

*Phytochemistry* will not be limited to the most recent advances in any area. But in spite of this difference of stated objective, a perusal of the contents indicates that there is a danger of excessive overlap among these two new series, the older British series, and the *Annual Review of Plant Physiology*. I hope that the freedom from the restrictions of a symposium will permit this *Progress* series to continue reviewing less popular areas such as lichen chemistry.

In general, the content and tabular form of the data presented in the *Progress* volume are excellent. For basic new and useful information, I prefer the articles on plant cuticles by Mazliak, on lichen substances by Huneck, and on lipids and fatty acids of photosynthetic tissue by Nichols and James. The summary of fern constituents should be of considerable use to biochemically oriented taxonomists.

Trewavas discusses the interactions between nucleic acid and hormones, coverage of which is much duplicated in other sources. However, his paper is a critical review, with citations of pertinent work with animal tissues. The articles by Hardy and Knight on the biochemistry and mechanisms of nitrogen fixation will be useful to teachers and researchers, even though the emphasis is on the work and interpretations of the author. It apparently fills a gap among the recent reviews that have stressed other aspects of nitrogen fixation. Furuya's paper on phytochrome is quite readable, but it is hard to present new ideas on a subject that has been reviewed so often recently. Furuya mistakenly states that "anthocyanin synthesis . . . always requires an irradiation via an energy-dependent photoreaction." All the papers mentioned above contain useful tables of data.

The paper and printing of this first volume of *Progress* are not completely satisfactory. The binding of my review copy is poor; several pages have already pulled out.

Whether I continue to buy and to recommend for purchase by our library these series will depend on the editors and the subsequent authors. There are excellent reviews here, with new ideas or summaries of data, but there are also some that represent only repetitions or a rehashing of former publications.

HELEN A. STAFFORD

Biology Department,  
Reed College, Portland, Oregon

## Books Received

**Acetic Acid Bacteria.** Classification and Biochemical Activities. Toshinobu Asai. University of Tokyo Press, Tokyo; University Park Press, Baltimore, 1968. x + 344 pp., illus. \$17.50.

**Aircraft Flight Instrumentation Integrated Data Systems.** A conference. D. Bosman, Ed. Technivision, Maidenhead, England, 1968 (distributed in the U.S. by Circa Publications, Pelham, N.Y.). xii + 300 pp., illus. \$20. Agard Conference Proceedings No. 6.

**Animal Communication.** Techniques of Study and Results of Research. Thomas A. Sebeok, Ed. Indiana University Press, Bloomington, 1968. xviii + 686 pp., illus. \$20.

**Antimicrobial Agents and Chemotherapy—1967.** Proceedings of the 7th Inter-science Conference, Chicago, Oct. 1967. Gladys L. Hobby, Ed. American Society for Microbiology, Ann Arbor, Mich., 1968. xiv + 782 pp., illus. \$15.

**Between Pacific Tides.** Edward F. Ricketts and Jack Calvin. Revised by Joel W. Hedgpeth. Stanford University Press, Stanford, Calif., ed. 4, 1968. xvi + 624 pp., illus. \$10.

**Biologie et Chirurgie du Corps Vitré.** Report presented to the Société Française d'Ophtalmologie, May 1968. A. Brini, A. Bronner, J.-P. Gerhard, and J. Nordmann. Masson, Paris, 1968. viii + 664 pp., illus. Paper, 135 F. Publications de la Société Française d'Ophtalmologie.

**Biologie et Écologie des Premiers Fossiles.** Henri Termier and Geneviève Termier. Masson, Paris, 1968. viii + 216 pp., illus. Paper, 66 F. Collection les Grands Problèmes de la Biologie, Monographie 8.

**The Brain Stem of the Cat.** A Cytoarchitectonic Atlas with Stereotaxic Coordinates. Alvin L. Berman. University of Wisconsin Press, Madison, 1968. xvi + 176 pp., illus. \$50.

**Building Contracts for Design and Construction.** Harold D. Hauf. Wiley, New York, 1968. x + 342 pp. \$10.95.

**Catalog of Emission Lines in Astrophysical Objects.** Aden B. Meinel, Anthony F. Aveni, and Martha W. Stockton. Optical Sciences Center and Steward Observatory, University of Arizona, Tucson, 1968. iv + 198 pp. Paper, \$4.

**Cellular Biology of Vertebrate Regeneration and Repair.** Anthony J. Schmidt. University of Chicago Press, Chicago, 1968. xii + 420 pp., illus. \$17.50.

**Ceramic Microstructures.** Their Analysis, Significance, and Production. Proceedings of the 3rd International Materials Symposium, Berkeley, June 1966. Richard M. Fulrath and Joseph A. Pask, Eds. Wiley, New York, 1968. xx + 1012 pp., illus. \$29.95. Inorganic Materials Research Division Series.

**Changing the Family.** Warren M. Brodey. Potter, New York, 1968. 160 pp. \$6.

**Chemical Induction of Cancer.** Structural Bases and Biological Mechanisms. Vol. 1. Joseph C. Arcos, Mary F. Argus, and George Wolf. Academic Press, New York, 1968. xxiv + 496 pp., illus. \$24.

**Chemistry and Technology of Silicones.** Walter Noll. Translated from the second German edition by B. Hazzard and M. Landau, in collaboration with Express

Translation Service. Academic Press, New York, 1968. xiv + 706 pp., illus. \$32.

**The Clinico-Pathological Manifestations of Schistosomiasis in the African and the Indian in Durban.** S. Brumdt Bhagwan-deen. University of Natal Press, Pietermaritzburg, 1968. viii + 210 pp., illus. 4.75 rands.

**Computer-Aided Integrated Circuit Design.** Gerald J. Herskowitz, Ed. McGraw-Hill, New York, 1968. xvi + 432 pp., illus. \$15.

