

The newest addition to the annual
MICROBIOLOGY series,

MICROBIOLOGY-

1982

puts into focus
exciting new work in
the following major areas of microbiological research:

CELL-CELL INTERACTIONS IN PATHOGENESIS

Bacterial Adhesion in Pathogenesis

- Introduction
- Autochthonous Populations
- Role of Surface Proteins Involved in Surface Adhesion
- Role of Surface Polysaccharides in Bacterial Adhesion
- Variable Surface Factors in Bacterial Adhesion

The Macrophage in Host Defense

Cell Surface Receptors Involved in the Immune System

COMPARATIVE MOLECULAR BIOLOGY

Streptococcal Genetics

- Conjugation
- Transformation, Transduction, and Bacteriophage
- Drug Resistance
- Genetics and Physiology
- Metabolic and Bacteriocoem-Related Plasmids
- Development and Use of Recombinant DNA Technology

Bacillus subtilis Chromosome

- Structure and Modification
- Molecular Cloning

As usual in this well-established series, these extended abstracts are carefully selected for their importance to the development of the knowledge base in each of these areas. The book will be particularly useful in research laboratories and institutional libraries.

Bibliographic and Ordering Information

Editor: David Schlessinger.

July 1982, 420 pages, clothbound, \$15.00 to ASM members; \$25.00 to others. Please note that ASM members must remit payment with order. Orders from outside the United States and Canada must be prepaid before shipment. Prices are subject to change without notice. ISBN: 0-914826-42-5. Standing orders to the series are welcome.

Previous volumes in the series, which started publication in 1975 with the volume entitled *Microbiology* 1974, are still available in limited quantities. Prices for each preceding volume are \$15.00 for ASM members and \$25.00 for others.



Published and distributed by:
American Society for Microbiology
Publications Office
1913 I Street, NW
Washington, DC 20006

Now available as a clothbound book—

APPROVED LISTS OF BACTERIAL NAMES

Edited by V. B. D. Skerman, Vicki McGowan, and P. H. A. Sneath
on behalf of the Ad Hoc Committee of the Judicial Commission of the
International Committee on Systematic Bacteriology,
International Association of Microbiological Societies

Reprinted from the January 1980 issue of *International Journal of Systematic Bacteriology*

- Indispensable for the proper conduct of taxonomic studies and for the correct usage of bacterial names
- The culmination of 227 years of bacteriological nomenclature
- Complements the new starting date for bacteriological nomenclature—1 January 1980
- The combined efforts of international taxonomic subcommittees and expert individual taxonomists

Approved Lists is an essential reference. It eliminates the need to search the world's literature simply for the sake of finding the first available name for an organism. In the past, strict observance of the rule of priority frequently resulted in the exhumation of a name never used after its initial proposal.

By contrast, the *Approved Lists* permits the scientist to ascertain rapidly and easily whether an isolate is a member of a new species. The procedure now is to compare

the isolate with the type (or neotype) strains and the description of the species which closely resembles it and which are included either in the *Approved Lists* or in *International Journal of Systematic Bacteriology*, starting with the January 1980 issue.

Reference to the *Approved Lists* is absolutely essential for the proper conduct of taxonomic studies and for the correct usage of the names of bacteria.

1980. 200 pages. Clothbound. \$10.00.

Direct all orders and inquiries to the publisher:

ASM
American Society
for Microbiology

1913 I Street, NW
Washington, DC 20006

For the first time, a discussion of

HOST-PARASITE interactions in PERIODONTAL DISEASES

EDITORS: Robert J. Genco and Stephan E. Mergenhagen

This new book starts with the premise that periodontal diseases are initiated by bacteria and that the host response plays an important part in the outcome of these infections. The book takes a close look at the unique host-parasite interactions. It is organized to present an up-to-date summary of the microbiology and immunology of these diseases. Its intended audience is scientists and students whose main interests are in infectious diseases or clinical periodontology. Each of the contributing authors is a recognized leader in the specific research area covered. The result is a book which will be useful, clear, and helpful to physicians, general microbiologists, immunologists and other infectious disease specialists, and to advanced students in microbiology, immunology, and dental and medical courses.

The papers in this book were first presented at a symposium held in Buffalo, New York, in May 1981. They are divided into six sections:

- I. Etiology and Microbial Specificity
- II. Colonization by Periodontopathic Organisms
- III. Pathogenic and Virulence Factors in Periodontal Diseases
- IV. Cellular Aspects of Host Responses
- V. Effector Systems—Specific and Nonspecific
- VI. Clinical Implications of Host-Parasite Interactions

ORDERING INFORMATION

Publication date: January 1982. 414 pages. Clothbound.
\$25.00. ISBN: 0-914826-37-9. Price subject to change without notice.

