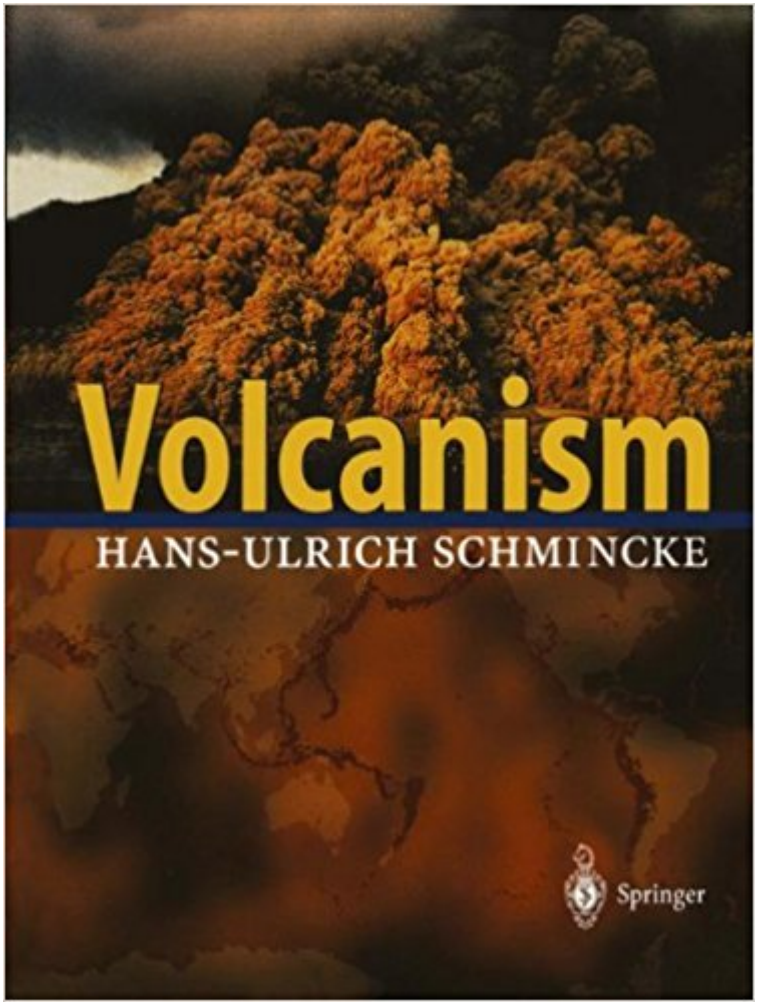
Volcanism



Synopsis

Volcanic eruptions are the clear and dramatic expression of dynamic processes in planet Earth. The author, one of the most profound specialists in the field of volcanology, explains in a concise and easy to understand manner the basics and most recent findings in the field. Based on over 300 color figures and the model of plate tectonics, the book offersÃ Â insight into the generation of magmas and the occurrence and origin of volcanoes. The analysis and description of volcanic structures is followed by process oriented chapters discussing the role of magmatic gases as well as explosive mechanisms and sedimentation of volcanic material. The final chapters deal with the forecast of eruptions and their influence on climate. Students and scientists of a broad range of fields will use this book as an interesting and attractive source of information. Laypeople will find it a highly accessible and graphically beautiful way to acquire a state-of-the-art foundation in this fascinating field. "Volcanism by Hans-Ulrich Schmincke has photos of the best quality I have ever seen in a text on the subjectÃ¢â ¬Â| In addition, the schematic figures in their wide range of styles are clear, colorful, and simplified to emphasize the most important factors while including all significant featuresÃ¢â ¬Â| "I have really enjoyed reading and rereading SchminckeÃ¢â ¬â„¢s book. It fills a great gap in texts available for teaching any basic course in volcanology. No other book I know of has the depth and breadth of VolcanismÃ¢â ¬Â| I have shared Volcanism with my colleagues to their significant benefit, and I am more convinced of its value for a broad range of Earth and planetary scientists. Undoubtedly, I will use Volcanism for my upcoming courses in volcanology. I will never hesitate to recommend it to others. Many geoscientists from very different subdisciplines will benefit from adding the book to their personal libraries. Schmincke has done us all a great service by undertaking the grueling task of writing the book Ã¢â ¬â œ and it is much better that he alone wrote it." Stanley N. Williams, ASU Tempe, AZ (Physics Today, April 2005) Ã Â "Schmincke is a German volcanologist with an international reputation, and he has done us all a great favour because he sensibly channelled his fascination with volcanoes into writing this beautifully illustrated book... [he] tackles the entire geological setting of volcanoes within the earth and the processes that form them... And, with more than 400 colour illustrations, including a huge number of really excellent new diagrams, cutaway models and maps, plus a rich glossary and references, this book is accessible to anyone with an interest in the subject."Ã Â New Scientist (March 2004) "The science of volcanology has made tremendous progress over the past 40 years, primarily because of technological advances and because each tragic eruption has led researchers to recognize the processes behind such serious hazards. Yet scientists are still learning a great deal because of photographs that either capture those processes in action or show us the critical factors