**Convergence of Probability Measures.** Patrick Billingsley. Wiley, New York, 1968. xiv + 258 pp. \$12.50.

**The CP Puzzle.** Strange Decays of the Neutral Kaon. P. K. Kabir. Academic Press, New York, 1968. x + 138 pp., illus.

**Cybernaut.** A Space Poem. E. G. Valens. Viking, New York, 1968. 48 pp. \$3.50.

**Democracy and the Student Left.** George F. Kennan, with letters by others. Little, Brown, Boston, 1968. xii + 240 pp. \$5.75.

**Discovering Plants.** A *Nature and Science* Book of Experiments. Richard M. Klein and Deana T. Klein. Natural History Press, Garden City, N.Y., 1968. x + 128 pp., illus. \$4.50.

**The Economics of Soviet Oil and Gas.** Robert W. Campbell. Published for Resources for the Future by Johns Hopkins Press, Baltimore, 1968. xviii + 284 pp., illus. \$8.50.

**Economics of Trade and Development.** James D. Theberge, Ed. Wiley, New York, 1968. xiv + 546 pp., illus. \$9.95.

**Elasticité Linéaire.** Liviu Solomon. Masson, Paris, 1968. xx + 744 pp., illus. 150 F.

**Elementary Chemical Calculations.** N. C. Desai and K. S. Forland. East African Literature Bureau, Nairobi, 1968. vi + 62 pp. Paper, 3/30.

**Encyclopedia of Library and Information Science.** Allen Kent, Harold Lancour, and William Z. Nasri, Eds. Vol. 1, A to Associa. Dekker, New York, 1968. xii + 676 pp., illus. \$45; by subscription, \$35.

**Environmental Conservation.** Raymond F. Dasmann. Wiley, New York, ed. 2, 1968. xvi + 384 pp., illus. \$8.95.

**The Estimation of Probabilities.** An Essay on Modern Bayesian Methods. Irving John Good. M.I.T. Press, Cambridge, Mass., 1968. xii + 116 pp. Paper, \$2.45. M.I.T. Research Monograph No. 30. Reprint of the 1965 edition.

**Evolution of Mathematical Concepts.** An Elementary Study. Raymond L. Wilder. Wiley, New York, 1968. xx + 234 pp., illus. \$8.

**An Examination of the Engineering Profession.** R. P. Loomba. Manpower Research Group, Center for Interdisciplinary Studies, San Jose State College, San Jose, Calif., xii + 108 pp. Paper, \$1.

**L'Expansion Universitaire.** Avis et conclusions sur l'application des mesures contenues dans la loi du 9 avril 1965. Conseil National de la Politique Scientifique, Brussels, 1968. 180 pp. Paper.

**Fatty Acids.** Their Chemistry, Properties, Production, and Uses. Part 5. Klare S. Markley, Ed. Interscience (Wiley), New York, ed. 2, 1968. xii + 722 pp., illus. \$27.50. Fats and Oils. A Series of Monographs.

(Continued on page 319)

## BOOKS RECEIVED

(Continued from page 272)

**Fish, Amphibian and Reptile Remains from Archaeological Sites.** Part 1, Southeastern and Southwestern United States. With an appendix, The Osteology of the Wild Turkey. Stanley J. Olsen. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass., 1968. xviii + 138 pp., illus. Paper, \$4.85. Papers of the Peabody Museum, Vol. 57, No. 2.

**The Fishes of New Guinea.** Ian S. R. Munro. Department of Agriculture, Stock and Fisheries, Port Moresby, New Guinea, 1967. xxxviii + 651 pp., + 78 plates, illus. \$14.50 Australian + \$A1.80 postage.

**Flashing Wings.** The Drama of Bird Flight. John K. Terres. Illustrated by Robert Hines. Doubleday, Garden City, N.Y., 1968. xiv + 178 pp. \$4.95.

**Folk Song Style and Culture.** A staff report on cantometrics presented at the Washington meeting of the American Association for the Advancement of Science, Dec. 1966. Alan Lomax. With contributions by the Cantometrics Staff, Bureau of Applied Social Research, Columbia University, and with the editorial assistance of Edwin E. Erickson. AAAS, Washington, D.C., 1968. xx + 364 pp., illus. \$16.75; members' cash price, \$14.50. AAAS Publication No. 88.

**Galactic Astronomy.** Dimitri Mihalas. With the collaboration of Paul McRae Routly. Freeman, San Francisco, 1968. xiv + 258 pp., illus. \$10. A Series of Books in Astronomy and Astrophysics.

**The Geology of the East Midlands.** P. C. Sylvester-Bradley and T. D. Ford, Eds. Leicester University Press, Leicester, 1968. xx + 400 pp., illus. 84 s.

**The Golden Web.** A History of Broadcasting in the United States. Vol. 2, 1933-1953. Erik Barnouw. Oxford University Press, New York, 1968. vi + 394 pp., illus. \$9.

**Government Contracting and Technological Change.** Clarence H. Danhof. Brookings Institution, Washington, D.C., 1968. xiv + 472 pp., illus. \$8.75.

**Growth and Imperfections of Metallic Crystals.** D. E. Ovsienko, Ed. Translated from the Russian edition (Kiev, 1966). Consultants Bureau, New York, 1968. x + 270 pp., illus. Paper.

**Growth and Organization in Plants.** Structure, Development, Metabolism, Physiology. F. C. Steward. Addison-Wesley, Reading, Mass., 1968. xii + 564 pp., illus. \$15. Addison-Wesley Series in Life Science.

**The Guidance Function in Education.** Percival W. Hutson. Appleton-Century-Crofts, New York, ed. 2, 1968. xx + 786 pp., illus. \$9.50.

