Anyone reading this book will get a clear idea of the state of knowledge of tne mechanical properties of bone as it was in about 1969. There are few later references. The experiments are set out in detail, usually far too great detail. For instance, in 1965 the reviewer published a paper concerning anelasticity in bone. It was 13 pages long, with six illustrations. Evans paraphrases it in 5½ pages using all six illustrations magnified 40 percent (this magnification being a general feature of the book). There is no possible reason for devoting 1½ percent of the book to this possibly pioneering, but certainly naive, paper.

What the reader will not get is any feeling for what are important problems to be solved now. This is for two reasons. First, there are effectively no comments on the worth or significance of different pieces of research. Work done by Rauber in 1876 is treated in exactly the same way, and at the same length, as the highly sophisticated work of, for instance, McElheney or Evans himself. Second, almost no consideration is given to why bone behaves as it does. Sometimes, if the authors he cites themselves discuss the matter, Evans will quote them, but the result is less than satisfactory. For instance, the discussion by Roth et al. of the causes of plasticity in bone was interesting in 1961; nowadays it reads like something from another age.

All this is particularly bitter because no one is better placed than Evans to sit back and comment on where the evidence so far accumulated is leading. This is a book that all research workers on bone must own, with regret that it is not a different book.

JOHN D. CURREY

Department of Biology, University of York, York, England

#### **Plant Physiology**

Phloem Translocation. M. J. CANNY. Cambridge University Press, New York, 1973. xii, 302 pp., illus. + plates. \$22.50.

The intriguing question of the mechanism involved in transporting carbon compounds over long distances in plants has evoked much research, and recently several reviews and books on the topic have been published. Canny emphasizes the kinetics of carbon transport and deliberately works "towards a mechanism." In these respects he extends the available literature on the

anatomy, physiology, and biophysics of the process.

The early chapters of *Phloem Translocation* cover aspects of the anatomy of the phloem, the chemical composition of the moving solution, the energy supply, and bidirectional transport. Detailed information on these aspects of the process can be obtained from other texts, but in this volume it is oriented toward aspects relevant to the kinetics of carbon transport. Furthermore, it is background information that will allow readers new to the topic to appreciate the biology of the process.

The book collects and interprets almost all the data that have ever been obtained from radiocarbon tracer profiles; this material constitutes a useful résumé and illustrates the accomplishment of existing techniques. The treatment of the theoretical profiles is limited, though the inclusion of the work of Taylor will be appreciated. In contrast experimental data on tracer profiles, that is, the distribution of tracer in a plant as a function of time and distance from the point of application, are exhaustively examined. These cover many species, times, and treatments and generally illustrate that they fit error curves.

Three characteristics must be taken into account to describe mass transfer: the concentration of the solution, speed, and the cross-sectional area involved in transport. The relationships among these components will be important in understanding translocation, and, as Canny comments, whether speed is related to the amount of sugar moving or independent of the mass moved is a "crucial question that awaits experimental attack." Clearly definitive techniques to describe these components are required.

The objective of the book becomes most apparent in part 2—this is, to present the author's theory of the mechanism. This is achieved by a step-bystep explanation of fitting error functions, its application to 28 tracer profiles, extensive discussion showing that the results support the accelerateddiffusion model, and relative neglect of other models. The reader becomes well acquainted with Canny's point of view and may be tempted by the detailed description of the method to apply it without understanding the model. The validity of Canny's interpretation of the profiles has been questioned by MacRobbie and Passioura. I think there are many experimental data showing that the shape of the carbon

profile is determined primarily in the source region and that there is little alteration along the leaf or stem, although this conclusion may depend on species and environmental conditions.

This volume emphasizes the need for reliable techniques to obtain quantitative kinetic data about the transport of carbon in plants. Some data already available conflict with Canny's interpretation, but many more are required to elucidate the mechanism of this process that is important in plant production. The chapter entitled "Towards a mechanism" describes the discussion in this book. The goal has yet to be attained.

JOHN H. TROUGHTON

Department of Plant Biology, Carnegie Institution of Washington, Stanford, California

#### **Books Received**

Aging and Behavior. A Comprehensive Integration of Research Findings. Jack Botwinick. Springer, New York, 1973. x, 326 pp., illus. \$10.50.

Alfred Binet. Theta H. Wolf. University of Chicago Press, Chicago, 1973. xiv, 376 pp. \$13.75.

