

Meet the Authors



Juliet Biggs is a Reader in the School of Earth Sciences at the University of Bristol (UK) where she works on active volcanic and tectonic processes. Current projects include studying caldera unrest in the East African Rift and long-lived eruptions in Latin America. Her research focuses on using satellite imagery, in conjunction with field observations,

to provide new insights into magmatic processes. She was awarded the Bullerwell Prize of the British Geophysical Association in 2016 and the Lloyds of London Science of Risk Prize in 2014.



Katharine V. Cashman is a Professor of Volcanology at the School of Earth Sciences at the University of Bristol (UK). She has worked on volcanoes around the world but is (arguably) best known for her research on Mount St. Helens (Washington, USA) and Kilauea (Hawaii, USA) and addressing the interplay between chemical and physical processes that

drive volcanic eruptions. Her studies encompass a wide variety of eruption styles and settings, as well as the written and oral histories of volcanic regions. She is a Fellow of the American Geophysical Union, the American Academy of Arts and Sciences, the Academia Europaea, the Royal Society and the National Academy of Sciences.



Kari M. Cooper is a professor in Earth and Planetary Sciences at the University of California, Davis (USA). Her early interest in volcanoes was cemented by studying active lava flows during a United States Geological Survey–National Association of Geoscience Teachers internship at the Hawaiian Volcano Observatory. Her masters at University of

Washington and her doctorate at the University of California, Los Angeles, were followed by postdoctoral work at the California Institute of Technology (USA). Prior to her current appointment, she held a faculty position at the University of Washington (USA). Her research has included structural and metamorphic evolution of the Alaska Range and large-scale recycling of crustal material into the mantle, but has recently focused on U-series dating of volcanic crystals in crustal magma reservoirs.



Marie Edmonds is a Reader in the Earth Sciences Department at the University of Cambridge (UK). Prior to her current appointment, she was volcanologist with the British Geological Survey, then a Mendenhall Fellow with the US Geological Survey. She received her PhD in volcanology at the University of Cambridge in 2002. Edmonds' research concerns the role that volatiles play in magmatic differentiation, eruption processes and styles. She has worked extensively on the Soufrière Hills Volcano (Montserrat). More broadly, she is interested in the role of volcanoes in geochemical cycling and climate.



Matthew E. Pritchard is a geophysicist who measures changes in the shape of the Earth and develops models of the myriad processes that cause these changes, such as earthquakes, volcanoes, groundwater, landslides, and glaciers. He makes these observations in the field and via radar and optical satellites. He was educated at the University of

Chicago (BA) (Illinois, USA) and the California Institute of Technology (MS and PhD), and was a Harry Hess Postdoctoral Scholar at Princeton University (New Jersey, USA). He has been a faculty member at Cornell University (New York, USA) since 2005 and spent 7 months as a Visiting Professor at the University of Bristol (UK) in 2016.



Keith D. Putirka grew up in Los Angeles (California, USA) and was inspired to study geology while hiking in the Sierra Nevada, the San Gabriel Mountains and the Mojave Desert in the western USA. His degrees are in geology—a BS from California State University Northridge; MS from California State University, Los Angeles; and PhD

from Columbia University (New York, USA). Keith resides in Clovis (California) and is a professor at the California State University, Fresno, where his teaching and research interests include arc volcanoes and plutons, planetary cooling/tectonic histories, the composition of exoplanets, and the history of science. He is the Editor of the *American Mineralogist*.



R. Stephen J. Sparks FRS CBE is Professorial Research Fellow in the School of Earth Sciences at Bristol University (UK). His research concerns volcanic and igneous processes, and he has made contributions in petrology, physical volcanology, fundamental fluid mechanics, sedimentology, and in hazard and risk assessment methods. Honours

include the 2004 Arthur Holmes Medal (European Union of Geoscience), 2000 Arthur Day Medal of the Geological Society of America, the 2008 Thorarinnsson Medal (International Association of Volcanology and Chemistry of the Earth's Interior), 2012 Wollaston Medal (Geological Society of London) and the 2015 Vetlesen Prize (regarded as the equivalent of the Nobel Prize for Earth Sciences).



Paul J. Wallace is Professor in the Department of Earth Sciences at the University of Oregon (USA). He received his PhD in geology from the University of California at Berkeley (USA) in 1991, a postdoctoral research associate at the University of Chicago (Illinois, USA), and was a staff scientist with the Ocean Drilling Program before coming to Oregon

in 2001. His research focuses on volatile recycling and magma formation in subduction zones; volatiles in explosive, caldera-forming rhyolitic eruptions; and relationships between shallow degassing processes, crystallization, and eruption styles.



Colin J.N. Wilson is a Professor of Volcanology at the Victoria University of Wellington (New Zealand). He studied at Imperial College, London (UK) with George Walker and has worked extensively in New Zealand, the western United States, and Alaska. He studies large explosive eruptions, particularly those that generate ignimbrites, in

order to understand eruption processes on a variety of scales. He also researches the dynamics of magmatic systems at large silicic caldera volcanoes (Taupo Volcanic Zone [New Zealand], and Long Valley and Yellowstone [both USA]), integrating laboratory and analytical information with detailed field studies.

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