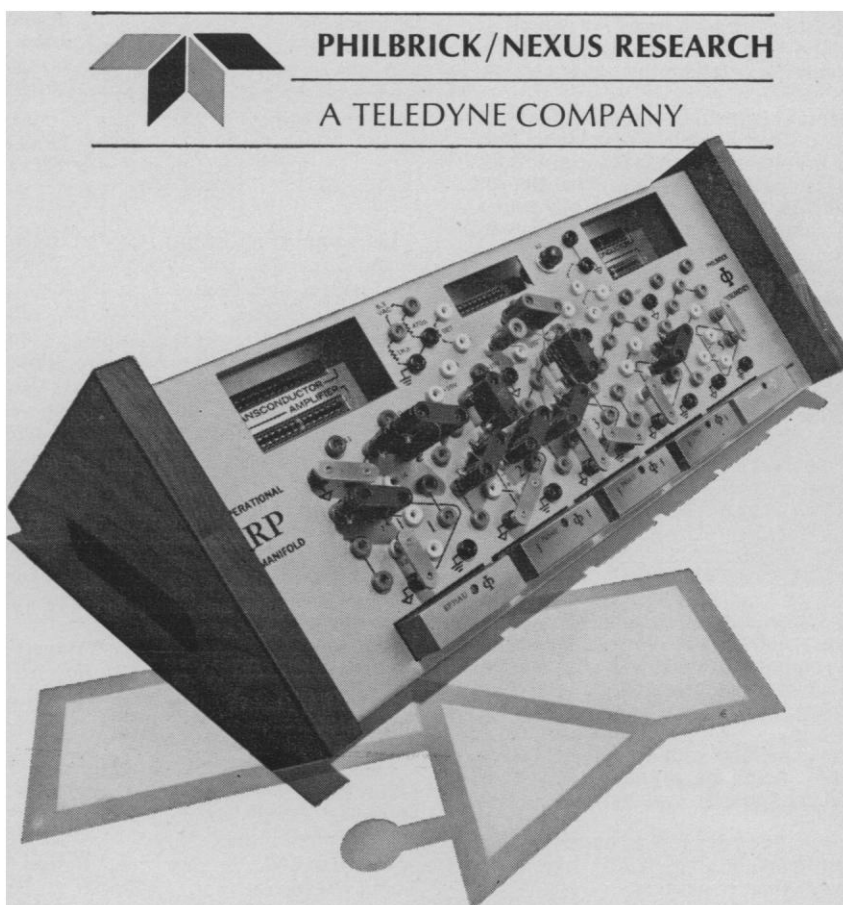
**Hadrons and Their Interactions.** Current and Field Algebra, Soft Pions, Supermultiplets, and Related Topics. Proceedings of the 5th course of the International School of Physics "Ettore Majorana," Erice, July 1967. A. Zichichi, Ed. Academic Press, New York, 1968. xii + 718 pp., illus. \$26.50.

**Higher Education: Who Pays? Who Gains?** Financing Education beyond the High School. M. M. Chambers. Interstate, Danville, Ill., 1968. xvi + 304 pp. \$6.95; less educational discounts of 10 percent

## RP-- a lab assistant that's a whiz at instrumentation setups

The Philbrick / Nexus RP is a self-powered, 5-amplifier operational manifold that serves you in many different ways. What do you make of it? Practically anything. It depends on the accessory amplifiers you plug in, your hookup and your capability in electronics and mathematics.

The RP computes physiological measurements, helps implement circuit design of process instrumentation, evaluates electronic filter performance, solves problems in fluidics, evaluates astronomical observations and serves as an interface between analog and digital systems — to mention a few. Put this lab assistant on your payroll and you'll be spending the time you save undertaking more projects. Contact your Philbrick / Nexus sales representative for complete details and specifications. Or write, Philbrick/Nexus Research, 25 Allied Drive at Route 128, Dedham, Massachusetts 02026.



Circle No. 32 on Readers' Service Card

**BEL-ART**

**THE PROVEN PLASTIC**

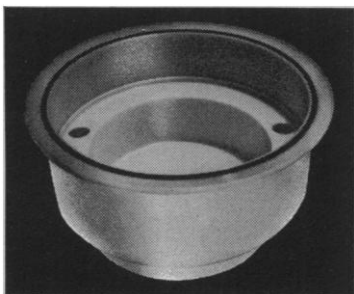
# desiccator

**AVAILABLE IN THREE SIZES**



This proven plastic desiccator permits application of high vacuum, which is retained by a specially designed retention valve, located on the upper section.

Extremely light but strong and easy to handle. Good chemical resistance. Permits the use of incandescent crucibles with conventional plates. The Bel-Art Desiccator operates successfully over a wide range of temperatures, seal unaffected by low temperatures (0° C.).



The lower section is made of tough polypropylene. The flange design offers no interference with the normal sliding of top section off bottom when opening.

Groove molded into flange of bottom section holds neoprene O-ring, which provides superior seal between halves.

Vacuum line connects to upper half, the lower load-carrying half is free to be moved when necessary.

See your nearest laboratory supply dealer.

Our **NEW** supplement is now available.  
For your **FREE** copy write Dept. E-1

**BEL-ART PRODUCTS**

**PEQUANNOCK, N. J. 07440**

Circle No. 82 on Readers' Service Card

on one copy, 20 percent on two or more copies.

**The Human Eye.** Benjamin N. Schuman. Drawings by Michael K. Meyers. Atheneum, New York, 1968. vi + 78 pp. \$4.75.

**High Frequency Radio Communications.** With Emphasis on Polar Problems. Finn Lied, Ed. Technivision, Maidenhead, England, 1968 (distributed in the U.S. by Circa Publications, Pelham, N.Y.). xiv + 130 pp., illus. \$9.75. Agardograph No. 104.

**The Human Face.** An Account of the Postnatal Growth and Development of the Craniofacial Skeleton. Donald H. Enlow. Illustrations by William L. Brudon. Harper and Row, New York, 1968. xvi + 304 pp., illus. \$20.

