Biogeochemistry, Second Edition: An Analysis of Global Change

W.H. Schlesinger
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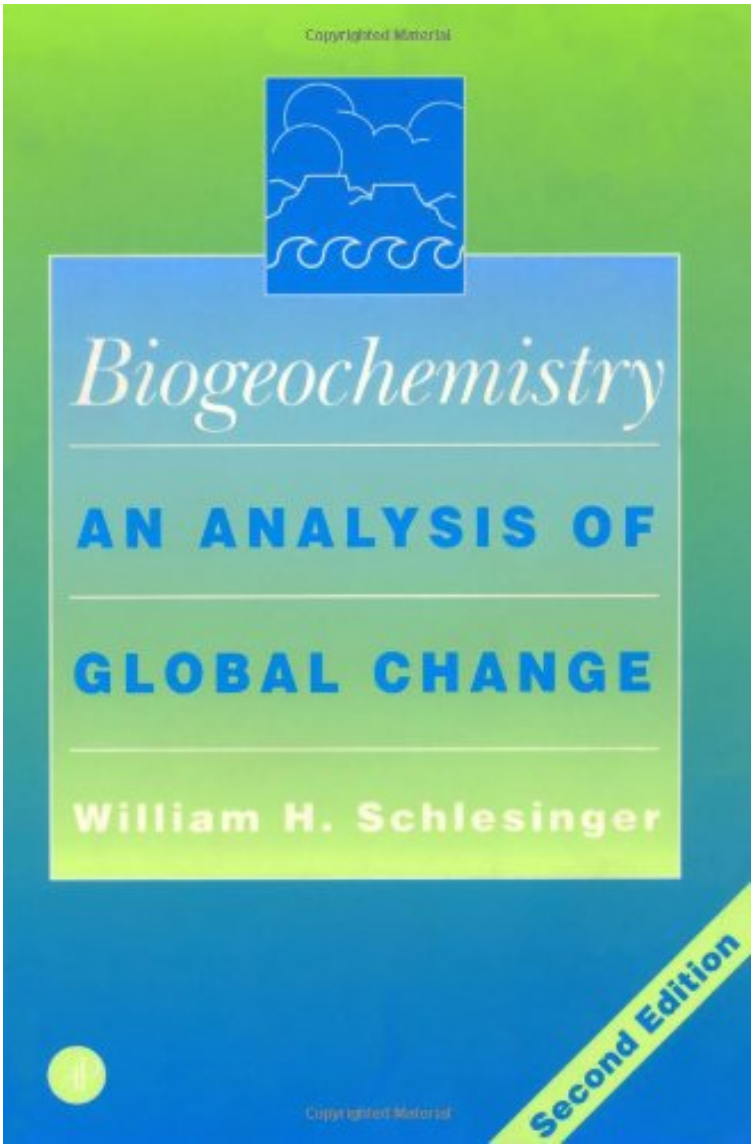

#1214396 in Books 1997-03-06Original language:EnglishPDF # 1 1.11 x 5.93 x 8.92l, 1.80 #File Name: 012625155X588 pages | File size: 63.Mb

W.H. Schlesinger : Biogeochemistry, Second Edition: An Analysis of Global Change before purchasing it in order to gage whether or not it would be worth my time, and all praised Biogeochemistry, Second Edition: An Analysis of Global Change:

1 of 1 people found the following review helpful. Meh.By Lee MooresThe principles discussed in the book are quite thorough, but I never like the use of different units. Rather than change the data from the journal articles cited the author left the units unchanged. It is difficult to compare ppm to M while reading without stopping to run the

calculation. There were many times that the author left charges off of the ions in the text and figures, but the inconsistency made it difficult to understand which chemical species was being discussed. The articles cited tended to be quite dated, which may have been fixed in the newer version. Had this book not been specifically assigned for a class I would have purchased the newer version.0 of 0 people found the following review helpful. When I received the book, the porfessor told us ...By Lucky's Nancy mamaWhen I received the book, the porfessor told us a newer edition was needed, becasue campus website made mistake. But the older version printed in goodl paper. I just kept it for reference.0 of 0 people found the following review helpful. Great Book Overveiwing Climate ChangeBy KateThis is a great book, which thoroughly overviews Climate Change/Warming. There is a great diagram, which covers carbon pools and fluxes. This book can give a great basis for understanding biogeochemistry in the context of Global Change.Much of the information is outdated now that we are in 2014, I would love to see Schlesinger update some of the data, figures, and graphs, and put out another addition.I would also like to see more discussion on biological influences in the book.

For the past 4 billion years, the chemistry of the Earth's surface, where all life exists, has changed remarkably. Historically, these changes have occurred slowly enough to allow life to adapt and evolve. In more recent times, the chemistry of the Earth is being altered at a staggering rate, fueled by industrialization and an ever-growing human population. Human activities, from the rapid consumption of resources to the destruction of the rainforests and the expansion of smog-covered cities, are all leading to rapid changes in the basic chemistry of the Earth.The Second Edition of Biogeochemistry considers the effects of life on the Earth's chemistry on a global level. This expansive text employs current technology to help students extrapolate small-scale examples to the global level, and also discusses the instrumentation being used by NASA and its role in studies of global change. With the Earth's changing chemistry as the focus, this text pulls together the many disparate fields that are encompassed by the broad reach of biogeochemistry. With extensive cross-referencing of chapters, figures, and tables, and an interdisciplinary coverage of the topic at hand, this text will provide an excellent framework for courses examining global change and environmental chemistry, and will also be a useful self-study guide.* Emphasizes the effects of life on the basic chemistry of the atmosphere, the soils, and seawaters of the Earth* Calculates and compares the effects of industrial emissions, land clearing, agriculture, and rising population on Earths chemistry* Synthesizes the global cycles of carbon, nitrogen, phosphorous, and sulfur, and suggests the best current budgets for atmospheric gases such as ammonia, nitrous oxide, dimethyl sulfide, and carbonyl sulfide* Includes an extensive review and up-to-date synthesis of the current literature on the Earths biogeochemistry

"Schlesinger presents a clear analysis of the interactions among biological and chemical processes that determine the composition of the atmosphere, oceans, and biosphere, and places these in the context of global change."--Pamela Matson in ECOLOGY"Schlesinger presents the material in a vivid style making the book both informative and a pleasure to read."--Peter Warneck in JOURNAL OF ATMOSPHERIC CHEMISTRY"An excellent resource for earth scientists interested in increasing their knowledge of the roles of the terrestrial biosphere and of soil organic matter in geochemical cycling, particularly as they affect the global cycles of carbon, nitrogen, and phosphorus."--E.K. and R.A. Berner in GEOCHIMICA ET COSMOCHIMICA ACTA"Do not take a spin on a biogeochemical cycle without first reading Schlesinger's description of the components of that cycle."--J.C.G. Walker in SCIENCE"Careful attention to detail is evident throughout the text. The book is richly illustrated with clearly explained figures, most of which are redrawn from the original primary literature. I recommend this book for any scientitst who needs a comprehensive and thoroughly referenced overview of biogeochemistry, and it is certainly well suited as a textbook for upper-level and graduate courses that deal with biogeochemistry."--Stephen K. Hamilton, Michigan State University, BULLETIN OF THE AMERICAN METEOROLOGY SOCIETYAbout the AuthorDr. Schlesinger is one of the nations leading ecologists and earth scientists and a passionate advocate for translating science for lay audiences. A member of the National Academy of Sciences, he has served as dean of the Nicholas School of the Environment at Duke and president of the Cary Institute of Ecosystem Studies. He lives in Down East Maine and Durham, N.C. and continues to analyze the impacts of humans on the chemistry of our natural environment.