left behind in the rock record.Volcanism by Hans-Ulrich Schmincke has photos of the best quality I have ever seen in a text on the subject. I found myself wishing that I had had the photo of NicaraguaÃ¢â ¬â„¢s Masaya volcano, which was the subject of my dissertation, but it was Schmincke who was able to include it in his book. In addition, the schematic figures in their wide range of styles are clear, colorful, and simplified to emphasize the most important factors while including all significant features. The bookÃ¢â ¬â„¢s paper is of such high quality that at times I felt I had turned two pages rather than one. I have really enjoyed reading and rereading SchminckeÃ¢â ¬â„¢s book. It fills a great gap in texts available for teaching any basic course in volcanology. No other book I know of has the depth and breadth of Volcanism. I was disappointed that the text did not arrive on my desk until last August, when it was too late for me to choose it for my course in volcanology. I am also disappointed about another factÃ¢â ¬â ¢the bookÃ¢â ¬â„¢s binding is already becoming tattered because of my intense use of it! Schmincke is a volcanologist who, in 1967, first published papers on sedimentary rocks of volcanic origin, the direction traveled by lava flows millions of years ago, and the structures preserved in explosive ignimbrites, or pumice-flow deposits, that reveal important details of their formation. Since then, his studies in GermanyÃ¢â ¬â„¢s Laacher See, the Canary Islands, the Troodos Ophiolite of Cyprus, and many other regions have forged great fundamental advances. Such contributions have been recognized with his receipt of several international awards and clearly give him a strong base for writing the book. However, as a scientist who has focused on the challenges of monitoring the very diverse activities of volcanoes, I think that the textÃ¢â ¬â„¢s overriding emphasis on the rock record has its cost. The group of scientists who are struggling with their goals to reduce or mitigate the hazards of the eruptions of tomorrow need to learn more about the options of technology, instrumentation, and methodology that are currently available. More than 500 million people live near the more than 1500 known active volcanoes and are constantly facing serious threats of eruptions. An extremely energetic earthquake caused the horrific tsunamis of 2004. However, the tsunamis of 1792, 1815, and 1883, which were caused by the eruptions of JapanÃ¢â ¬â„¢s Unzen volcano and IndonesiaÃ¢â ¬â„¢s Tambora and Krakatau volcanoes, each took a similar toll. " (Stanley N. Williams, PHYSICS TODAY, April 2005)

Book Information

Hardcover: 324 pages

Publisher: Springer; First Edition edition (November 14, 2005)

Language: English

ISBN-10: 3540436502

ISBN-13: 978-3540436508

Product Dimensions: 8.3 x 1 x 10.9 inches

Shipping Weight: 3.3 pounds (View shipping rates and policies)

