

abstract

MEASURING VOLCANOES & ANTICIPATING ERUPTIONS



A long-term goal of volcanologists is to be able to forecast volcanic eruptions. This talk will explore case studies from volcanoes around the world, focussing on examples from Chile, the Caribbean and Greece.

I will show some of the techniques currently used to monitor unrest at dormant volcanoes, and explain how we can use these observations to start to develop forecasts of future activity.

Professor David Pyle
University of Oxford

ABOUT DAVID PYLE:

I am a volcanologist, with interests in the rates and impacts of volcanism and volcanic degassing.

Highlights of recent work include the first modern measurements of mercury in volcanic emissions (work led by Mel Witt, Tamsin Mather and Sandro Aiuppa); the discovery that hot volcanic vents act as high temperature reaction sites for atmospheric gases (work with Rob Martin and Tamsin Mather), and the recognition of glacially-modulated volcanism in Europe (with David Nowell and Chris Jones).

We have also recently compiled a database of all known large volcanic eruptions; specifically explosive events of more than about 400 cubic kilometres of magma. Other recent work includes a new digital elevation model for the Kameni islands, Santorini, and studies of some its fabulous glassy enclaves (with Vikki Martin, John Elliott and Marian Holness); and a synthesis of volcanic emissions from the Central American arc.

The poster features a blue background with a central image of a volcano erupting. In the top left corner is a small portrait of Professor David Pyle. To the right of the portrait, the text 'PROFESSOR DAVID PYLE UNIVERSITY OF OXFORD' is written in yellow. Below this, the title 'MEASURING VOLCANOES & ANTICIPATING ERUPTIONS' is written in white. In the bottom right corner, the event details are listed in yellow: '7.30pm JANUARY 17 DEPARTMENT OF EARTH SCIENCES SOUTH PARKS ROAD OXFORD'. The Oxford Geology Group logo is in the bottom left corner, and the website 'www.oxgg.org.uk' is at the bottom center.