

An up-to-date resource book for  
microbiologists in academic research  
and applied microbiology —

# MICROBIAL GROWTH ON C<sub>1</sub> COMPOUNDS

EDITORS: Ronald L. Crawford  
and R. S. Hanson

## Proceedings of the 4th International Symposium

Microorganisms that grow on C<sub>1</sub> compounds offer great potential for use in applied microbiology. They are useful as biocatalysts, for certain biotransformations, for production of fine and bulk chemicals by fermentation, and for production of cloned gene products and single cell protein.

Recent advances in the biochemistry and genetics of these microorganisms enhance their potential for use in several processes. This new book contains high-quality, full-length invited papers from recognized authorities on all aspects of the microorganisms that utilize C<sub>1</sub> compounds.

### Sections:

- Physiology and Biochemistry of Autotrophs
- Physiology and Biochemistry of Methylotrophs and Methanotrophs
- Physiology and Biochemistry of Methanogens
- Genetics of Microbes that Utilize C<sub>1</sub> Compounds
- Taxonomy and Ecology of Microbes that Grow on C<sub>1</sub> Compounds
- Applied Aspects of Microbes that Grow on C<sub>1</sub> Compounds
- New Directions in C<sub>1</sub> Metabolism

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Announcing publication of a new proceedings volume from ASM

# Molecular Basis of Oral Microbial Adhesion

EDITORS: Stephan E. Mergenhagen and Burton Rosan

This new book discusses adhesion of bacteria to oral tissues and to other bacteria. With the recognition that oral microbial adhesion and colonization are crucial determinants in the pathogenesis of dental caries and periodontal diseases, the presentations in this book examine in detail the molecular interactions that are involved in the process of bacterial adherence to the tooth surface, to the oral mucosal surface, and to other bacteria in dental plaque. The papers in this book were first presented at a workshop held at the University of Pennsylvania in Philadelphia, June 1984. They are divided into six sections:

- Advances in Mechanisms of Microbial Adherence
- Adherence to Oral Soft Tissues
- Bacterial Adherence to Hard Tissues
- Salivary Components Influencing Bacterial Adherence
- Intergeneric Coaggregation between Oral Bacteria
- Genetic and Environmental Influences on Bacterial Adherence



The book is intended for microbiologists, infectious disease specialists, dental and medical students, graduate and postgraduate microbiology and dental students, and dental and periodontal researchers. It should be available in medical, dental, and university libraries.

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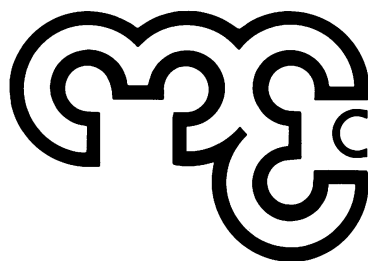
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# Current Perspectives in MICROBIAL ECOLOGY

## Proceedings of the 3rd International Symposium

**EDITORS: M.J. Klug and C.A. Reddy**

Microbial ecology is a young discipline that studies the important role played by microbial processes in all ecosystems. It calls on numerous other disciplines—other fields of microbiology, as well as oceanography, limnology, soil science, atmospheric chemistry, and plant and animal sciences—to clarify the interactions and strategies common to all microbes regardless of habitat. Current and future trends are examined in these invited papers, which cover four major themes: microbial adaptations, microbial interactions, microorganisms in ecosystems, and microbial bioconversion; the scope ranges from molecular to planetary.

### SECTIONS INCLUDE:

- Microbes and Ecological Theory
- Physiological and Morphological Adaptations
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- Mechanisms of Microbial Adhesion to Surfaces
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- Atmospheric-Biospheric Exchanges
- Ecological Significance of Biomass and Activity Measurements
- Microbial Responses to Ecosystem Perturbations
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- Bioconversion of Inorganic Materials
- Ecological Strategies for the Fermentation Industry
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Sharing first prize was the Pharmacology Department at the University of Wisconsin Medical School. They were also awarded a new NBS Model G25 Incubator Shaker.



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