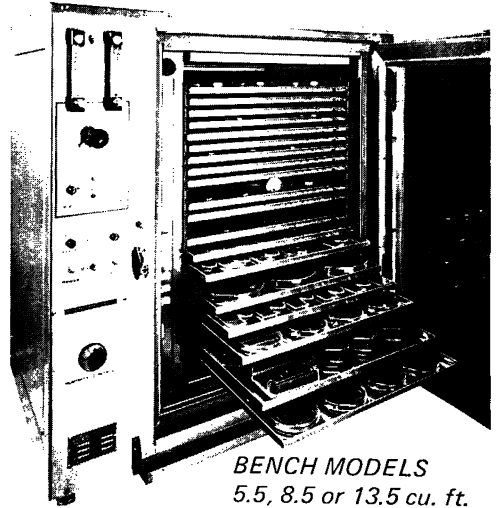


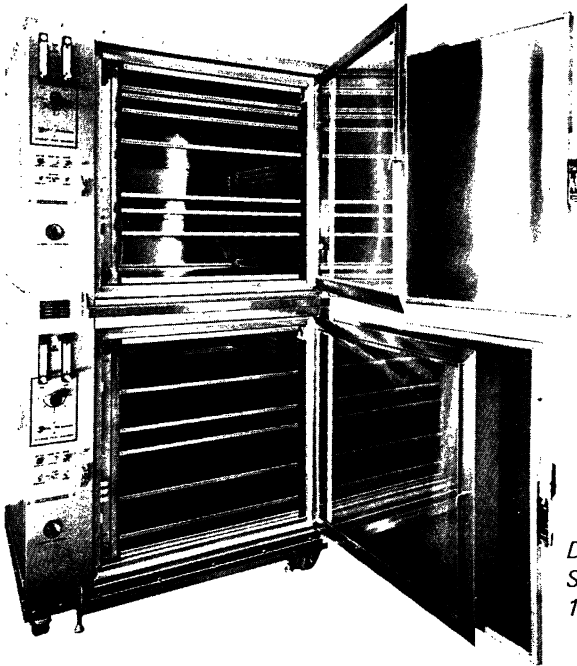
INCUBATORS

for
professional use

- **Dry or Humid**
- **CO₂**
- **Refrigerated**



*BENCH MODELS
5.5, 8.5 or 13.5 cu. ft.*



- *High Loading Capacity*
- *Laminar Flow Circulation*
- *Fast Recovery*
- *All Stainless Steel*
- *Low CO₂ Consumption*

*DUAL CHAMBER FLOOR MODELS
SEPARATE CONTROLS
17 & 27 cu. ft.*

FOR ADDITIONAL INFORMATION WRITE:

W E D C O INC., CUSTOMER SERVICE DEPT., P. O. BOX 223
SILVER SPRING, MARYLAND TEL. (301) 589-9450

FERMENTATION TECHNOLOGY TODAY

Proceedings of the IVth International Fermentation Symposium

Edited by Dr. Gyozo Terui

This volume contains all the papers presented at the focal topic sessions of the IV International Fermentation Symposium held in Kyoto during March 19-25, 1972. Valuable, up-to-date information in the field of fermentation technology is presented.

Fermentation Technology Today is now in press, and is to be published during November, 1972.

Contents include:

(1) Fermentation Dynamics; (2) Mass Transfer and Scale-up; (3) Continuous Culture; (4) Instrumentation for Process Control; (5) Genetics Applied to Process Improvement; (6) Amino Acids and Nucleic Acid-Related Products by Fermentation; (7) Microbial Enzymes; (8) Water-Insoluble Enzyme Derivatives; (9) Physiologically Active Substances by Fermentation; (10) Biomass from Noncarbohydrate Organic Substances; (11) Utilization of Autotrophic Microbes; (12) Microbiological Waste Treatment; (13) Recent Progress in Traditional Fermentation Industries; (14) Tissue Culture; (15) Novel Fermentation Products; (16) Production and Use of Enzymes Active in Hydrolyzing Cell Walls and Related Substances; (17) Process Design and Product Recovery; (18) Taxonomy and Ecology of Yeasts; (19) Subcellular Structure and Function of Yeasts; (20) Sexuality, Gene Action, and Breeding of Yeasts; Opening and Closing Lectures.

