790, during Kīlauea Volcano's largest explosive eruption in 1000 years. What happened during the eruption, and why were there fatalities? Ongoing research on the deposits of explosive debris indicates that the eruption had several violent stages, each potentially deadly. The start of the eruption remains enigmatic, but, once explosive activity really got going, the deposits can be read like chapters in a book. **Don Swanson**, a USGS Hawaiian Volcano Observatory scientist, will present what he and other geologists are learning about the 1790 events. Their findings provide a sketch of what to expect during Kīlauea's next violent explosive eruption—and the picture isn't pretty.

Friday, January 14

During a volcanic eruption, who's watching out for you?

When a Hawaiian volcano erupts, County, State, and Federal organizations work closely together to keep island residents and visitors informed and safe, but each agency has a different role with distinct responsibilities. Learn who is responsible for what—and who's watching out for you—during this presentation by **Jim Kauahikaua**, USGS Hawaiian Volcano Observatory Scientist-in-Charge; **Quince Mento**, Hawai'i County Civil Defense Administrator; and **Cindy Orlando**, Hawai'i Volcanoes National Park Superintendent. Each speaker will talk about how his/her agency responds to particular volcanic eruption scenarios.

Friday, January 21

A Volcanologist's Toolkit: Methods used for tracking activity at Hawai'i's active volcanoes

Monitoring active volcanoes is accomplished through four disciplines—geology, seismology, geophysics and geochemistry—with scientists from each discipline using a variety of techniques and instruments. For example, geologists map lava flows and assess hazards, seismologists study earthquakes, geophysicists use GPS to track ground movements, and geochemists study gases to characterize magma. Together, these techniques comprise a toolkit that enables scientists to better understand volcanic hazards and activity. Join **Mike Poland**, a USGS Hawaiian Volcano Observatory volcanologist, as he explores the tools used to monitor active volcanoes, and how applying multiple tools can lead to new insights into how Hawaiian volcanoes work.

Friday, January 28

How Hawai'i's active volcanoes provided raw material for Hawaiian ko'i and other traditional stone tools

Hawai'i does not have the naturally-occurring metal resources typically used for the manufacture of tools. Consequently, early Hawaiians created their traditional tools using coral, bone, or tool-quality stone produced by certain types of volcanic activity. **Steve Lundblad**, a UH-Hilo geochemist and assistant professor of geology, will explore how changes in activity during the life cycle of a Hawaiian volcano can be used to trace the origin of stone tool artifacts found in Hawai'i. He will also talk about on-going UH-Hilo geoarchaeology research that uses non-destructive techniques to gain new insights into the source and exchange of Hawaiian stone artifacts.