Ancient Views on the Origins of Life. Ernest L. Abel. Fairleigh Dickinson University Press, Rutherford, N.J., 1973. 94 pp. \$6.75.

Annual Reports in Organic Synthesis. 1972. John McMurry and R. Bryan Miller, Eds. Academic Press, New York, 1973. xiv, 274 pp., illus. Paper, \$7.50.

Atlas of Hawaii. Department of Geography, University of Hawaii. University Press of Hawaii, Honolulu, 1973. ii, 222 pp., illus. Paper, \$15.

Atomic Structure and Properties of Solids. Proceedings of the International School of Physics "Enrico Fermi," Course 52, Varenna, Italy, 1971. E. Burstein, Ed. Academic Press, New York, 1972. xx, 608 pp., illus. \$39.

Barobiology and the Experimental Biology of the Deep Sea. Proceedings of a symposium, 1972. Ralph W. Brauer, Ed. North Carolina Sea Grant Program, University of North Carolina, Chapel Hill, 1972. xiv, 428 pp., illus. Paper, \$10.

Basic Physical Chemistry for the Life Sciences. Virginia R. Williams and Hulen B. Williams. Freeman, San Francisco, ed. 2, 1973. xx, 524 pp., illus. \$14.95.

Biochemistry of the Developing Brain. Vol. 1. Williamina Himwich, Ed. Dekker, New York, 1973. xviii, 388 pp., illus. \$24.50.

The Biology of the Indian Ocean. Proceedings of a symposium, Kiel, Germany, Mar. 1971. Bernt Zeitzschel, Ed., in cooperation with Sebastian A. Gerlach. Springer-Verlag, New York, 1973. xiv, 550 pp., illus. \$55.40.

Chemotherapy of Malaria and Re-(Continued on page 120) black printing, and programmable "no print" blanking for each digit. The printing cycle is 400 milliseconds. The unit is complete with power supply and demand motor operation controlled by a built-in time-tachometer circuit. Coulbourn Instruments, Incorporated. Circle No. 137 on Readers' Service Card.

#### Mass Spectrometer Leak Detectors

The NRC 925 series features a stainless steel spectrometer tube with a disposable dual-filament ion source, plug-in electronic connections, and a cold cathode gauge. The leak-rate indicator reads directly from  $2 \times 10^{-11}$ to  $6 \times 10^{-5}$  standard cubic centimeters per second. The series comprises the 925 Manumatic detector, the 925 VFT detector, the 925-20 sensing tube, and the Integra-Test leak detector. The operator may choose a system to meet his specifications. Applications range from production testing of sealed relays and insulators to maintenance of particle accelerators and altitude chambers. Varian Associates, NRC Operation. Circle No. 135 on Reader's Service Card.

#### Literature

YSI Temperature Instruments is a four-page catalog of thermometers, thermographs, telemetry and temperature sensing devices for all laboratory and field applications. Yellow Springs Instrument Company. Circle No. 145 on Readers' Service Card.

Electronic Top-Loading Balances describes a line of laboratory devices. The electronic data may be read, recorded, or transmitted for computer analysis. Performance, design specifications, photographs, and schematic drawings are included. Mettler Instrument Corporation. Circle No. 146 on Readers' Service Card.

Chromatography Apparatus Catalog 80A275 is a 28-page brochure that illustrates the Lab-Crest line of columns, end-fittings, and accessories. Fischer & Porter Company. Circle No. 147 on Readers' Service Card.

Microscope Photometer, MPV System describes apparatus for microphotometry including the MPV2 microscope photometer. Applications, accessories, and performance data are illustrated. E. Leitz, Incorporated. Circle No. 148 on Readers' Service Card.

#### **BOOKS RECEIVED**

(Continued from page 68)

sistance to Antimalarials. Report of a WHO Scientific Group. World Health Organization, Geneva, 1973 (available from the United Nations Bookshop, New York). 122 pp., illus. Paper, \$2.10. World Health Organization Technical Report Series No. 529.

La Chimie des Surfaces. Jacques Oudar. Presses Universitaires de France, Paris, 1973. 172 pp., illus. Paper, 17F. Collection SUP, Le Chimiste, vol. 7.

Chromomycosis. Yousef Al-Doory. Mountain Press, Missoula, Mont., 1972. xii, 204 pp., illus. \$10.

