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Chapter 9. Quantitative risk assessment of *Cryptosporidium* in a watershed  
Chapter 10. PCR determination of inactivated RNA coliphage Q;  
Chapter 11. Evaluation of UV-radiation and its residual effect for algal growth control;  
Chapter 12. Bacteriophages, coliform and fecal coliform bacteria in wastewater in southern Thailand;  
Chapter 13. Assessment of treatment efficiency by quantitative recovery of indicator bacteria and pathogens in sewage effluents;  
Section 3: Biological Nutrient Removal  
Chapter 14. Visualization of microscale distribution of nitrifying bacteria in biofilms formed in various type wastewater treatment processes  
Chapter 15. Nitrous oxide production in nitrogen removal process treating domestic sewage from combined sewer system;  
Chapter 16. Quinone profile analysis of activated sludge in enhanced biological P removal SBR treating actual sewage;  
Chapter 17. Applicability of FISH, dot blot hybridization, antibody immobilized latex coagulation, and MPN techniques as enumeration methods for ammonia-oxidizing bacteria in various water environments  
Chapter 18. Nitrous oxide and nitric oxide emissions during sulfur denitrification in soil-water system  
Chapter 19. FISHing for biomass in activated sludge mixed liquor: the slippery VSS fraction;  
Chapter 20. Identification of predominant microbial populations in a non-phosphate removing anaerobic aerobic bioreactor fed with fermented products;  
Chapter 21. Microbial aspects of autotrophic denitrification of wastewaters;  
Section 4: Sludge Reduction and Material Recovery  
Chapter 22. Membrane bioreactor: an advanced wastewater treatment/reclamation technology and its function in excess-sludge minimization

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Sommario/riassunto

This book is the result of the international symposium, "Establishment and Evaluation of Advanced Water Treatment Technology Systems Using Functions of Complex Microbial Community", organized in 2000 at the University of Tokyo. The volume presents the most recent progress in application of microbial community analysis, health-related microorganisms management, nutrient removal, waste sludge minimization and materials recovery, and water management in tropical countries. Included in this work are the following major topics in wastewater treatment: application of various innovative

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