

Prof Katharine Cashman - University of Bristol



Professor Katharine Cashman's enormous and far-reaching contributions to the field of volcanology and magmatic studies encompass all types of volcanic activity on seven continents. Her unique approach harnesses an ability to make intuitive leaps and connections between ideas and data in disparate fields, followed up by detailed and systematic field and lab-based observations.

After PhD studies at The John Hopkins University, Maryland, she took up an Assistant Professorship at Princeton University before becoming an Associate and then Full Professor at the University of Oregon. She came to the University of Bristol in 2011 where she was offered an AXA endowed Chair of Volcanology in 2014.

Professor Cashman's immense contributions to volcanology have been made by studying the products of volcanic eruptions to determine the processes that formed them. Among her pioneering research is the use of quantitative crystal size distributions for igneous systems, and the quantification of the rheological changes that magmas undergo as they ascend, degas and crystallise. Her work has an applicability to a wide range of fields, from geophysics to social science and risk, and has often led to paradigm shifts, prompting new research directions and stimulating discussion and interest in fundamental questions. Her numerous awards and honours include election to the National Academy of Sciences (USA, 2016), the Royal Society (2016), the American Academy of Arts and Sciences (2012) and the American Geophysical Union (2009).