Order from the publisher.

AMERICAN SOCIETY for MICROBIOLOGY

Publication Sales, 1913 I Street, NW / Washington, DC 20006

Meeting the bacteriologist's need for a compact handbook of laboratory methods—

Manual of Methods for General Bacteriology

EDITOR-IN-CHIEF:
Philipp Gerhardt

SECTION EDITORS:
Ralph N. Costilow
Noel R. Krieg
R. G. E. Murray
Eugene W. Nester
G. Briggs Phillips
Willis A. Wood

Published
and distributed
by:



American Society
for Microbiology
1913 I Street, NW
Washington, DC 20006

This *Manual* covers all the taxa of bacteria, and its approach is generalized for both pure and applied bacteriology. Aimed at senior undergraduate and beginning graduate science majors, at teachers and researchers, the *Manual* provides practical descriptions of laboratory procedures that are known to be reliable and that are in frequent use. It is an invaluable tool for all involved in bacteriology in the laboratory setting.

The book comprises six sections, each of which is self-contained, with its own table of contents to help the reader find specific methods as easily as possible. The contents are listed below.

METHODOLOGY FOR GENERAL BACTERIOLOGY

MORPHOLOGY—Light Microscopy—Specimen Preparation for Light Microscopy—Determinative Methods of Light Microscopy—Electron Microscopy—Cell Fractionation

GROWTH—Biophysical Factors in Growth—Biochemical Factors in Growth—Enrichment and Isolation—Solid Culture—Liquid Culture—Growth Measurement—Preservation

GENETICS—Gene Mutation—Gene Transfer—Plasmids

METABOLISM—Physical Methods—Chemical Composition—Enzymatic Activity—Permeability and Transport

SYSTEMATICS—General Characterization—Numerical Taxonomy—Genetic Characterization

LABORATORY SAFETY—Sterilization—Containment and Disinfection

ADDENDUM—Diluents and Biomass Measurement

ORDERING INFORMATION

Publication date: March 1981. 525 pages, fully illustrated.

Clothbound

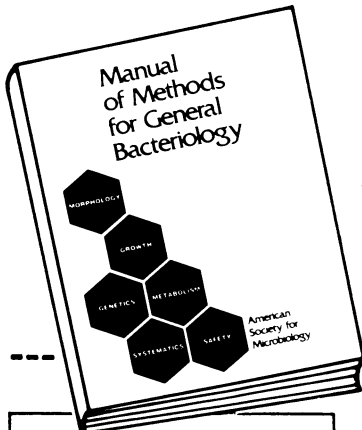
Flexible binding:

ISBN: 0-914826-29-8

ISBN: 0-914826-30-1

\$28.00 (\$20.00 to members of ASM) \$24.00 (\$17.00 to members of ASM)

Prices subject to change without notice.



I am a member of ASM.
Send me _____ copy(ies)
(limit of 3 at member prices)

\$20.00 (Cloth);

\$17.00 (Flexible).

I have enclosed \$ _____.

Please send me _____ copy(ies) of
MANUAL OF METHODS FOR GENERAL BACTERIOLOGY

\$28.00 (Cloth);

\$24.00 (Flexible).

Send book(s) to:

I have enclosed \$ _____.

Name _____

Address _____

City/State/Zip _____

The most recent advances in spore science—

SPORULATION and GERMINATION

EDITORS:
HILLEL LEVINSON
A. L. SONENSHEIN
DONALD J. TIPPER

Proceedings of the Eighth International Spore Conference
Woods Hole, Massachusetts, 9–12 October 1980

This book contains two kinds of papers — review articles and research papers — and reflects the high quality of the Conference, at which advances in the applications of modern molecular genetics and biochemistry to persistent questions regarding sporulation and germination were presented.

The review articles, listed below, are authoritative, up-to-date, critical reviews of major areas written by leaders in their respective fields:

- Initiation of Bacterial Sporulation. Ernst Freese
- Biochemistry of Bacterial Forespore Development and Spore Germination. Peter Setlow
- Advances in the Genetics of *Bacillus subtilis* Differentiation. P. J. Piggot, A. Moir, and D. A. Smith
- Cloning Strategies in *Bacillus subtilis*. Paul S. Lovett
- Sigma Factors, Stage 0 Genes, and Sporulation. Richard Losick
- Toxins of Sporeforming Bacteria. Robert E. Andrews, Jr., and Lee A. Bulla, Jr.
- Biophysical Studies on the Molecular Mechanisms of Spore Heat Resistance and Dormancy. W. G. Murrell.

