local areas of contraction or extension to create so-called restraining and releasing bends respectively. The editors once again provide a useful summary to the contents and main issues tackled by the collection of papers, and have divided the volume up into three main sections covering bends and sedimentary basins, restraining bends and releasing bends. Following the introduction, the book actually commences with a major review paper by Mann (extending to some 130 pages) which provides an excellent catalogue and classification of restraining and releasing bends on ancient and currently active strike-slip faults. The volume also covers the geometry and reactivation of strike-slip faults, the magnitude and distribution of strain together with stress fields, and feedbacks between climate, topography and thermal histories. The editors also provide some pointers concerning the future direction of this research topic highlighting the unravelling of deformation histories in regions affected by coalescing strike-slip faults, together with the linkages and interactions of fault bends with the lower crust and lithospheric mantle as potential themes.

In summary, this is a very useful, well illustrated and timely contribution to what is an extremely important topic in terms of Earth tectonics and seismicity. As with the theme of many special publications of the Geological Society, the topic will appeal more to the specialist audience, although this volume does provide an excellent benchmark and ready-to-use source of up-to-date information for those who wish to delve further into the subject. It deserves to find a place on the shelves of many university libraries.

Ian Alsop

LEWIS, G. B. & DE LAJARTRE, P.-E. B. 2007. *The Red Volcanoes. Face to Face with the Mountains of Fire.* Introduction by Alain Gerente and John P. Lockwood. 144 pp. London: Thames & Hudson. Price £18.95 (hard covers). ISBN 0 500 54340 5.
doi:10.1017/S0016756809006062

The Red Volcanoes is a simply stunning collection of photographs of lava and eruptions on Hawaii and Réunion. The photographers, G. Brad Lewis and Paul-Edouard Bernard de Lajarte, have superbly captured the inherent beauty and excitement of nature at her rawest and most exhilarating. The collated images document the immense, rich variety of phenomena displayed by the two active volcanoes and are testament to the artistic skill, bravery and patience of the two contributing photographers. Introductions by scientists John P. Lockwood and Alain Gerente poetically set the scene for the 115 photographs in this collection, outlining in lay terms the history of the volcanoes, their impact on the inhabitants of the islands and their connections with the volcanic giants.

The featured images in this book are exceptional documents of the beauty of flowing lava and glowing fountains and include everything from sweeping aerial panoramas of the volcanoes, through to bursting bubbles of lava, flowing rivers of red hot rock cutting through lush rainforests and towering white columns of steam generated as lava streams into the ocean. Each image is a marvel, drawing the eye in and around time and again. Each is magnificently composed, and some almost appear abstract or impressionist in their other-worldly beauty, with sprays of molten rock looking more like petulant flicks from a heavily loaded paintbrush rather than hot, dense disrupted magma (p. 36). Several images stand out, including a striking close-up photograph of a giant bubble bursting through lava (pp. 52–3), a heart-shaped ring of spatter from Pu'u O'o (p. 59) and aerial photos of backlit steam columns billowing above lavas along Réunion's growing coastline (pp. 116–19). The print quality of the images is high and the book is beautifully laid out with a thumbnail section at the back giving a brief background to each featured image and a short glossary of terms. This book is sure to make a much-read addition to the coffee table and will provide endless conversation and inspiration. It is an ideal gift for Earth scientists, nature lovers and anyone seeking the spectacle of the Earth's most impressive displays of power.

Richard Brown

STACEY, F. D. & DAVIS, P. M. 2008. *Physics of the Earth*, 4th ed. xiii + 532 pp. Cambridge, New York, Melbourne: Cambridge University Press. Price £40.00, US $80.00 (hard covers). ISBN 9780 521 87362 8.
doi:10.1017/S0016756809006104

I must confess that before taking on this review I had not really looked carefully at previous editions of this book. Now in its fourth edition, *Physics of the Earth* has been completely revised and expanded in comparison with its earlier incarnations. Paul Davis has also joined Frank Stacey as an author. The preface outlines the major changes. The number of chapters has been increased by subdividing the chapters of the previous edition and new chapters have been included covering elastic and inelastic properties of rocks and rock mechanics which provide a framework for additional chapters on earthquake processes and dynamics.

These changes have resulted in a book consisting of 26 chapters covering an extensive range of topics which include most aspects of Solid Earth Geophysics and a host of other subjects which might best be described as underpinning knowledge, such as 'Origin and history of the Solar System' and 'Composition of the Earth'. While being largely self-contained, the topics are organized in a logical fashion so that any knowledge required for an understanding of subsequent chapters is introduced at an appropriate point. For example chapters on 'Rotation and the figure of the Earth and gravity', and 'Precession, wobble and rotational irregularities' precede the chapter on the satellite geoid. The shorter chapters, each averaging around 15 pages, provide a well-written, concise and easily readable introduction aimed at final-year undergraduate or first-year postgraduate level. Each chapter is prefaced with an excellent section outlining critical aspects of the topic and putting it into an appropriate context. In my mind this is one of the best parts of this textbook since the reader can quickly make a decision whether to pursue each chapter further or move on.

On reflection, while the coverage of topics is comprehensive there is one area that the book might cover but does not. I expected the chapters on 'Tectonics' and 'Convective and tectonic stresses' to consider the possible links between mantle convection and surface elevation through viscous coupling. While in some respects this topic is emerging and controversial, and the authors could be forgiven for steering clear of it as a result, there is a need for a textbook-level introduction and this volume would seem to be the appropriate place.

To complement each chapter there is a comprehensive set of problems in a separate section at the back of the book. The problems are related to chapters by their numbers and a set of solutions for course convenors is available online. There is also a set of appendices covering mathematical topics in more detail than would be appropriate for the chapters together with listings of fundamental data. The book is rounded off with a comprehensive and up-to-date reading list and an extensive index.

In conclusion, this is an excellent text that I can strongly recommend to anyone requiring an introduction to Solid Earth Geophysics and planetary science.

R. W. England