

# THE VOLCANISM BLOG

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## **Book review ... Volcanoes: Global Perspectives by John P. Lockwood & Richard W. Hazlett**

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- John P. Lockwood & Richard W. Hazlett, *Volcanoes: Global Perspectives* (Chichester: Wiley-Blackwell, 2010).

As the preface makes clear, this book has been decades in the making, and it was well worth the wait. *Volcanoes: Global Perspectives* is a great overview of volcanology, an excellent textbook and a very good read. Some books on volcanism have as their central focus what volcanoes are; this one is as interested in *how they are experienced*, and it is this that gives it an extra freshness and energy. The authors emphasize throughout the importance of direct engagement with volcanoes in the field, and they waste no time in immersing the reader straightaway in their own dramatic first-hand experiences of eruptive activity at a 'grey' or explosive volcano (Galunggung, 1982) and a 'red' or effusive volcano (Kilauea, 1974). This is the kind of thing that makes people want to become volcanologists: it also firmly establishes in the reader's mind the beauty and drama of volcanoes, their danger and their fascination, their complexity, their importance, and the manifold forms their activities take.

From there follows a lively, informal but crystal-clear exposition of practically every aspect of volcanism and volcanology that a reader wishing to be well-informed, whether specialist or not, needs to know about. Consciously avoiding specialist terminology, the authors nevertheless achieve the requisite detail and depth as they explain and explore the global context of plate tectonics that gives rise to volcanism, the nature and origin of magma, the characteristics of volcanic eruptions and their products, and the role of volcanoes and volcanism in shaping landforms. Finally, a fascinating final section of the book looks at 'humanistic volcanology', covering the significance of volcanoes in life, climate and human history, volcanic hazards and risks, and the economics of volcanism. It is admirable that these aspects of volcanism are not regarded as peripheral but are treated at length and in depth in this way.

Numerous well-chosen photographs and well-designed diagrams, maps, charts and tables illuminate the text, and throughout readers are invited to engage with the issues and test their own understanding through 'questions for thought, study, and discussion'. The text in general is informal in style but clear and precise, always well-constructed, with a logical flow of analysis and many signposts to keep the reader's progress through the potentially bewildering plethora of topics covered focused and on track. There are guides

to further reading with every chapter, and the list of 'references' at the back constitutes an extensive volcanological bibliography.

It should also be mentioned that, despite its long gestation period, this book is very up-to-date: among the eruptions cited are the Chaiten eruption of 2008-10, the Hunga Tonga subsea eruption of March 2009, Sarychev Peak's 2009 activity, and the deep-sea explosive activity found at West Mata in the Lau basin in May 2009 is described. The coverage of volcanoes and eruptions is truly global, and volcanism elsewhere in the solar system is not disregarded, being nicely explored in a section of the delightfully-named chapter 'Volcanoes Unseen and Far Away'.

In summary, this book can be strongly recommended as a substantial but highly accessible survey of volcanism suited to specialist and non-specialist audiences alike. Readers in the latter group should not be put off by the apparent level of detail present in the book: some prior acquaintance with volcanology and some basic understanding of geology will be a help, but anyone who approaches the subject of volcanoes with enthusiasm, interest and a desire to learn will get a huge amount out of this book. It ought to reach the widest possible audience.

'Volcanoes themselves are the best teachers of volcanology' say the authors at the beginning of this book, and that is true; but superb textbooks such as *Volcanoes: Global Perspectives* are the next best thing.