**Human Influences on the Zoogeography on Panama.** Charles F. Bennett. University of California Press, Berkeley, 1968. viii + 114 pp., illus. Paper, \$3.50. Ibero-Americana, No. 51.

**Imagination in Science.** Jacobus Henricus van't Hoff. Translated from the Dutch, with notes and an introduction by Georg F. Springer. Springer-Verlag, New York, 1967. 20 pp. Paper, \$1.65. Molecular Biology, Biochemistry, and Biophysics, vol. 1.

**The Indian Heritage of America.** Alvin M. Josephy, Jr. Knopf, New York, 1968. xxx + 384 pp., illus. \$10.

**Industrial Democracy and Industrial Management.** A Critical Essay on the Possible Meanings and Implications of Industrial Democracy. Eric Rhenman. Translated from the Swedish edition (Stockholm, 1964) by Nancy Walker. Van Gorcum, Assen, Netherlands; Tavistock, London, 1968. xii + 176 pp., illus. Paper, Hf. 16. Technology and Democratic Society, No. 2.

**Inorganic High-Energy Oxidizers.** Synthesis, Structure, and Properties. Edward W. Lawless and Ivan C. Smith. Dekker, New York, 1968. x + 310 pp., illus. \$14.75.

**Inorganic Qualitative Analysis.** A Short Course for Introductory Chemistry. Richard B. Hahn and Frank J. Welcher. Van Nostrand, Princeton, N.J., ed. 2, 1968. viii + 328 pp., illus. \$6.40.

**Insect Physiology.** Vincent B. Wigglesworth. Methuen and Science Paperbacks, London, 1968 (distributed in the U.S. by Barnes and Noble, New York). x + 134 pp., illus. Paper, \$1.75. Methuen's Monographs on Biological Subjects. Reprint of the 1966 edition.

**Institutions and the Person.** Papers Presented to Everett C. Hughes. Howard S. Becker, Blanche Geer, David Riesman, and Robert S. Weiss, Eds. Aldine, Chicago, 1968. x + 374 pp. \$11.75.

**Island of Adventure.** A Naturalist Explores a Gulf Coast Wilderness. Ross E. Hutchins. Dodd, Mead, New York, 1968. xii + 244 pp., illus. \$6.

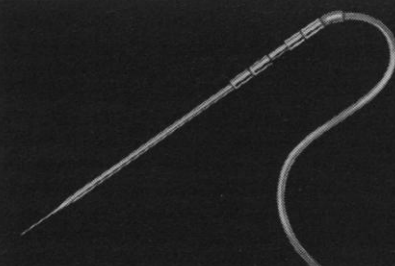
**International Review of Connective Tissue Research.** Vol. 4. David A. Hall, Ed. Academic Press, New York, 1968. xvi + 376 pp., illus. \$18.50.

**An Introduction to Human Physiology.** J. H. Green. Oxford University Press, New York, ed. 2, 1968. x + 184 pp., illus. Cloth, \$9.75; paper, \$6.50.

**Introduction to the Mathematics of Population.** Nathan Keyfitz. Addison-Wesley, Reading, Mass., 1968. xiv + 450 pp., illus. \$13.50.

## a new micro electrode

for biomedical stimulation and recording



the **microtrode**™

Composite structure of thin film metal layer bonded to drawn glass probes

- Reproducible performance
- Infinite shelf life
- Low resistance
- One micron tip diameter
- Available uninsulated or with resin insulation
- Gold plated pin connector with mating cable assembly
- May be cleaned and reused
- Special structures quoted on request

The Microtrode, connector and cable assembly under \$10.00.

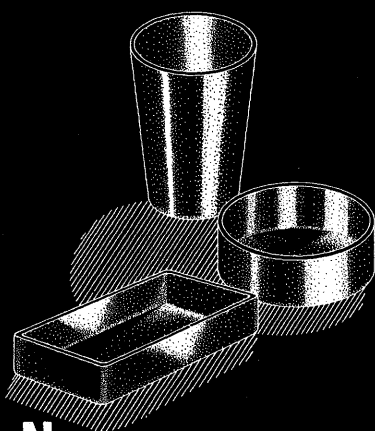
**TG**

**TRANSIDYNE  
GENERAL  
CORPORATION**

462 Wagner Road • Ann Arbor, Michigan 48103

Dom. & For. Pat. Pend.

Circle No. 91 on Readers' Service Card



## New High-Purity Coors AD-998 Alumina Labware

This new Coors alumina ceramic labware is made of 99.8%-pure recrystallized aluminum oxide. Use it for contamination-free results in high-temperature laboratory analyses. It is inert in hydrogen and carbonaceous atmospheres and offers high resistance to alkaline fluxes. Also recommended for refractory metals. Shapes include crucibles, dishes, trays and tubes. Maximum operating temperature, 1950°C. See your local laboratory-supply dealer or write for catalog.

**Coors Porcelain Company**  
Golden, Colorado 80401

Circle No. 88 on Readers' Service Card

**Kiki: Ten Thousand Years in a Lifetime.** A New Guinea Autobiography. Albert Maori Kiki. Praeger, New York, 1968. x + 190 pp. \$4.95.

**Leonhard Rauwolf.** Sixteenth-Century Physician, Botanist, and Traveler. Karl H. Dannenfeldt. Harvard University Press, Cambridge, Mass., 1968. xiv + 326 pp., illus. \$7.95. Harvard Monographs in the History of Science.

**La Lutte contre les Pollutions.** Milieux Inhalés, Ingérés et Acoustiques. Jean A. Ternisien. Presses Universitaires de France, Paris, 1968. 184 pp. Paper, 14 F. La Science Vivante.

**Magnetic Compasses and Magnetometers.** Alfred Hine. University of Toronto Press, Toronto, 1968. viii + 386 pp., illus. \$30.

