

THE WORLD OF VOLCANOLOGISTS

Volcanologists study volcanoes and volcanic activity. They work hard to understand how, why, and when a volcano will erupt, as well as searching for ways to predict eruptions long before they actually happen.



Volcanologist
(vol-cuh-NOH-luh-jist)

Volcanologists working near active volcanoes don't just use tools to do their work, they have to wear the right gear to stay safe. This often includes **special suits** to protect their bodies from the high temperatures that come with being close to lava, and **gas masks** stop them breathing in toxic fumes.

WHAT DO VOLCANOLOGISTS DO?

A volcanologist's work is really interesting, and makes a huge difference to the lives of people all over the world.



LAB WORK

Mostly, volcanologists spend time looking at past and present data to improve their understanding of assessing hazards. They often work with other scientists, sharing information and writing papers about new discoveries. There are lots of sciences that can be helpful to understand all about volcanos, such as geology and biology, as well as mathematics and engineering.

FIELDWORK

Volcanologists travel far to work in remote, dangerous places to install monitoring equipment near active volcanoes. They use special drones to see inside the volcano and gather up-to-the-minute data to help them improve their predictions. They also travel to collect samples from volcanoes after an eruption or to visit historical sites where volcanos are no longer active.

Fieldwork can be physically demanding, as scientists have to hike and climb in challenging areas, so staying fit is extremely important. Working in regions with active volcanoes can also be dangerous as volcanoes are unpredictable.



WHO DO VOLCANOLOGISTS WORK FOR?

Some volcanologists are independent and conduct their own research. Most, however, work for government research institutions, geological societies, and universities.

FAMOUS DISCOVERIES

Volcanologists have made so many amazing discoveries that have changed our understanding of volcanoes. Here's just a few of the biggest and best!

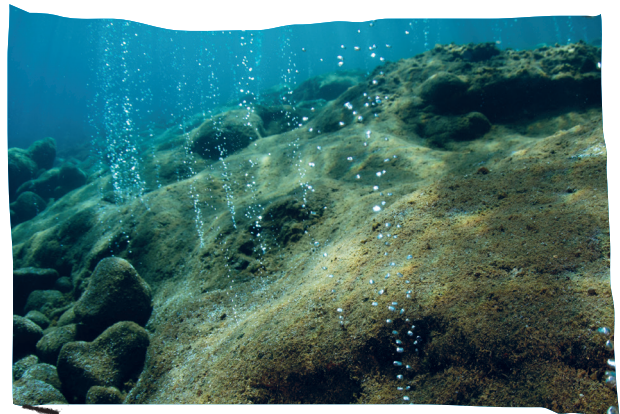


THE LOST CITY OF POMPEII

Mount Vesuvius' famous eruption in 79 CE destroyed and covered the Ancient Roman city of Pompeii. Giuseppe Fiorelli was an Italian archaeologist whose plans helped uncover the lost city. What we see today is remarkable; a moment in time perfectly preserved by lava, right down to loaves of bread baked on that day!

UNDERWATER VOLCANOES

Tamu Massif is located in the Pacific Ocean about 1,600 kilometres (990 miles) east of Japan. Its summit is about 1,980 metres (6,500 ft) below the surface of the ocean. It is part of an underwater mountain range formed 145 million years ago, however it is no longer active.



Drones help scientists in lots of ways!

NEW DRONE TECHNOLOGY

Special drones were developed in 2020 by an international team led by UCL (University College London). Tiny sensors capture gas samples from active volcanoes, which can help work out the location of the magma - these samples can indicate how likely an eruption is.

Volcanologists are making discoveries all the time, who knows what they might discover next!

FAMOUS VOLCANOLOGISTS

There have been so many brave volcanologists over the years.
Here's just a few of the most famous.

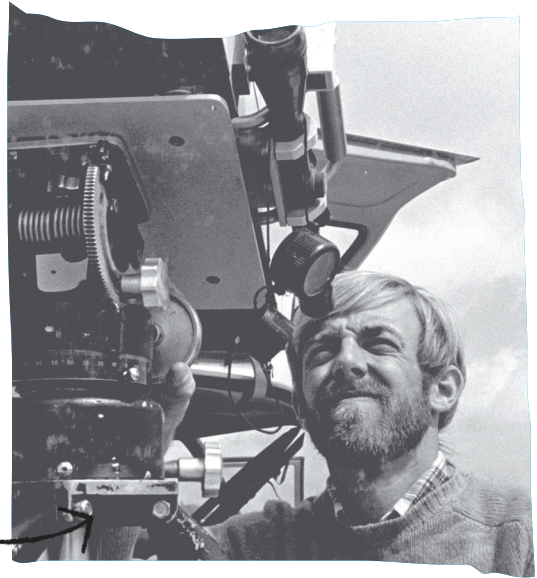


FRANK A. PERRET

In 1929, when Mount Pelée in Martinique suddenly showed signs that it was becoming active, sending people into panic, Frank set up a listening device to monitor the volcano and restore confidence for the community.

DAVID A. JOHNSTON

David was sadly killed by the 1980 eruption of Mount St. Helens in the USA while manning an observation post 10 kilometres (6 miles) away. He had convinced the authorities to close the area to the public despite pressure to re-open the site. His dedication saved thousands of lives.



KATIA & MAURICE KRAFFT

This husband-and-wife team were known for filming, photographing, and recording volcanoes, often very close to lava flows. Usually first on the scene, they were greatly respected. Tragically, they were killed along with 41 other people (including firefighters and journalists) during an eruption of Mount Unzen in Japan in 1991.



These are just a few of the many volcanologists who have made a huge difference to the science.