

Sharing the excitement of deep ocean research

The UK has long prided itself on its achievements in science, engineering and technology. They contribute directly to the country's prosperity and benefit humanity, yet many non-scientists have little knowledge of this important work.

In 2007, the Parliamentary Select Committee on Science and Technology produced its *Investigating the Oceans* report. It noted that 'people could be drawn into many topics to increase interest in science' and that 'a focus on extreme environments (space and oceans) could entice young people into science'. MPs made it clear that all scientists should be engaged in actively involving audiences beyond their immediate research community as this would build a legacy of inspiration and curiosity in the UK.

Researchers in Ocean and Earth Science at the University of Southampton are at the forefront of improving the public awareness of science by communicating their work widely, whether it involves explaining climate change, investigating life at the bottom of the world's deepest oceans, or understanding the forces behind glaciers and volcanoes.

They are involved in many significant and fascinating global projects and have forged strong links with colleagues at universities around the world to further our knowledge. One major research area is the deep oceans where much remains to be understood. Few non-specialists have any knowledge of this extraordinary world, which is under increasing pressure from human activities and exploitation.

In recent years, fieldwork has resulted in a number of scientific 'firsts' that have underpinned the University's extensive public engagement work. These include the discovery of the world's deepest known undersea vents, 3.1 miles down in the Cayman Trough, and the first deep-sea vents found in the Antarctic. At least 30 new animal species have been found in these challenging environments.

Ocean and Earth researchers have risen to the challenge of increasing public awareness of science in many ways. Outreach events have targeted groups of people including schoolchildren, people who use the sea, retirees/lifelong learners and local communities along the south coast. They play a major part in the University's Science Week, contributing interactive exhibits and displays for curious visitors of all ages.

In 2010, Ocean and Earth scientists created thesearethevoyages.net, an online engagement programme for their research expeditions to deep-sea volcanic vents. The core website carries daily fieldwork updates explaining the science and technology behind these exciting expeditions and provides interactive links for school pupils and anyone interested in learning more about the oceans.

Southampton researchers are frequently interviewed by the world's media about their achievements. In one example, a broadcast by BBC news from their research ship was watched by more than 10 million people worldwide. Their work has also featured in documentaries, such as a National Geographic series broadcast in more than 170 countries.

Feedback from outreach and public engagement events show ocean and Earth scientists are inspiring and enthusing ordinary members of the public. Encouraging media outlets to carry links to Southampton's online resources has helped the core website attract more than 250,000 visitors from 90 countries since April 2010. Senior Lecturer in Marine Ecology Dr Jon Copley received the Biosciences Federation Science Communication Award in 2008.