**Magnetism and Magnetic Materials.** J. C. Anderson. Chapman and Hall, London, 1968 (distributed in the U.S. by Barnes and Noble, New York). viii + 248 pp., illus. \$8. Modern Electrical Studies.

**Magnetohydrodynamic Energy Conversion.** Richard J. Rosa. McGraw-Hill, New York, 1968. xvi + 241 pp., illus. \$17.50.

**Manuel Pratique de Chromatographie en Phase Gazeuse.** Jean Tranchant, J. Buzon, N. Guichard, J. Lebbe, A. Prevot, J. Serpinet, and J. Tranchant. Masson, Paris, ed. 2, 1968. xi + 365 pp., illus. 80 F.

**Mathematical Theory of Switching Circuits and Automata.** Sze-Tsen Hu. University of California Press, Berkeley, 1968. xiv + 264 pp., illus. \$9.

**Mathematical Thinking in Behavioral Sciences.** Readings from *Scientific American*. With introductions by David M. Messick. Freeman, San Francisco, 1968. viii + 232 pp., illus. Cloth, \$10; paper, \$4.95.

**Mathematics in the Modern World.** Readings from *Scientific American*. With introductions by Morris Kline. Freeman, San Francisco, 1968. x + 414 pp., illus. Paper, \$6.50.

**Mesmerism and the End of the Enlightenment in France.** Robert Darnton. Harvard University Press, Cambridge, Mass., 1968. xiv + 218 pp., illus. \$5.95.

**Metal Forming.** Processes and Analysis. Betzalel Avitzur. McGraw-Hill, New York, 1968. xxii + 506 pp., illus. \$17.50. McGraw-Hill Series in Materials Science and Engineering.

**Metallurgical Principles of Founding.** V. Kondic. Elsevier, New York, 1968. x + 286 pp., illus. \$9.

**Methodological Problems in Cross-National Studies in Aging.** Ethel Shanas and J. Madge, Eds. Karger, Basel, 1968 (distributed in the U.S. by Phiebig, White Plains, N.Y.). vi + 114 pp., illus. \$5.75. Interdisciplinary Topics in Gerontology, vol. 2.

**Mission to Hanoi: A Chronicle of Double-Dealing in High Places.** A Special Report from the Center for the Study of Democratic Institutions. Harry S. Ashmore and William C. Baggs. With a chronology of American involvement in Vietnam compiled and narrated by Elaine H. Burnell. Patnam, New York, 1968. xii + 372 pp. Paper. A Berkeley Medallion Book, N1620.

**The Multiple Universe.** On the Nature of Spiritual Reality. Michael M. Hare. Julian, New York, 1968. x + 197 pp., illus. \$15.

FOR THE  
MEDICAL LIBRARY 

# THE BIOLOGICAL BASIS OF MEDICINE

IN SIX VOLUMES

Edited by **E. EDWARD BITTAR**, *Department of Investigative Medicine, University of Cambridge, England*

assisted by **NEVILLE BITTAR**, *Department of Medicine, The University of Wisconsin, Madison, Wisconsin*

This timely work, which is the first of its kind, aims at providing a balanced treatment between contemporary medical science and the applications of cell biology in medicine. The six volumes consist of essays written by over one hundred specialists representing the various medical and biological sciences.

## VOLUME 1

### CONTENTS:

I. THE DYNAMIC STATE OF THE CELL: Molecular Organization of Membranes. Membrane Metabolism and Ion Transport. Trace Metal Metabolism. The Mitochondrion. The Golgi Apparatus. Lysosomes. The Biosynthesis and Function of Nucleic Acids. The Cell Nucleus as the Center of RNA Synthesis. II. GROWTH: The Control of Tissue Growth. III. CELL INJURY: The Multiphase Chemistry of Cell Injury. Aspects of Cellular Injury and Recovery. The Biochemistry of Malnutrition. IV. AGEING: The Fine Structural and Histochemical Changes in Ageing. Arteriosclerosis and Arterial Metabolism. The Nature of the Ageing Process. Author Index. Subject Index.  
1968, 590 pp., \$19.50

## VOLUME 2

### CONTENTS:

I. HORMONES: The Biogenesis of Hormones. Transport and Metabolism of Hormones. Control of Hormonal Secretion. Metabolic Effects of Catecholamines. II. CONTROL OF METABOLIC PROCESSES: Some Aspects of Control of Cell Metabolism. Hormonal Control of Fatty Acid Metabolism. Hormonal Control of Cholesterol Metabolism. Hormonal Control of Protein Biosynthesis. Hormonal Control of Gluconeogenesis. The Glucose Fatty Acid Cycle and Diabetes Mellitus. III. MECHANISM OF ACTION OF BIOLOGICAL AND PHYSICAL AGENTS: Virus-host Interactions. The Basis of Leucocidin Action. The Mechanisms of Fever. The Mode of Action of Antibiotics. Cellular Injury by Drugs. Injury by Radiation and Radiometric Drugs. Effect of Low Temperature on Tissues of the Body. Author Index. Subject Index.  
1968, 576 pp., \$21.00

Volume 3  
in preparation  
Volume 4  
in preparation

Volume 5  
in preparation  
Volume 6  
in preparation

 **ACADEMIC PRESS**  
NEW YORK AND LONDON  
111 FIFTH AVENUE, NEW YORK, N. Y. 10003

Circle No. 76 on Readers' Service Card

**The Muscular System of the Red Howling Monkey.** Miguel A. Schön. Smithsonian Institution Press, Washington, D.C., 1968 (available from the Superintendent of Documents, Washington, D.C.). vi + 186 pp., illus. Paper, \$1.25. U.S. National Museum Bulletin, No. 273.

**Mykologie.** Gundriss für Naturwissenschaftler und Mediziner. Emil Müller and Wolfgang Loeffler. Thieme, Stuttgart, 1968. (distributed in the U.S. by Intercontinental Medical Book Corp., New York). vi + 302 pp., illus. Paper, DM 9.80.