Average Customer Review: 3.7 out of 5 stars 11 customer reviews

Best Sellers Rank: #410,615 in Books (See Top 100 in Books) #20 inÃ Â Books > Science & Math > Earth Sciences > Geology > Volcanology #49 inÃ Â Books > Science & Math > Chemistry > Geochemistry #67 inÃ Â Books > Science & Math > Earth Sciences > Seismology

Customer Reviews

From the reviews: "Volcanism by Hans-Ulrich Schmincke has photos of the best quality I have ever seen in a text on the subjectÃ¢â ¬Â¦ In addition, the schematic figures in their wide range of styles are clear, colorful, and simplified to emphasize the most important factors while including all significant featuresÃ¢â ¬Â¦ "I have really enjoyed reading and rereading SchminckeÃ¢â ¬â„¢s book. It fills a great gap in texts available for teaching any basic course in volcanology. No other book I know of has the depth and breadth of VolcanismÃ¢â ¬Â¦ I have shared Volcanism with my colleagues to their significant benefit, and I am more convinced of its value for a broad range of Earth and planetary scientists. Undoubtedly, I will use Volcanism for my upcoming courses in volcanology. I will never hesitate to recommend it to others. Many geoscientists from very different subdisciplines will benefit from adding the book to their personal libraries. Schmincke has done us all a great service by undertaking the grueling task of writing the book Ã¢â ¬â œ and it is much better that he alone wrote it." Stanley N. Williams, ASU Tempe, AZ (Physics Today, April 2005) "This book comes from a lifetime of volcanological field experience all over the world from a leading professor of volcanology Ã¢â ¬Â¦ . The book is based on the authorÃ¢â ¬â„¢s lecture materials Ã¢â ¬Â¦ . figures make this volume exceptionally valuable to students and instructors. The photographs, historic figures, and charts and figures Ã¢â ¬Â¦ are done thoughtfully and carefully and will be very widely used. Ã¢â ¬Â¦ would be appropriate as a text for an upper-level college class in volcanology. Ã¢â ¬Â¦ It could attract newcomers to this highly interdisciplinary field Ã¢â ¬Â¦ ." (William I. Rose, Journal of Geology, May, 2005) "This outstanding handbook has the power to incite any geologist or interested layman to become a volcanologist himself Ã¢â ¬Â¦ . It is Ã¢â ¬Â¦ lavishly illustrated with superb photographs and excellent cartoons of models, schematic cross-sections or contour maps, with easy to consult references, glossary and indexes. ... It is highly recommended to all those interested in earth sciences in general and should be present in every

earth science library. Ã¢â ¬Â¦ definitely will raise the fascination for the earth as a complex system among many." (Michiel Dusar, Geologica Belgica, Vol. 8 (1-2), 2005) "The book by Hans-Ulrich Schmincke Ã¢â ¬Â¦ is alluring for several reasons. Firstly, it deals with topics which Ã¢â ¬Â¦ are potentially attractive for all, regardless of ones age and educational level. Secondly, it is perfectly balanced in providing a professional level of science Ã¢â ¬Â¦ . Thirdly, it contains a wealth of colourful photos Ã¢â ¬Â¦ . the most spectacularly illustrated one I have recently read. Ã¢â ¬Â¦ the text is written with passion and with a superb knowledge of the subject Ã¢â ¬Â¦ . Students and scientists Ã¢â ¬Â¦ will find this excellent book an indispensable source of information Ã¢â ¬Â¦ ." (Marek Lewandowski, Pure and Applied Geophysics, Vol. 162, 2005) "Hans-Ulrich Schmincke Ã¢â ¬Â¦ has done us all a great favour because he sensibly channelled his fascination with volcanoes into writing this beautifully illustrated book. Volcanism, however, is much more than pretty pictures. Ã¢â ¬Â¦ It inspires you to explore Ã¢â ¬Â¦ . And, with more than 400 colour illustrations, including a huge number of really excellent new diagrams, cutaway models and maps, plus a rich glossary and references, this book is accessible to anyone with an interest in the subject." (Douglas Palmer, New Scientist, March, 2004) "The book succeeds for the most part on the generalized level of providing a bridge between the technical and popular literature on volcanoes, and as such can be recommended. Ã¢â ¬Â¦ The strengths of the Schmincke volume lie in its overall coverage of volcanic topics, readability, and in the large number of almost entirely excellent-quality photographs and diagrams that make it an easy book to dip into." (Colin Wilson, Economic Geology, Vol. 100 (3), 2005)