Classical Galois Theory. With Examples. Lisl Gaal. Chelsea, New York, ed. 2, 1973. viii, 248 pp., illus. \$7.50.

Clinical Nutrition. Proceedings of a symposium, Saltsjöbaden, Sweden, June 1971. J. C. Somogy, Ed. Karger, New York, 1973. viii, 166 pp., illus. Paper, \$26. Bibliotheca "Nutritio et Dieta," No. 19, Series of the Institute of Nutrition Research, vol. 19.

The Coastline of Scotland. J. A. Steers. Cambridge University Press, New York, 1973. xvi, 336 pp., illus. + map. \$31.50.

Cognitive Development and the Acquisition of Language. Proceedings of a conference, Buffalo, N.Y., Aug. 1971. Timothy E. Moore, Ed. Academic Press, New York, 1973. xii, 308 pp., illus. \$16.

The Coming Dark Age. Roberto Vacca. Translated from the Italian edition (Milano, 1971) by J. S. Whale. Doubleday, Garden City, N.Y., 1973. viii, 222 pp. \$6.95.

Comparative Organellography of the Cytoplasm. A. Frey-Wyssling, Springer-Verlag, New York, 1973. viii, 106 pp., illus. DM 53. Protoplasmatologia, band 3/G.

Comparative Physical Biology. N. R. Joseph. Karger, New York, 1973 (distributor, Phiebig, White Plains, N.Y.). x, 234 pp., illus. \$35.

Comparative Social Research. Methodological Problems and Strategies. Proceedings of a conference, Bloomington, Ind., 1971. Michael Armer and Allen D. Grimshaw, Eds. Wiley-Interscience, New York, 1973. xxii, 474 pp., illus. \$17.95. Comparative Studies in Behavioral Science.

Comparative Statistical Inference. Vic Barnett. Wiley, New York, 1973. xvi, 288 pp., illus. \$16.50. Wiley Series in Probability and Mathematical Statistics.

Compensatory Education for Children Ages Two to Eight. Recent Studies of Educational Intervention. Proceedings of a symposium, Baltimore, Apr. 1972. Julian C. Stanley, Ed. Johns Hopkins University Press, Baltimore, 1973. x, 214 pp., illus. Cloth, \$10; paper, \$2.95.

The Conscious Brain. Steven Rose. Knopf, New York, 1973. vi, 344 pp., illus. + index. \$10.

The Crystal Structure of Solids. P. J. Brown and J. B. Forsyth. Arnold, London, and Crane, Russak, New York, 1973. xii, 172 pp., illus. Cloth, \$15.50; paper, \$6.95. Structures and Properties of Solids, No. 2.

Current R & D Projects in Israel 1972. Natural Sciences & Technology. C. Keren

and P. Wollman, Eds. National Center of Scientific and Technological Information, Tel-Aviv, Israel, ed. 3, 1973. Two volumes. Vol. 1, Main Tables. xiv, 458 pp. Vol. 2, Indexes. ii, 376 pp. \$50.

Daily Life in People's China. Arthur W. Galston with Jean S. Savage. Crowell, New York, 1973. xii, 226 pp., illus. \$6.95.

Deaths of Man. Edwin S. Shneidman. Quadrangle (New York Times Book), New York, 1973. xviii, 238 pp. \$8.95.

Deep Impurities in Semiconductors. A. G. Milnes. Wiley-Interscience, New York, 1973. xviii, 526 pp., illus. \$24.95.

The Detection of Fish. David Cushing. Pergamon, New York, 1973. xiv, 200 pp., illus. \$16.50. International Series of Monographs in Pure and Applied Biology, Zoology, vol. 52.

Development of Educational Programmes for the Health Professions. World Health Organization, Geneva, 1973. 104 pp. Paper, \$2.10. Public Health Papers No. 52.

Developments in High-Energy Physics. Proceedings of the International School of Physics "Enrico Fermi," Course 54, Varenna, Italy, 1971. R. Gatto, Ed. Academic Press, New York, 1972. xii, 426 pp., illus. \$34.50.

Developments in Mathematical Education. Proceedings of a congress, Exeter, England, Aug. 1972. A. G. Howson, Ed. Cambridge University Press, New York, 1973. x, 318 pp., illus. Cloth, \$14.50; paper, \$6.95.