**Neutralization and World Politics.** Cyril E. Black, Richard A. Falk, Klaus Knorr, and Oran R. Young. Published for the Center of International Studies, Princeton University, by Princeton University Press, Princeton, N.J., 1968. xviii + 198 pp. \$7.50.

**New Trends in Basic Lymphology.** Proceedings of a symposium, Charleroi, Belgium, July 1966. J. M. Collette, G. Jantet, and E. Schoffeniels, Eds. Birkhauser, Basel, 1967. x + 236 pp., illus. SF 48. Experimentia Supplementum 14.

**Nouveau Traité de Chimie Minérale.** Paul Pascal, Ed. Vol 8, fasc. 1, Carbone. Masson, Paris, 1968. xl + 1048 pp., illus. 280 F.

**Nouveau Traité de Chimie Minérale.** Paul Pascal. Vol. 15, fasc. 4, Uranium (compléments). J. Elston and R. Caillat, Eds. Masson, Paris, 1967. xlv + 1216 pp., illus. 350 F.

**A Numerical Taxonomic Study of the Genus Salix, Section Sitchenses.** Theodore J. Crovello. University of California Press, Berkeley, 1968. vi + 64 pp., illus. Paper, \$2. University of California Publications in Botany, vol. 44.

**Die Optischen Wahrnehmungsstörungen und die Nichteuclidische Struktur des Sehraumes.** Gerhard Kienle. Thieme, Stuttgart, 1968. iv + 172 pp., illus. Paper, DM 48.

**Pain.** Proceedings of an international symposium, Paris, April 1967. A. Soulairac, J. Cahn, and J. Charpentier, Eds. Academic Press, New York, 1968. xii + 562 pp., illus. \$19.50.

**Papers in Biochemical Genetics.** Geoffrey L. Zubay, Ed. Holt, Rinehart and Winston, New York, 1968. xvii + 554 pp., illus. Paper, \$5.95.

**Perspectives in Developmental Change.** Art Gallaher, Jr., Ed. University of Kentucky Press, Lexington, 1968. xvi + 264 pp. \$8.50.

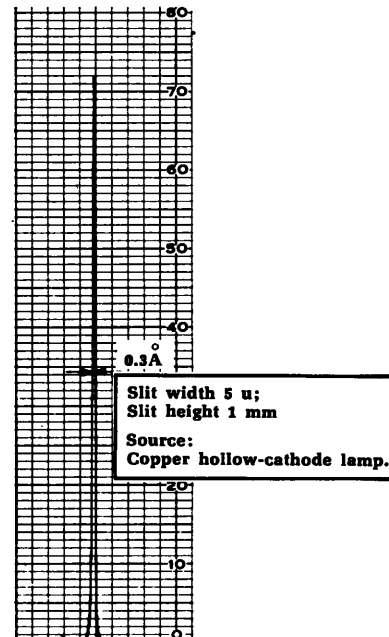
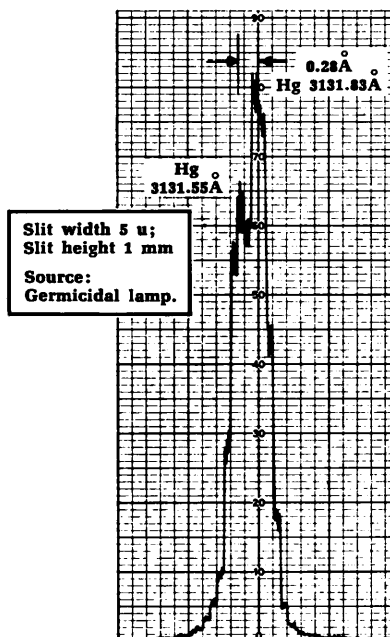
**Physiology and Biochemistry of Haemocyanins.** A symposium, Naples, Italy, Aug-Sept. 1966. F. Ghiretti, Ed. Academic Press, New York, 1968. x + 134 pp., illus. \$7.50.

**Plant and Animal Geography.** Marion Newbigin. Methuen, London, 1968 (distributed in the U.S. by Barnes and Noble, New York). xvi + 320 pp. Cloth, \$5.75; Paper, \$3. University Paperbacks, No. 221. Reprint of the 1936 edition.

**Plasma Physics.** D. V. Skobel'tsyn, Ed. Translated, with revisions by the author, from the Russian edition (Moscow, 1966). Consultants Bureau, New York, 1968. x + 202 pp., illus. Paper. Proceedings (Trudy) of the P.N. the Lebedev Physics Institute, vol. 32.

**Platelets in Haemostasis.** E. Hagen, W. Wechsler, F. Zilliken, C. Haanen, and J. Jürgens, Eds. Karger, Basel, 1968 (dis-

## the \$1195\* Monochromator with "better than 1 Å resolution"



## how much better?

We do not intend to praise the resolution of the Heath/Malmstadt-Enke EU-700 Monochromator by numbers. The optical performance of the "700" is better illustrated by the degree of separation of a typical first order profile of a 3131 Hg line and by the sharp, coma-free line produced from a copper hollow-cathode lamp, enabling you to judge its resolving power against the criteria you generally use.

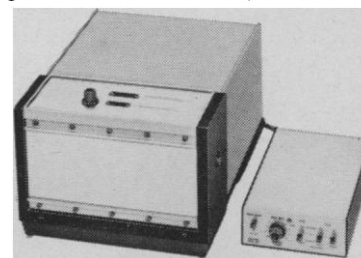
If you think your Monochromator is as good as the "700" try the above tests on your instrument, compare them with the "700" ... and see if you don't need a new Monochromator. The optical system is of the Czerny-Turner type with a focal length of 350 mm. To prevent aberration of the images and minimize coma, the "700" has parabolic mirrors, coated with MgF<sub>2</sub> for maximum reflectance in the UV. Image deterioration is virtually nonexistent.

