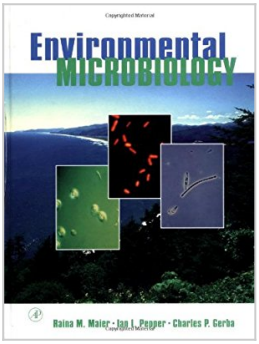

Environmental Microbiology

By Raina M. Maier, Ian L. Pepper, Charles P. Gerba

Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba

The field of environmental microbiology encompasses aspects of several areas of study including microbial ecology, molecular genetics, and environmental science. **Environmental Microbiology** is the first book to offer a comprehensive discussion of this field as a discipline, which the authors define as the study of microbial fate and activity in air, water, and soil, and the resulting impact on human health and welfare. While the roots of environmental microbiology can be traced to sanitary engineering (water and wastewater treatment), the field has grown to include other practical issues such as bioremediation, the control of known and emerging waterborne pathogens, microbial risk assessment, and environmental biotechnology. Five general areas are emphasized in this text: (i) Foundation chapters, (ii) microbial environments, (iii) detection of microbial activity, (iv) the impact of microbial activity on the environment in terms of nutrient cycling and pollutant fate, and (v) detection and control of pathogens in the environment. Designed for courses at senior undergraduate and graduate levels, Environmental Microbiology will also serve as an essential reference for environmental microbiologists, microbial ecologists, and environmental engineers, as well as those interested in epidemiology, water and wastewater treatment, and biotechnology.

Key Features
Among the Highlights of this state-of-the-art Textbook:
* Includes foundation chapters for background in biological and earth sciences
* Covers emerging areas such as transport

Environmental Microbiology

By Raina M. Maier, Ian L. Pepper, Charles P. Gerba

Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba

The field of environmental microbiology encompasses aspects of several areas of study including microbial ecology, molecular genetics, and environmental science. **Environmental Microbiology** is the first book to offer a comprehensive discussion of this field as a discipline, which the authors define as the study of microbial fate and activity in air, water, and soil, and the resulting impact on human health and welfare. While the roots of environmental microbiology can be traced to sanitary engineering (water and wastewater treatment), the field has grown to include other practical issues such as bioremediation, the control of known and emerging waterborne pathogens, microbial risk assessment, and environmental biotechnology. Five general areas are emphasized in this text: (i) Foundation chapters, (ii) microbial environments, (iii) detection of microbial activity, (iv) the impact of microbial activity on the environment in terms of nutrient cycling and pollutant fate, and (v) detection and control of pathogens in the environment. Designed for courses at senior undergraduate and graduate levels, Environmental Microbiology will also serve as an essential reference for environmental microbiologists, microbial ecologists, and environmental engineers, as well as those interested in epidemiology, water and wastewater treatment, and biotechnology.

Key Features
Among the Highlights of this state-of-the-art Textbook:
* Includes foundation chapters for background in biological and earth sciences
* Covers emerging areas such as transport

Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba Bibliography

- Sales Rank: #2639399 in Books
- Published on: 2000-03-08
- Original language: English
- Number of items: 1
- Dimensions: 1.14" h x 8.76" w x 11.28" l,
- Binding: Hardcover
- 585 pages

Editorial Review

Review
"This book... provides a good source of reference of many of the important concepts relating to environmental microbiology... It would be a useful text for undergraduate students with interests in this area of microbiology... The information is well written and presented and is supported by good figures and tables, as well as case studies, which are effectively used to highlight particular issues."
- Microbiology Today

From the Back Cover
The field of environmental microbiology encompasses aspects of several areas of study, including microbial ecology, molecular genetics, and environmental science. **Environmental Microbiology** is the first book to offer a comprehensive discussion of this field as a discipline, which the authors define as the study of microbial fate and activity in air, water, and soil and the resulting impact on human health and welfare. While the roots of environmental microbiology can be traced to sanitary engineering (water and wastewater treatment), the field has grown to include other practical issues such as bioremediation, the control of known and emerging waterborne pathogens, microbial risk assessment, and environmental biotechnology. Five general areas are emphasized in this text: (i) foundation chapters, (ii) microbial environments, (iii) detection of microbial activity, (iv) the impact of microbial activity on the environment in terms of nutrient cycling and pollutant fate, and (v) detection and control of pathogens in the environment. Designed for courses at senior undergraduate and graduate levels, **Environmental Microbiology** will also serve as an essential reference for environmental microbiologists, microbial ecologists, and environmental engineers, as well as those interested in epidemiology, water and wastewater treatment, and biotechnology.
Among the Highlights of this State-of-the-Art Textbook:
* Includes foundation chapters for background in biological and earth sciences
* Covers emerging areas such as transport of microbes and DNA, microbial risk assessment, and use of molecular detection in environmental applications
* References key or landmark works without interrupting the flow of text
* Describes the newest analytical and molecular methodologies
* Contains many detailed, full-color graphics to make the text visually stimulating
* Presents numerous "case studies" to emphasize relevance to real-life situations
* Provides study questions at the end of each chapter

About the Author
Dr. Ian Pepper is currently a Professor at the University of Arizona. He is also Director of the University of Arizona, Environmental Research Laboratory (ERL) and the NSF Water and Environmental Technology (WET) Center. Dr. Pepper is an environmental microbiologist specializing in the molecular ecology of the environment. His research has focused on the fate and transport of pathogens in air, water, soils and wastes. His expertise has been recognized by membership on six National Academy of Science Committees and former memberships on an EPA FIFRA Science and Advisory Panel. Dr. Pepper is a Fellow of the American Association for the Advancement of Science, American Academy of Microbiology, the Soil Science Society of America, and the American Society of Agronomy. He is also a Board Certified Environmental Scientist within the American Academy of Environmental Engineers and Scientists. He is the author or co-author of six textbooks; 40 book chapters; and over 180 peer-review journal articles.

