

Raymond Cas, IUGG Fellow

AUSTRALIA

Ray Cas is an Emeritus Professor in the School of Earth, Atmosphere and Environment at Monash University and an Honorary Professorial Research Associate at CODES, University of Tasmania. He is an internationally well-known expert in the field of physical volcanology, including understanding explosive and effusive eruption processes, transportation and dispersal processes of erupted products, intraplate volcanism, submarine volcanism, pyroclastic flow dynamics and ignimbrites, explosive calderas, volcanology of kimberlite pipes, volcanology of komatiites, the hazards posed by volcanic eruptions, and the natural resources associated with modern and ancient volcanic systems.

He and his research team of postdoctoral research fellows and research students have undertaken research in many modern volcanic provinces overseas, including Japan, New Zealand, Italy, Canary Islands (Spain, in the Atlantic Ocean), Azores Islands (Portugal, in the mid-Atlantic Ocean), the Andes (northwest Argentina), as well as the still active Newer Volcanics Province of Western Victoria and South Australia.

In addition, Ray has a long record of undertaking collaborative research with the mining industry, helping companies to develop a better understanding of the origin and characteristics of the volcanic host rock successions to a variety of mineral deposits, including gold, nickel, VMS base metals (Cu, Pb, Zn) and diamonds. This research has involved fieldwork all over Australia, Canada, South Africa and Botswana.

Ray has published over 150 peer-reviewed research papers in international journals, he is coauthor, with J.V. Wright, of an internationally highly cited book on volcanology, "Volcanic Successions", and is lead author of a new book on volcanology, "Physical Volcanology", together with G. Giordano and J.V. Wright.

Ray was President of the International Association for Volcanology and Chemistry of the Earth's Interior (IAVCEI) and a member of the IUGG Executive Committee from 2011 – 2015. He is currently a member of the IUGG Resolution Committee.