



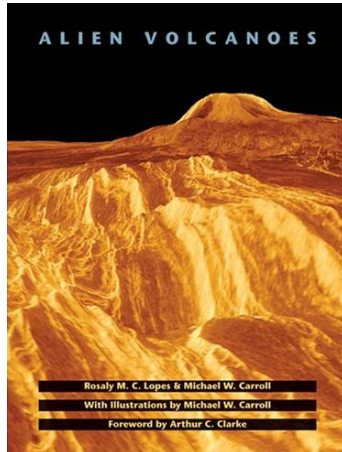
Alien volcanoes

by Rosaly Lopes & Michael Carroll

Johns Hopkins University Press, 2008.
ISBN 978-0-8018-8673-7. Pp 152,
£20.00 (hbk).

This is an attractive and very well-illustrated coffee-table book, containing many imaginative and well-executed paintings by the second author. With humans' near-fatal attraction to volcanoes, and given its lucid text and visual impact, *Alien Volcanoes* is certain to have wide appeal.

The book deals with our growing understanding of terrestrial volcanoes and tectonics, with stories from Pompeii, Krakatoa and Martinique through to the modern-day Mount St Helens. Very soon we are taken on a tour of those solar system objects known to exhibit active volcanism, whether the driving force be carbon dioxide, sulphur dioxide, steam, nitrogen or whatever. We spend some time in 'Dante's Inferno' on Io, the first planetary body beyond Earth discovered (by *Voyager*, in 1979) to possess currently active volcanoes. The authors also discuss the very different behaviour and chemistry of the geysers subsequently – and most surprisingly – found on Neptune's icy moon Triton and (even more recently, thanks to *Cassini*) Saturn's Enceladus. There is also a chapter covering cryovolcanic objects, such as those found upon some of the satellites of the



'Gas Giants' (and upon Europa in particular) which have undergone partial resurfacing through the action of some subsurface

activity. Finally, the authors consider what sights explorers might witness in other solar systems, and detail the impact of volcanoes upon human culture.

Though dated 2008, the book evidently went to press just before the *Messenger* probe reached Mercury. It has a preface written by the late Arthur C. Clarke: as he writes here, some day humans will witness firsthand an eruption on Io or a nitrogen geyser

on Triton. But for now, your imagination (and these pictures) will have to fill in the details. I enjoyed *Alien Volcanoes* and can thoroughly recommend it to you.

Richard McKim

Dr Richard McKim directs the Mercury & Venus and Mars Sections, and so far has had to content himself with observing Olympus Mons – the solar system's largest volcano – from the safety of his back garden with his 41cm Cassegrain telescope.

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