

Geoscenario Specialists: Yellowstone Hotspot



Park research geologist Rick Hutchinson examines rock debris thrown out in a 1989 hydrothermal explosion at Porkchop Geyser. Photo: courtesy of Robert Smith, University of Utah.

A **geologist** interprets and explains information that can be learned from rocks, rock formations, and landforms. Geologists use patterns and evidence to hypothesize the greater processes that shape those patterns and evidence.



A University of Utah Swiss postdoctoral fellow is lugging a seismometer barrel to a new seismograph station being installed near Old Faithful, Yellowstone National Park.

A **seismologist** studies earthquakes and the effects of elastic waves through Earth's crust. Sources of particular interest include volcanoes and tectonic boundaries. Recent equipment has allowed seismologists to create 3-D images of magma chambers fueling hotspots.



USGS scientists Tina Neal (left) and Melissa Pfeffer (right) analyze data as it returns from several volcanoes around Alaska.

A **volcanologist** studies the formation and behavior of volcanoes to better understand past eruptions and predict future events. Volcanologists often visit active volcanoes as well as study old tuff layers found within rock columns.



Lila Petersen, an International Environmental Policy master's student in the Graduate School of International Relations and Pacific Studies (IR/PS) at the University of California, San Diego, seen here representing IR/PS at the United Nations Framework Convention on Climate Change (COP16) in Cancun, Mexico.

A **renewable energy consultant** requires a broad knowledge of energy issues in various industries. As businesses become more concerned about their energy efficiency, energy consumption, and carbon footprint, consultants can guide them toward the best technology.