

Ocean and Climate Studies

ANNE MÜLLER

*Department of Earth Sciences, The University of Queensland, Brisbane, Qld 4072, Australia
Email: a.mueller@uq.edu.au*

Marine Geology and Deep-Sea Research are young science disciplines undergoing rapid development and requiring interdisciplinary knowledge and collaboration. Topics like plate tectonics, the formation of new ocean floor, the ring of fire and submarine volcanism, submarine earthquakes and their monitoring, how tsunamis form and where and when they occur, touch educational aspects linked to natural hazards in the Asia-Oceania region and hence are of great value to the community.

The fields of Marine Geology and Deep-Sea Research also respond to the great need to find new resources. The oceans are a major resource for mankind, which are yet to be explored and exploited to their full potential. The oceans and interconnecting seas form a continuous territory that covers about three-fourths of the earth's surface. Within this realm, we have sources of minerals and energy that are largely untapped. Just the continental shelves offer a large almost virgin territory to explore.

Finally, Marine Geology and Deep-Sea Research provide geological perspectives in marine studies that are helping to understand past climate and its effects on biological systems. Paleoclimate data from deep-sea sediment cores and corals provide a window in which to view the frequency and magnitude of past climate changes, and to correlate natural variability with variability caused by human activities.

Consequently, education in these fields, including the latest developments in deep-sea research and the newly developed technologies will increase awareness of the potential of the oceans and develop knowledge that will allow to deal with a number of issues that are of great importance to the future of mankind.

Keywords: Marine Geology; Deep-Sea Research, Submarine Earthquakes, Tsunami, Ocean Resources, Climate Change.