Developments in Powder Metallurgy. R. F. Smart. Mills and Boon, London, 1973 (U.S. distributor, Crane, Russak, New York). 80 pp., illus. \$5.50. M and B Monograph ME/15.

The Diabetic Foot. Marvin E. Levin and Lawrence W. O'Neal, Eds. Mosby, Saint Louis, 1973. xviii, 262 pp., illus. \$25.50.

Dictionary of Epilepsy. Part 1, Definitions. H. Gastaut. World Health Organization, Geneva, 1973. 76 pp. \$6.

Dietary Lipids and Postnatal Development. C. Galli, G. Jacini, and A. Pecile, Eds. Raven, New York, 1973. viii, 278 pp., illus. \$17.50.

Discrete Models. Donald Greenspan. Addison-Wesley, Reading, Mass., 1973. xviii, 166 pp., illus. Cloth, \$16; paper, \$8.50. Applied Mathematics and Computation, No. 3.

Discrimination without Violence. Miscegenation and Racial Conflict in Latin America. Mauricio Solaún and Sidney Kronus. Wiley-Interscience, New York, 1973. xiv, 240 pp. \$9.95.

Economics of Research & Development. P. N. Chowdhury. People's Publishing House, New Delhi, 1973. xiv, 163 pp. Rs. 18.

Elementary Electromagnetic Theory. In Three Volumes. Vol. 3, Maxwell's Equations and Their Consequences. B. H. Chirgwin, C. Plumpton, and C. W. Kilmister. Pergamon, New York, 1973. viii pp. + pp. 441-602, illus. Cloth, \$9.75; paper, \$6.

Encountering Aborigines. A Case Study: Anthropology and the Australian Aboriginal. Kenelm Burridge. Pergamon, New York, 1973. xii, 260 pp. Cloth, \$12.50; paper, \$6.95. Pergamon Frontiers of Anthropology Series.

## **VERSATILE POWER SUPPLY**

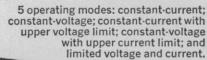
5 operating modes • stabilized power output

New, advanced DC power supply with silicon-controlled rectifier circuit makes automatic compensation for fluctuations in load resistance

which protects samples and media from overheating. Size 16" x 9" x 7".

Operates completely unattended for unlimited periods of time.

PITTSBURGH



Adjustable output
0-500 volts
and 0-150mA.

FRANKFURT

Two pair of output sockets are provided, each fitted with a polarity reversal switch.

A large selection of other power supplies ranging up to 10,000 volts is available from Shandon Southern Instruments, Inc., 515 Broad Street, Sewickley, Pennsylvania 15143 (Pittsburgh District).



\_\_\_\_

Circle No. 91 on Readers' Service Card

LONDON



Encyclopedia of Industrial Chemical Analysis. Vol. 18, Silicon to Thiophene. Foster Dee Snell and Leslie S. Ettre, Eds. Interscience (Wiley), New York, 1973. xiv, 546 pp., illus. \$40; by subscription, \$35.

The Encyclopedia of Microscopy and Microtechnique. Peter Gray, Ed. Van Nostrand Reinhold, New York, 1973. xii, 638 pp., illus. \$32.50.

Energy Needs and the Environment. Proceedings of a symposium, Tucson, Ariz., 1971. Robert L. Seale and Raymond A. Sierka, Eds. University of Arizona Press, Tucson, 1973. xiv, 350 pp., illus. \$9.50.

Energy, Structure, and Reactivity. Proceedings of a conference, Boulder, Colo., 1972. Darwin W. Smith and Walter B. McRae, Eds. Wiley-Interscience, New York, 1973. xx, 400 pp., illus. \$14.95.

Environment and Cancer. Proceedings of a symposium, Houston, Mar. 1971. Published for the University of Texas at Houston by Williams and Wilkins, Baltimore, 1972. xvi, 476 pp., illus. \$19.

Environmental Quality and Safety. Global Aspects of Chemistry, Toxicology and Technology as Applied to the Environment. Vol. 2. Frederick Coulston and Friedhelm Korte, Eds. Thieme, Stuttgart, and Academic Press, New York, 1973. xviii, 336 pp., illus. \$24.

Ergebnisse zur Sexualmedizin. Volkmar Sigusch, Ed. Eine Produktion des Wissenschafts, Cologne, Germany, and Karger, New York, ed. 2, 1973. 186 pp. Paper, \$5.25.

