Nitrification and Denitrification in the Activated Sludge Process

Michael H. Gerardi
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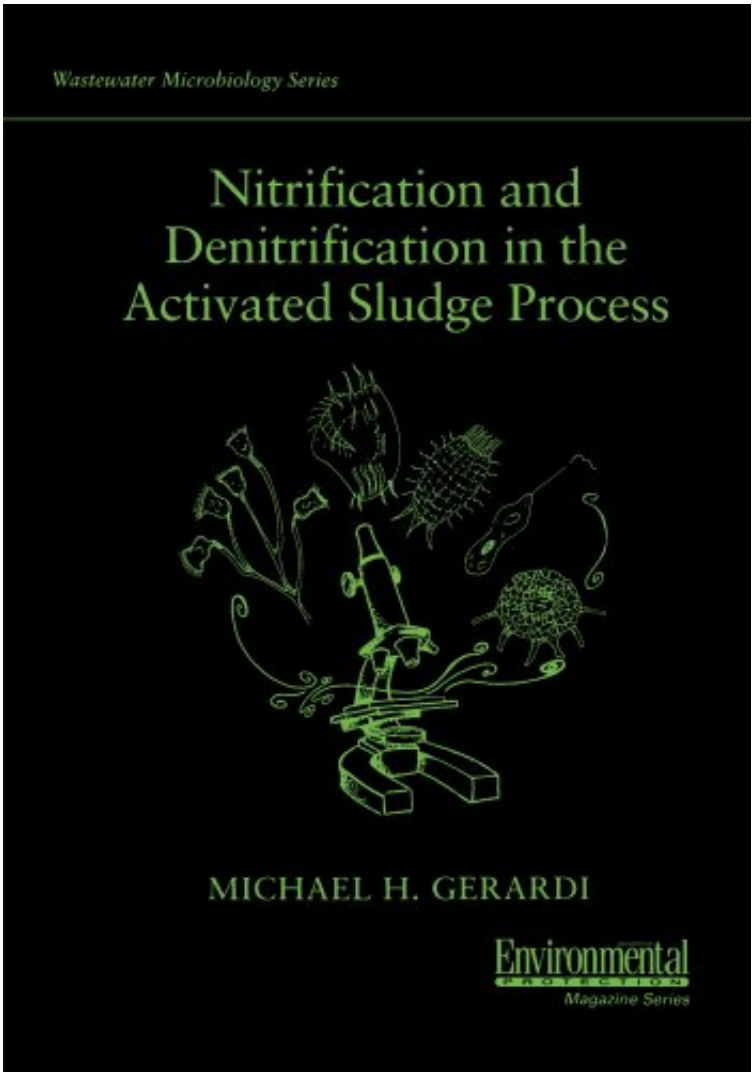

#1988846 in Books 2002-01-09Original language:EnglishPDF # 1 10.04 x .40 x 6.97l, .81 #File Name: 0471065080193 pages | File size: 31.Mb

Michael H. Gerardi : Nitrification and Denitrification in the Activated Sludge Process before purchasing it in order to gage whether or not it would be worth my time, and all praised Nitrification and Denitrification in the Activated Sludge Process:

1 of 1 people found the following review helpful. Expertise made easyBy Dr ChemicalI am sure glad I took no notice of the other reviews of this book, and bought it anyway.This book could accurately be titled "Denitrification and Nitrification for Dummies" It guides the novice through the whole process step-by-step, defining terms along the way. The reader is introduced to the various concepts involved in a systematic manner that allows you to build your knowledge gradually and comprehensively.The style of writing is extremely tight - that is, it deals with topics one by

one, and does not go off on tangents, as many books do. The outcome of this is that you cannot read a lot of it at once, as you find your brain crammed with so much useful information.It has been many years since I have read a scientific book that is so clearly and expertly written. The short, concise sentences are easy to read and understand, and it's the kind of book that you could read again and again, to cement concepts. This not a book to be just read, but digested.The person who begins this book as a novice will finish it as an expert.0 of 0 people found the following review helpful. Five StarsBy CustomerIt is a very useful book0 of 0 people found the following review helpful. Understanding nitrification/denitrificationBy eugene saultersIn general I have yet to find a book that explains the nitrification/denitrification process in such detail and its still be easy to understand.

Nitrification and Denitrification in the Activated Sludge Process, the first in a series on the microbiology of wastewater treatment, comprises the critical topics of cost-effective operation, permit compliance, process control, and troubleshooting in wastewater treatment plants. Avoiding the technical jargon, chemical equations, and kinetics that typically accompany such texts, Nitrification and Denitrification in the Activated Sludge Process directly addresses plant operators and technicians, providing necessary information for understanding the microbiology and biological conditions that occur in the treatment process. Of special interest to wastewater treatment plant operators are the bacteria that degrade nitrogenous wastesthe nitrifying bacteriaand the bacteria that degrade carbonaceous wastesthe cBOD-removing bacteria. Both groups of bacteria need to be routinely monitored and operational conditions favorably adjusted to ensure desired nitrification. Each chapter in this groundbreaking study offers a better understanding of the importance of nitrification and denitrification and the bacteria involved in these crucial processes. Chapters include: Organotrophs The Wastewater Nitrogen Cycle Nitrite Ion Accumulation Dissolved Oxygen Denitrifying Bacteria Gaseous End Products Free Molecular Oxygen The Occurrence of Denitrification

From the Back CoverA practical guide to wastewater treatment for plant technicians and operators This book, the first in a series on the microbiology of wastewater treatment, comprises the critical topics of cost-effective operation, permit compliance, process control, and troubleshooting in wastewater treatment plants. Avoiding the technical jargon, chemical equations, and kinetics that typically accompany such texts, Nitrification and Denitrification in the Activated Sludge Process directly addresses plant operators and technicians, providing necessary information for understanding the microbiology and biological conditions that occur in the treatment process. Of special interest to wastewater treatment plant operators are the bacteria that degrade nitrogenous wastesthe nitrifying bacteriaand the bacteria that degrade carbonaceous wastesthe cBOD-removing bacteria. Both groups of bacteria need to be routinely monitored and operational conditions favorably adjusted to ensure desired nitrification. Each chapter in this groundbreaking study offers a better understanding of the importance of nitrification and denitrification and the bacteria involved in these crucial processes. Chapters include: Organotrophs The Wastewater Nitrogen Cycle Nitrite Ion Accumulation Dissolved Oxygen Denitrifying Bacteria Gaseous End Products Free Molecular Oxygen The Occurrence of Denitrification Nitrification and Denitrification in the Activated Sludge Process is an ideal companion for operators and technicians of wastewater treatment plants as they study to receive certification in their field, now required in more than thirty states. Sanitary engineers, chemists, microbiologists, and educators will benefit from this comprehensive guide.About the AuthorMICHAEL H. GERARDI is Research Project Associate and Instructor at the Pennsylvania State University in Linden, Pennsylvania.