The plane diffraction grating features 1180 lines per mm and a blaze wavelength of 2500 Å. Continuously variable slits between 5 and 2000 microns have ground and polished knife edges with heights from 0.5 to 12 mm. Stray light is minimized by the use of high

quality optical components. Special two-stage light baffles prevent off-axis light from entering or being dispersed.

All "700" Monochromators will produce the 0.3 Å resolution shown above, despite the fact that Heath conservatively states only "better than 1 Å." This high performance, versatile and stable Monochromator also features:

- $\pm 1$  Å tracking accuracy
- Modular versatility integrates the "700" into a series of spectrophotometers available soon
- In-line entrance and exit beams
- Electronic Programmable Digital Scanning
- Wavelength: zero order to 10,000 Å
- High Mechanical Stability with portability ... all for just \$1195.



For more information on the "700" send for the NEW HEATH Scientific Instrumentation Catalog. A Manual is also available for \$2.

HEATH COMPANY, Dept. 560-19  
Benton Harbor, Michigan 49022

- ☐ Please send New Free Scientific Instrumentation Catalog.  
☐ Please send Manual 595-912, a 100 pg. application and operation book of the "700" ... \$2.00

Name

Address

City  State  Zip

Prices & specifications subject to change without notice. EK-268R  
\*Mail order prices; F.O.B. factory.



tributed in the U.S. by Phiebig, White Plains, N.Y.). x + 242 pp., illus. \$16.60. Experimental Biology and Medicine, vol. 3.

**Politics and Policy.** The Eisenhower, Kennedy, and Johnson Years. James L. Sundquist. Brookings Institution, Washington, D.C., 1968. xii + 564 pp., illus. \$8.75.

**Les Pollutions et Leurs Effects.** Milieux Inhalés, Ingérés et Acoustiques. Jean A. Ternisien. Presses Universitaires de France, Paris, 1968. viii + 189 pp. Paper, 14 F. La Science Vivante.

**A Portrait of Isaac Newton.** Frank E. Manuel. Belknap Press of Harvard University Press, Cambridge, Mass., 1968. xviii + 478 pp., illus. \$11.95.

**Practical Scientific Russian.** S. Kaganoff. Gordon and Breach, New York, 1968. vi + 342 pp. Cloth, \$16; paper, \$8.50; 20 percent discount for payment in advance.

**Pre-Med. The Foundation of a Medical Career.** Douglas L. Lieberman, Ed. McGraw-Hill, New York, 1968. x + 270 pp. Paper, \$4.95.

**A Primer on Connective Tissue Biochemistry.** Maxwell Schubert and David Hamerman. Lea and Febiger, Philadelphia, 1968. xiv + 318 pp., illus. \$14.

**Proceedings of the Symposium on Mountain Meteorology.** Fort Collins, Colo., June 1967. E. R. Reiter and J. L. Rasmussen, Eds. Department of Atmospheric Science, Colorado State University, Fort Collins, 1968. x + 222 pp., illus. Paper, \$3.50. Atmospheric Science Paper No. 122.

**Reflections on Big Science.** Alvin M. Weinberg. M.I.T. Press, Cambridge, Mass., 1968. x + 182 pp. Paper, \$1.95. Reprint of the 1967 edition.

**Relativity Theory. Its Origins and Impact on Modern Thought.** L. Pearce Williams, Ed. Wiley, New York, 1968. xii + 164 pp. \$6.95. Major Issues in History series.

**Renal Hypertension.** Irvine H. Page and James W. McCubbin, Eds. Year Book Medical Publishers, Chicago, 1968. xii + 496 pp., illus. \$18.75.

**Research in Solid-State Sciences. Opportunities and Relevance to National Needs.** National Academy of Sciences, Washington, D.C., 1968. iv + 108 pp. Paper, \$3.50. NAS Publication 1600.

**Scientists against Time.** James Phinney Baxter, III. M.I.T. Press, Cambridge, Mass., 1968. xxiv + 474 pp., illus. Paper, \$3.95. Reprint of the 1946 edition.

**Selective Service. Conflict and Compromise.** Harry A. Marmion. Wiley, New York, 1968. xiv + 168 pp. + appendices, illus. \$5.95.

**Shape and Size (Triangle 3).** x + 67 pp., illus. Paper, \$2.50. **Computation and Structure (Circle 3).** viii + 86 pp., illus. Paper, \$2.50. Nuffield Mathematics Project. Wiley, New York, 1968.

**Stochastic Approach to Chemical Kinetics.** Donald A. McQuarrie. Methuen, London, 1968 (distributed in the U.S. by Barnes and Noble, New York). iv + 68 pp., illus. Paper, \$2.50. Methuen's Supplementary Review Series in Applied Probability, vol. 8. First published in the *Journal of Applied Probability*, 1967.

**Storage of Blood.** B. A. L. Hurn. Academic Press, New York, 1968. xii + 167 pp., illus. \$7.50.

17 JANUARY 1969

at last . . . a 400 tube fraction collector!

## the new fractomette 400

*Collect the largest number of samples in the least amount of space.*

If you wish to collect a large number of fractions from a fast column or wish to collect 200 fractions each from two columns simultaneously, the Buchler Fractomette 400 is ideal for you. Collection by Drop, Time or Volume in 18 x 150 MM test tubes. Equipped with automatic Drop-Stop preventing stray drops or loss of samples due to power failure. Sturdy aluminum frame for column mounting. This latest addition to Buchler's family of fraction collectors costs only \$1375.



For further information request Technical Bulletin AS-3-4400A

Circle No. 33 on Readers' Service Card

**Structure Reports for 1958.** Vol. 22. W. B. Pearson, A. Taylor, J. S. Kasper, and A. McL. Mathieson, Eds. Published for the International Union of Crystallography by Oosthoek, Utrecht, 1968. viii + 890 pp., illus. Dfl. 140.