Dr. Charles P. Gerba is a Professor at the University of Arizona. He conducts research the transmission of

pathogens through the environment. His recent research encompasses the transmission of pathogens by water, food and fomites; fate of pathogens in land applied wastes; development of new disinfectants; domestic microbiology and microbial risk assessment. He has been an author on more than 500 articles including several books in environmental microbiology and pollution science. He is a fellow of the American Academy of Microbiology and the American Association for the Advancement of Science. In 1998 he received the A. P. Black Award from the American Water Works Association for outstanding contributions to water science and in 1996 he received the McKee medal from the Water Environment Federation for outstanding contributions to groundwater protection. He received the 1999 Award of Excellence in Environmental Health from National Association of County and City Health Officials.

Dr. Ian Pepper is currently a Professor at the University of Arizona. He is also Director of the University of Arizona, Environmental Research Laboratory (ERL) and the NSF Water and Environmental Technology (WET) Center. Dr. Pepper is an environmental microbiologist specializing in the molecular ecology of the environment. His research has focused on the fate and transport of pathogens in air, water, soils and wastes. His expertise has been recognized by membership on six National Academy of Science Committees and former memberships on an EPA FIFRA Science and Advisory Panel. Dr. Pepper is a Fellow of the American Association for the Advancement of Science, American Academy of Microbiology, the Soil Science Society of America, and the American Society of Agronomy. He is also a Board Certified Environmental Scientist within the American Academy of Environmental Engineers and Scientists. He is the author or co-author of six textbooks; 40 book chapters; and over 180 peer-review journal articles.

Dr. Charles P. Gerba is a Professor at the University of Arizona. He conducts research the transmission of pathogens through the environment. His recent research encompasses the transmission of pathogens by water, food and fomites; fate of pathogens in land applied wastes; development of new disinfectants; domestic microbiology and microbial risk assessment. He has been an author on more than 500 articles including several books in environmental microbiology and pollution science. He is a fellow of the American Academy of Microbiology and the American Association for the Advancement of Science. In 1998 he received the A. P. Black Award from the American Water Works Association for outstanding contributions to water science and in 1996 he received the McKee medal from the Water Environment Federation for outstanding contributions to groundwater protection. He received the 1999 Award of Excellence in Environmental Health from National Association of County and City Health Officials.

Dr. Terry Gentry is currently an Assistant Professor at Texas A&M University and is also the Director of the Soil and Aquatic Microbiology Laboratory (SAML). He is an environmental microbiologist specializing in the development and use of molecular technologies to enhance the detection and remediation of environmental contamination. This includes the detection and identification of microbial pathogens from animal, human, and natural sources and also the characterization of microbial populations and communities contributing to applied remediation processes such as the bioremediation of organic and metal contaminants. He teaches undergraduate and graduate courses in environmental microbiology and environmental soil science. He is the author or co-author of over 45 peer-reviewed journal articles and 4 book chapters.

Users Review

From reader reviews:

Janie Ross:

In this 21st millennium, people become competitive in every single way. By being competitive now, people have do something to make these individuals survives, being in the middle of the actual crowded place and notice by surrounding. One thing that occasionally many people have underestimated the idea for a while is

reading. That's why, by reading a e-book your ability to survive enhance then having chance to endure than other is high. For you personally who want to start reading the book, we give you that Environmental Microbiology book as starter and daily reading e-book. Why, because this book is more than just a book.

Edward Phillips:

The guide untitled Environmental Microbiology is the e-book that recommended to you to study. You can see the quality of the guide content that will be shown to anyone. The language that article author use to explained their way of doing something is easily to understand. The copy writer was did a lot of research when write the book, hence the information that they share to you personally is absolutely accurate. You also could get the e-book of Environmental Microbiology from the publisher to make you considerably more enjoy free time.

Mamie Crossett:

As a university student exactly feel bored to help reading. If their teacher requested them to go to the library as well as to make summary for some book, they are complained. Just minor students that has reading's spirit or real their passion. They just do what the trainer want, like asked to go to the library. They go to at this time there but nothing reading very seriously. Any students feel that studying is not important, boring and can't see colorful photos on there. Yeah, it is being complicated. Book is very important for yourself. As we know that on this era, many ways to get whatever we would like. Likewise word says, many ways to reach Chinese's country. Therefore this Environmental Microbiology can make you experience more interested to read.

Bruce Sandlin:

Some individuals said that they feel uninterested when they reading a publication. They are directly felt that when they get a half portions of the book. You can choose the book Environmental Microbiology to make your own reading is interesting. Your own personal skill of reading expertise is developing when you such as reading. Try to choose simple book to make you enjoy to study it and mingle the impression about book and reading through especially. It is to be initially opinion for you to like to open up a book and study it. Beside that the publication Environmental Microbiology can to be a newly purchased friend when you're sense alone and confuse in doing what must you're doing of their time.

Read Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba for online ebook

Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba books to read online.

Online Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba ebook PDF download

Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba Doc

Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba Mobipocket

Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba EPub

2CB6J0TD1RA: Environmental Microbiology By Raina M. Maier, Ian L. Pepper, Charles P. Gerba