A very basic introduction to volcanology; if you’re not going to be a volcanologist, this book will work well for you. If you ARE actually interested in volcanology, however, you probably want to go for a more advanced text (Encyclopedia of Volcanoes, etc) as a supplement. The book is well organized for the most part, featuring fairly succinct chapters that progress through fundamentals like rheology, morphology, deposit types, tectonic scenarios, and hazards and monitoring, supplemented with case studies of well-documented ’archetypal’ volcanoes and eruptions.The (new) copy I got came on really odd paper; it wasn’t glossy like normal textbook paper, and the pictures and photos were rather dull as a result. A classmate obtained a used copy that was printed on ’normal’ paper that had much better quality on the pictures -- I was able to notice details that were indiscernible in the photos in my book even under close inspection.That being said, it’s a textbook, not a picture book, so that’s probably not going to be a major sticking point for most people. Chances are, you’re buying this book it’s because it’s a required text for your volcanology

class, and for that purpose, it's perfectly suitable (and pretty reasonably priced). As an added bonus, the author's dry sense of humor does pop up in a few places here and there to break up the monotony.

I am a geology major with a specialty in volcanology. My professor required this for my last course. It has stunning pictures and illustrations on nearly every page. I could use it as a coffee table book, but it is poorly organized and is all over the place. If you are buying this with an outstanding knowledge of volcanism already, it is a great book. I don't know if it would be great for newbies. However, considering the lack of modern volcanology textbooks, this one is probably one of the best resources you are going to find.

A very good text.

This was one of my required textbook. Love it and it has color pictures unlike my other geology textbooks. Thats all.

The book ordered was in very good condition. It was a miracle that it made it through the mail. The package was just about to fall apart. This was mailed during Christmas rush.

I tried to cancel this item but was told no, I asked for a return form never given one, was told it would be sent with the item no return form was inside, item had a bad smell to it. I feel cheated and I am not happy

As a glance at some of my other reviews may indicate, I am very interested in nearly all aspects of volcanoes and volcanology. This is by far the best book that I have ever read on the general subject.The photography is in four-color format and is about the best I have ever encountered on the topics. The book is jam-packed with illustrative diagrams of high quality, and both photos and diagrams follow the text in a crisp, well-crafted manner. The book was obviously written in German first, and sometimes the grammatical translations seem awkward, but remain easily understandable. This is no way detracts from the substantive content of the book.Not surprisngly, many of the illustration are from sites of European volcanism, such as the Lacher See region of Rhineland, Germany, and the Canary Islands. The discussion of the extremely violent, but hardly known, Lacher See event is well done, and should be carefully perused by any reader. Dr. Schminke

reveals a history that is hardly known about, and sorely unappreciated, by readers on this side of the Atlantic. A repetition of the event today, which is cetainly not out of the question, would a major disaster for Western Europe.While the book uses many terms not familiar to one not acquainted with geology, these are explained for the most part, so the book should be enjoyed by anyone with a high school background in science. Of the many new books on volcanoes in recent years, this is unquestionably the finest one in my belief. I recommend it very highly to anyone who really enjoys the subject of volcanoes.

I didn’t have the opportunity to take a volcanology class as a student, so bought this book to read for "fun." Dr. Schmincke’s text is easy to understand (even when he explains relatively difficult concepts) and the photographs and illustrations are great - straightforward, colorful, and all definitely add to the text. As a former college geology instructor, I appreciate a book like this and, just from a pure enjoyment perspective - "Volcanism" was super; I had a tough time putting it down.