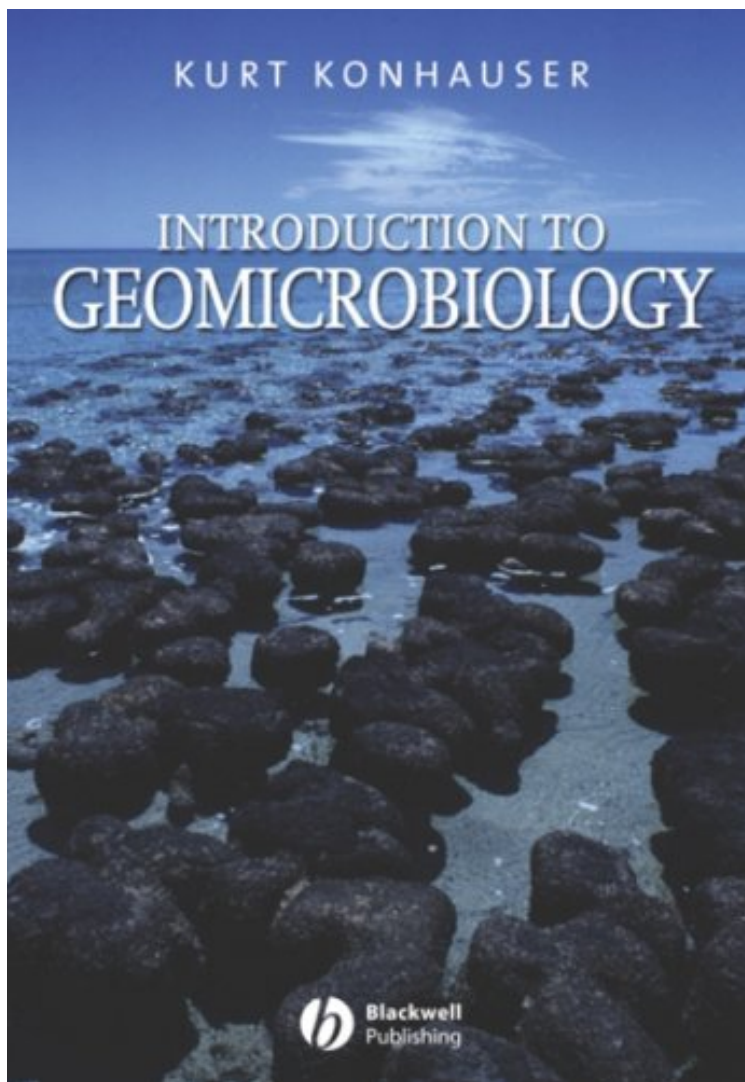


(Free) Introduction to Geomicrobiology

## Introduction to Geomicrobiology

*Kurt O. Konhauser*

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**Kurt O. Konhauser : Introduction to Geomicrobiology** before purchasing it in order to gage whether or not it would be worth my time, and all praised Introduction to Geomicrobiology:

1 of 1 people found the following review helpful. This could be the oneBy TWGI find this book great, as a compendium of the (almost) current knowledge of microbes and their impacts on the earth (of course they built the biosphere; and we are just microbes on wheels). It is broadly oriented, in contrast say to the (already somewhat dated, but classic) Chappelle's Groundwater Microbiology and Geochemistry. It has a 20 page index and a 50 page bibliography which are invaluable.Like all science books these days it could have done with some proofing, but I also sympathize with the publishers' not having a great margin for such luxuries. It seems pretty well bound though I would

have been happy to pay another \$20 for a hard-back. Put out by Blackwell in UK. I do have a wish though. In viewing this book on I find a remarkable number of new, similar titles available. Would that some journal (AEM, Geochimica?) would have a reviewer compare a dozen of them; and that finding such a review, a subscriber would post it on as a meta-review. Most of us will want just one of them for now (though we may also want the Sulfate Reducing Bacteria, or Archaea, or an astrobiology book as well) and have a hard time picking that one out unless a prof assigns it. If you have a choice for an introductory survey text and pick Konhauser you will not be disappointed. 0 of 0 people found the following review helpful. Great shipping time By Coppershadow Great shipping time. As a supplementary reading project, this text is wonderful for anyone delving deeper into the earth sciences.

Introduction to Geomicrobiology is a timely and comprehensive overview of how microbial life has affected Earth's environment through time. It shows how the ubiquity of microorganisms, their high chemical reactivity, and their metabolic diversity make them a significant factor controlling the chemical composition of our planet. The following topics are covered: how microorganisms are classified, the physical constraints governing their growth, molecular approaches to studying microbial diversity, and life in extreme environments bioenergetics, microbial metabolic capabilities, and major biogeochemical pathways chemical reactivity of the cell surface, metal sorption, and the microbial role in contaminant mobility and bioremediation/biorecovery microbiological mineral formation and fossilization the function of microorganisms in mineral dissolution and oxidation, and the industrial and environmental ramifications of these processes elemental cycling in biofilms, formation of microbialites, and sediment diagenesis the events that led to the emergence of life, evolution of metabolic processes, and the diversification of the biosphere. Artwork from the book is available to instructors at [www.blackwellpublishing.com/konhauser](http://www.blackwellpublishing.com/konhauser).

I recommend the book to anyone who is interested in where particular microbes live, how they live and what effects they may exert on our planet Earth. Certainly I will be using the book when preparing my lectures. (Geology Today, 1 May 2011) "This text is well illustrated with clear, informative and well-described diagrams and some splendid electron micrographs with convincing evidence for mineral deposition by bacterial action. A good index and up-to-date references make this a book that undergraduates of any biological discipline could use as an introductory text that would be useful throughout their course." Times Higher Education Supplement "A thorough and informative overview of the subject comprehensively referenced throughout. Dr Kohnhauser has done an excellent job in integrating the diverse aspects of geomicrobiology and making them accessible and interesting to...a wide range of readers." European Journal of Soil Science The most comprehensive general book in geomicrobiology, showing the great advances made in geomicrobiology during the past few years Packed with information. Journal of Sedimentary Research "I would recommend this book to any upper undergraduate / graduate students who wish to study geomicrobiology, as well as to researchers in geomicrobiology who may find here either a nice way to fill possible gaps in their knowledge or a starting point for new research." Journal of Sedimentary Research From the Back Cover Introduction to Geomicrobiology is a timely and comprehensive overview of how microbial life has affected Earth's environment through time. It shows how the ubiquity of microorganisms, their high chemical reactivity, and their metabolic diversity make them a significant factor controlling the chemical composition of our planet. The following topics are covered: how microorganisms are classified, the physical constraints governing their growth, molecular approaches to studying microbial diversity, and life in extreme environments bioenergetics, microbial metabolic capabilities, and major biogeochemical pathways chemical reactivity of the cell surface, metal sorption, and the microbial role in contaminant mobility and bioremediation/biorecovery microbiological mineral formation and fossilization the function of microorganisms in mineral dissolution and oxidation, and the industrial and environmental ramifications of these processes elemental cycling in biofilms, formation of microbialites, and sediment diagenesis the events that led to the emergence of life, evolution of metabolic processes, and the diversification of the biosphere. Artwork from the book is available to instructors at [www.blackwellpublishing.com/konhauser](http://www.blackwellpublishing.com/konhauser). About the Author Kurt Konhauser is a Canada Research Chair in Geomicrobiology in the Department of Earth and Atmospheric Sciences at the University of Alberta. He is also Editor-in-Chief for Geobiology. His current research interests include the role of bacteria in modern mineral precipitation, and how those same processes may have contributed to the preservation of early life forms and the formation of Precambrian banded iron formations.