The research papers are refereed and reflect the most recent advances in spore science, including material in molecular genetics and gene cloning. Well-documented experiments on important and interesting topics — 52 in all — are arranged in the following six major topic areas:

- Genetics of Sporeforming Bacteria and Cloning of Sporulation Genes
- Initiation of Sporulation and Regulation of Metabolism
- Macromolecular Synthesis During Sporulation
- Dormancy, Germination, and Outgrowth
- Resistance of Spores
- Resting Forms of Microorganisms Other than *Bacillus* and *Clostridium*.

SPORULATION AND GERMINATION will be of particular interest in graduate and undergraduate departments of microbiology, university libraries, medical school libraries, and industrial laboratories, as a handy reference for all individuals involved in spore research, and as adjunct material for teaching courses that cover spore science.

ORDERING INFORMATION

Publication Date: July 1981; ISBN: 0-914826-35-2; 316 pages, clothbound, \$25.00
(\$17.00 to members of ASM, who must remit payment with order. Limit of three copies at member price.)



Published and distributed by:
American Society for Microbiology

1913 I Street, NW • Washington, DC 20006

An event that the scientific world welcomes:
Publication of

Current Chemotherapy and Immunotherapy

EDITORS: Piero Periti and Giuliana Gialdroni Grassi
PUBLISHER: American Society for Microbiology



Proceedings of the 12th International
Congress of Chemotherapy



CURRENT CHEMOTHERAPY AND IMMUNOTHERAPY marks the outcome of the 12th ICC, a scientific meeting which is characterized by the excitement of new ideas and the presence of leading scientists from around the world. The two-volume book is remarkable, not only because it captures so vividly, by using extended abstracts, the essential content of the scientific information exchanged in Florence, but also because of the rapidity with which the material has been made available to scientists not fortunate enough to attend the meeting.

This compendium of information covers antimicrobial, anticancer, and antiviral chemotherapy, as well as immunology

and immunotherapy. Papers are divided into the following sections:

- Antimicrobial Agents
- Antiviral Agents
- Interferon
- Immunology
- Anticancer Chemotherapy

The two-volume set of meticulously edited, fully indexed books should be in every library with collections in chemotherapy, pharmacology, pharmaceutical sciences, cancer research, immunology, immunotherapy, antimicrobial agents, and medical microbiology. In addition, individual scientists whose work requires up-to-date knowledge of recent developments in current chemotherapy and immunotherapy will find this publication invaluable.

ORDERING INFORMATION

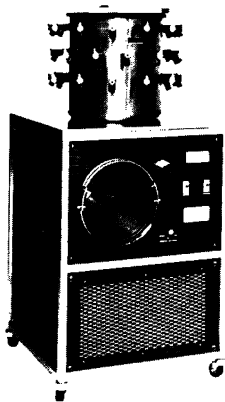
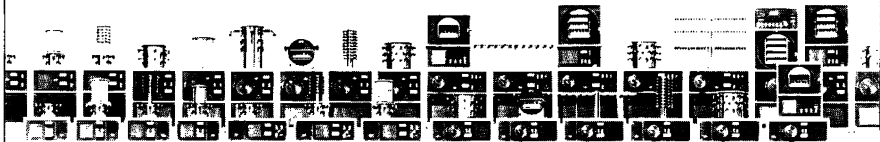
July 1982. 1,606 pages, in two clothbound volumes, sold only as a set. ISBN: 0-914826-39-5. \$90.00 (\$50.00 to members of the American Society for Microbiology, who must remit with order.) Please note that all orders from outside the United States must be prepaid in US dollars. Prices are subject to change without notice.

Order your copy from the publisher:

AMERICAN SOCIETY for MICROBIOLOGY

Publication Sales 1913 I Street, NW Washington, DC 20006

VIRTIS ANNOUNCES A NEW WORLD SERIES WITH 65 WINNERS



no. 52:

powerful new version
of the all-time reliability
champ, this
Freezemobile can
catch 24 liters
on a single run.

You used to need twice the floor space for a freeze dryer this size! Only 25" wide, this new Freezemobile can take you through any freeze drying assignment with ease. A smooth-sided stainless steel cylindrical condenser shows migrating vapors a vast 506 sq in of -55°C surface area — and you can slide out the entire 24 liter ice plug intact for fast defrost!

This maximum capability model is just one of many proven performers from 3 to 24 liters in the long VirTis line up. See 'em all in our colorful new 48 page catalog!



see the whole series—65 superstar performers

WORLD LEADER IN FREEZE DRYING

GARDINER, NEW YORK 12525 / 800 431 8232 • 914 255 5000