

Children's Christmas Demonstration Lecture

Exploring the deep

by Dr Jenny Collier
Reader in Marine Geophysics

Immense pressure, near-freezing temperatures, no light – the ocean floor is an alien and hostile world. But despite this, the seabed is teeming with unusual life that thrives on the products of seafloor volcanic eruptions.

With your help this lecture will demonstrate how advances in technology have revealed some intriguing pictures of these seascapes. It will examine the variety of

volcanic activity in the deep ocean – from

the gentle eruptions at mid-ocean ridges

to the highly explosive eruptions at

subduction zones. It will showcase some of the latest images and facts

from our mapping and sampling of this hidden world, and also speculate on

what remains to be explored.



**Visiting the Department of Earth
Science and Engineering**

Before the lecture you can visit the department to find out about studying at Imperial. There will be series of short activities based around meteorites and their impacts, what really killed the dinosaurs and a brief history of life.

The session will start at 16.00.
To attend, please email:
amanda.cerny@imperial.ac.uk

Lecture Theatre G16, Sir Alexander Fleming Building,
South Kensington Campus, London SW7 2AZ

RSVP: All are welcome and attendance is free, but with registration in advance: amanda.cerny@imperial.ac.uk
www.imperial.ac.uk/events

**Wednesday 7 December
2011 • 18.00**

The lecture is followed by drinks and mince pies

Jenny is a Reader in Marine Geophysics in the Department of Earth Science and Engineering.

Marine Geophysics involves the measurement of the physical properties of the seabed and below, using methods such as acoustics, gravity and magnetics. These measurements are taken at sea, complemented by seabed sampling either from the sea-surface or submersible dives. Marine Geophysics was one of the main disciplines that led to the development of Plate Tectonic theory. It continues to underpin all aspects of research into how the Earth evolved through time and might evolve in the future.

Over a 20-year career in ocean science, Jenny has travelled the globe in search of answers to how the Earth works with a particular interest in the processes by which a continent breaks in two to give birth to a new ocean. Much of her work focuses on the ‘magmatism’ linked to these geological events, and in particular the huge outpourings that can accompany continental rifting and the steady-state pattern of eruptions at mid-ocean ridges.



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