Index of subjects and authors, ca. 900 pages. Published by the Society of Fermentation Technology, Japan. Distributed by the American Society for Microbiology.

Available at \$18 per copy from:
Publications Office
American Society for Microbiology
1913 I Street, N.W.
Washington, D. C. 20006



If we don't have the Bacterial serotype you want, we'll tell you who does.

With 606 different Bacterial Antigens and Antisera, chances are good we have the serotype you're looking for. Difco is the largest source of Bacterial Antigens and Antisera.

There are good reasons to look first to Difco. Take quality and stability. Our Antigen suspensions and Antisera are carefully prepared and controlled according to accepted standards for the optimum in specificity and sensitivity. And Difco Antisera are freeze dried to give them greater stability.

So, if we don't have the serotype you want, we'll make good our promise. We'll try our best to find it for you. However, we may not have much luck. If we don't offer it, probably no one does.

For additional information, write for literature number 0222PL.

LABORATORIES
DETROIT MICHIGAN 48201 USA

Methods for Numerical Taxonomy

W. R. Lockhart and John Liston, *Editors*

The wide application of numerical methods to the study of bacterial classification during recent years has resulted in an almost bewildering variety of new techniques. The authors have drawn from the literature and from their own experience in producing this useful volume which describes some frequently used experimental methods. Without dwelling too much on underlying theoretical and philosophical arguments, they offer practical advice that should help students and workers unfamiliar with this field to evaluate the published results of others, and to select techniques applicable to their own work. Though intended primarily for microbiologists, the book should prove useful to anyone interested in numerical approaches to classification.

This small but important volume (58 pages plus index, paperbound) was prepared by the Taxonomy Committee (Subcommittee on Numerical Taxonomy) of ASM. The book comprises the following chapters:

- Introduction (John Liston)
- Collecting the Data (R. R. Colwell)
- Coding the Data (W. R. Lockhart)
- Analyzing the Data (C. Quadling)
- Presenting and Interpreting the Results (E. F. Lessel and J. G. Holt)

Available at \$3 per copy from:
Publications Office
American Society for Microbiology
1913 I Street, N.W.
Washington, D.C., 20006

We have the best medical dictionary STEDMAN'S 22

That may sound like a big claim—but we believe you'll agree with us when you use the brand new 22nd edition of Stedman's Medical Dictionary.

And we know you will want to use it, because it is the most authoritative, most comprehensive, and most up-to-date reference book the physician, medical student or researcher can buy. That's why we've invested seven years in revising, expanding, redesigning and rethinking our good old dictionary. Thirty-four experts have worked on the forty-four specialties for an average of three years apiece. (Where else can you find an accumulated 102 years of current medical knowledge?) And to assist these human brains, we enlisted the services of a computer for overall editorial review. (Where else does a great past unite with today's technology?)

We think it's about time the medical profession had the best. So we're offering you our investment. Your investment in Stedman's 22 will pay off. We can promise you that. So order your copy today. You'll never regret it.

The facts about Stedman's 22

Our new dictionary contains 7,199 significant new vocabulary entries reflecting new information from 44 specialties and subspecialties in the life sciences; 24,877 important editorial revisions presenting new information on 30% of the vocabulary; excellent color plates and illustrations presenting graphic accompaniment for hundreds of vocabulary entries; an alphabetical

index to subentries; appendices, tables, eponyms, synonyms; a medical etymology section; and to assist you in getting the most out of your dictionary—a special section written for just that purpose. Thumb-indexed for easy use, and beautifully bound, your new STEDMAN'S will be the most valuable addition to your library in years.