**Teaching Elementary Science.** The Teacher's Guide to Effective Classroom Activities. Rita Langley. Parker, West Nyack, N.Y., 1968. x + 276 pp., illus. \$8.95.

**Techniques Histologiques.** M. Gabe. Masson, Paris, 1968. x + 1114 pp., illus. 160 F.

**Theory of Waveguides and Cavity Resonators.** Emile Argence and Théo Kahan. Translated from the French edition (1964) by Scripta Technica. Hart, New York, 1968. xvi + 428 pp., illus. \$15.

**Thermoluminescence of Geological Materials.** Proceedings of a NATO Advanced Research Institute, Spoleto, Italy, Sept. 1966. D. J. McDougall, Ed. Academic Press, New York, 1968. xvi + 680 pp., illus. 155 s.

**Transformations Tumorales.** P. Manigault. Masson, Paris, 1968. vi + 114 pp., illus. Paper, 32 F. Monographies de Physiologie Végétale, No. 2.

**Transistor Audio Amplifiers.** Dwight V. Jones and Richard F. Shea. Wiley, New York, ed. 2, 1968. xii + 277 pp., illus. \$9.95.

**Ultrastructure of Fertilization.** C. R. Austin. Holt, Rinehart and Winston, New York, 1968. x + 198 pp., illus. \$5.95. Biology Studies.

**Undersea Frontiers.** Exploring by Deep-Diving Submarines. Gardner Soule. Rand McNally, Chicago, 1968. 280 pp., illus. \$6.95.

**Urbanization.** Development Policies and Planning. U.N. Department of Economic and Social Affairs. United Nations, New York, 1968. vi + 130 pp., illus. Paper, \$2.

**Variational Principles in Dynamics and Quantum Theory.** Wolfgang Yourgrau and Stanley Mandelstam. Saunders, Philadelphia, ed. 3, 1968. xiv + 202 pp., illus. \$6.50.

**Variation in the Polygonum Amphibium Complex and Its Taxonomic Significance.** Richard S. Mitchell. University of California Press, Berkeley, 1968. vi + 68 pp., illus. Paper, \$2.50. University of California Publications in Botany, vol. 45.

**Viral Etiology of Congenital Malformations.** Proceedings of a conference, Bethesda, Md., May 1967. National Institutes of Health, Bethesda, Md., 1968 (available from the Superintendent of Documents, Washington, D.C.). vi + 178 pp., illus. Paper, 65¢.

**Virology Monographs.** Die Virusforschung in Einzeldarstellungen. S. Gard, C. Hallauer, and K. F. Meyer, Eds. Vol. 2, The Simian Viruses, by R. N. Hull; Rhinoviruses, by D. A. J. Tyrrell. Springer-Verlag, New York, 1968. iv + 124 pp., illus. \$8.50.

**Voyage to the Planets.** Proceedings of the American Astronautical Society Fifth Goddard Memorial Symposium, Wash-

ington, D.C., 1967. AAS, Tarzana, Calif., 1968. xii + 176 pp., illus. \$11.25. AAS Science and Technology Series, vol. 16.

**Water Resources Research in Canada.** J. P. Bruce and D. E. L. Maasland. With a Special Report on the Contribution of Social Science Research to Water Resource Management in Canada, by W. R. Derrick Sewell. Science Secretariat, Ottawa, Canada, 1968 (available from the Queen's Printer, Ottawa). xviii + 170 pp. Paper, \$2.50. Special Study No. 5.

**The Wave Mechanics of Atoms, Molecules and Ions.** An Introduction for Chemistry Students. C. J. H. Schutte. St. Martin's, New York, 1968. xiv + 502 pp., illus. \$15.50.

**The Way to Modern Man.** An Introduction to Human Evolution. Fred T. Adams. Teachers College Press, Columbia University, New York, 1968. xii + 284 pp., illus. \$7.50.

**World Health.** Fraser Brockington. Little, Brown, Boston, ed. 2, 1968. x + 374 pp., illus. \$14.

**The World of the Grizzly Bear.** Text and photographs by W. J. Schoonmaker. Lippincott, Philadelphia, 1968. 192 pp. \$5.95. Living World Books.

**Your Child and Mathematics.** A short survey of the aims and methods of modern mathematics teaching of five- to thirteen-year-old children, written particularly for parents, in association with the Nuffield Mathematics Project. W. H. Cockcroft. Wiley, New York, 1968. ii + 30 pp., illus. Paper, \$1.50.

## FREE SAMPLE OF SHANDON'S OUTSTANDING CELAGRAM® CELLULOSE ACETATE FOR ELECTROPHORESIS

Make your own comparison test. Use Shandon Celagram cellulose acetate strips and you will make the fastest, clearest electrophoretograms ever. With Celagram you save time, improve results and simplify evaluation. Moreover, because multi-micro methods enable multiple samples to be run on very small strips in a fraction of the time normally taken, Celagram is actually cheaper to use than paper. Look at these advantages: no tailing of albumin . . . minimum background staining . . . distinct separation of alpha-globulin, beta<sub>1</sub> and beta<sub>2</sub> fractions . . . rapid separation of iso-enzymes . . . and sharper separation of glycoproteins, lipoproteins, hemoglobins and enzymes.

Send for literature, price list and free sample envelope containing 6 Celagram strips 25 x 120 mm to Shandon Scientific Company, Inc., 515 Broad Street, Sewickley, Pa. 15143 (Pittsburgh District).



PITTSBURGH • LONDON • FRANKFURT

Circle No. 93 on Readers' Service Card

Advertisers judge their advertising results by the number of responses to their ads. They also pay half the publishing cost of Science. Use the Readers' Service Card to contact manufacturers.