1972/ 1,620 pages/ \$18.50

The Williams & Wilkins Company
428 East Preston Street, Baltimore, Maryland 21202

MANUAL OF CLINICAL MICROBIOLOGY

Edited by JOHN E. BLAIR, Department of Microbiology, The Roosevelt Hospital, New York; EDWIN H. LENNETTE, Viral and Rickettsial Disease Laboratory, California Department of Public Health, Berkeley; and JOSEPH P. TRUANT, Department of Microbiology, Providence Hospital, Southfield, Michigan. With an expert editorial board of 16 members. *Regular edition: \$12.00; Student edition, \$7.00.* Members of the American Society for Microbiology may purchase copies of the regular edition at a discount of 50%, i.e., \$6 per copy (postpaid) by writing directly to the ASM Publications Office, 1913 I Street, N.W., Washington, D.C., 20006.

This manual is designed to be used as a working reference guide in clinical microbiology for the teacher and technologist. It encompasses the fields of clinical bacteriology, mycology, serodiagnosis, virology, and parasitology. Currently accepted and proven methods are presented which permit the complete microbiological examination of clinical specimens. Procedures are given for the isolation and identification of the medically important bacteria, fungi, viruses, and parasites, with emphasis on those organisms which occur most frequently in infection in man, but with adequate consideration of the rarer forms. The manual contains 77 chapters, written by 100 contributors.

General sections describe the collection and processing of specimens, nutritive and environmental requirements of microorganisms, selection and inoculation of culture media for primary isolation, formulas of culture media, reagents and stains, staining procedures, microscopy, quality control, and safety precautions.

Contents By Section: General. Identification of Aerobic Bacteria. Identification of Anaerobic Bacteria. Antimicrobial Agents. Serodiagnosis of Bacterial and Spirochetal Infections. Identification of Fungi. Identification of Parasites. Identification of Viruses and Rickettsiae. Miscellaneous Procedures. Media, Procedures, Reagents, and Stains.

Published 1970

by the American Society for Microbiology

Distributed by:

THE WILLIAMS & WILKINS COMPANY
428 East Preston Street, Baltimore, Md. 21202

SPORES V

Edited by

**HARLYN O. HALVORSON, RICHARD HANSON, AND
L. LEON CAMPBELL**

A publication comprising the papers presented at the Fifth International Spore Conference, held at Fontana, Wisconsin, 8-10 October 1971.

This book contains reviews as well as reports of original and basic research in eight related areas of interest regarding spores.

1. Structure and chemical nature of spores.
2. Genetics of spore forms.
3. Biochemical changes during sporulation:
Sporulation-related events.
4. Regulation of macromolecular synthesis during
sporulation and outgrowth.
5. Ecology of spore forms.
6. Immunology of spores and spore forms.
7. Cryptobiosis: Dormancy and its alterations.
8. Biochemical mechanisms of germination.

This book will serve as a valuable resource book for investigators, teachers, students, industry, and libraries.

1972

471 pages

\$10*

Publications Office

AMERICAN SOCIETY FOR MICROBIOLOGY

1913 I St., N.W.

Washington, D.C. 20006

* Members of ASM are entitled to purchase copies for personal use at the member price of \$5 per copy.

MYCOPLASMA TESTING? ● SERUM FRACTIONATION? ● ANTI-VIRAL SCREENING? ● SPECIFIC ANTISERUM? ● SPECIFIC VIRAL ANTIGEN PRODUCTION? ● FLUOROCHROME CONJUGATION? ● IMMUNOLOGICAL ASSAY?

QUESTION US ABOUT OUR SPECIAL SERVICES

Although we cannot anticipate all of the requirements investigators may have, we try to make available the specialized production and testing services you need.

We have also set up a special phone number, direct to our Customer Service Department.

If you have a specific requirement, call us. (800-638-0998)
Toll Free.



MAIN OFFICE / 4733 BETHESDA AVE.
BETHESDA, MARYLAND 20014 (301) 654-3400
WEST COAST OFFICE / 2330 S. CENTINELA AVE.
LOS ANGELES, CALIF. 90064 (213) 820-5250