Essai sur l'Application de l'Analyse à la Probabilité des Décisions. Rendues à la Pluralité des Voix. M. Le Marquis de Condorcet. Chelsea, New York, 1972. clxxxii, 304 pp., \$19.50. Photographic reprint of the 1785 edition.

The Evolution of Melanism. The Study of a Recurring Necessity. With Special Reference to Industrial Melanism in the Lepidoptera. Bernard Kettlewell. Clarendon (Oxford University Press), New York, 1973. xxiv, 424 pp., illus. + plates. \$33.

Explosive Nucleosynthesis. Proceedings of a conference, Austin, Tex., Apr. 1973. David N. Schramm and W. David Arnett, Eds. University of Texas Press, Austin, 1973. xiv, 302 pp., illus. Cloth, \$8.50; paper, \$4.95.

A Field Guide to Mexican Birds. Field Marks of all Species Found in Mexico, Guatemala, Belize (British Honduras), El Salvador. Roger Tory Peterson and Edward L. Chalif. Houghton Mifflin, Boston, 1973. xxii, 298 pp. + plates. \$8.95. Peterson Field Guide Series, No. 20.

Flora of the Pacific Northwest. An Illustrated Manual. C. Leo Hitchcock and Arthur Cronquist. Illustrations by Jeanne R. Janish. University of Washington Press, Seattle, 1973. xx, 730 pp. \$25.

Fluorine Chemistry Reviews. Vol. 6. Paul Tarrant, Ed. Dekker, New York. 1973. xii, 204 pp. \$19.75.

Form and Pattern in Human Evolution. Some Mathematical, Physical, and Engineering Approaches. Charles Oxnard. University of Chicago Press, Chicago, 1973. x, 218 pp., illus. \$12.50.

Freedom of Oceanic Research. A Study

Conducted by the Center for Marine Affairs of the Scripps Institution of Oceanography, University of California, San Diego. Warren S. Wooster, Ed. Crane, Russak, New York, 1973. viii, 256 pp. \$14.

Frequency Domain Criteria for Absolute Stability. Kumpati S. Narendra and James H. Taylor. Academic Press, New York, 1973. xx, 248 pp., illus. \$22.50. Electrical Science.

Fundamental Interactions in Physics. Proceedings of a conference, Coral Gables, Fla., Jan. 1973. Behram Kursunoglu, conference chairman, and Arnold Perlmutter, Ed. Plenum, New York, 1973. x, 400 pp., illus. \$25. Studies in the Natural Sciences, vol. 2.

Fundamental Principles of Bacteriology. A. J. Salle. McGraw-Hill, New York, ed. 7, 1973. x, 1094 pp., illus. \$15.95.

Galenism. Rise and Decline of a Medical Philosophy. Owsei Temkin. Cornell University Press, Ithaca, 1973. xx, 249 pp., illus. \$15. Cornell Publications in the History of Science.

Genetic Variation in Britain. Proceedings of a symposium, Oxford, England, Apr. 1972. D. F. Roberts and E. Sunderland, Eds. Taylor and Francis, London, and Barnes and Noble (Harper and Row), New York, 1973. viii, 306 pp., illus. \$16.50. Symposia of the Society for the Study of Human Biology, vol. 12.

Geometry of Submanifolds. Bang-yen Chen. Dekker, New York, 1973. xii, 298 pp. \$17.50. Pure and Applied Mathematics, vol. 22.

Health and Light. The Effects of Natural and Artificial Light on Man and Other Living Things. John N. Ott, Devin-Adair, Old Greenwich, Conn., 1973. xiv, 208 pp. + plates. \$7.95.

Health Care in Canada. A Commentary. H. Rocke Robertson. Science Council of Canada, Ottawa, Ontario, 1973. ii, 174 pp., illus. Paper, \$2.75. Special Study No.

Histology. Peter S. Amenta. Illustrated by Steven P. Gigliotti. Medical Examination Publishing, Flushing, N.Y., 1973. 250 pp. Spiral bound, \$8.

Historical Conceptions of Psychology. Mary Henle, Julian Jaynes, and John J. Sullivan, Eds. Springer, New York, 1973. xii, 324 pp. Cloth, \$10.95; paper, \$7.95.

A History of Croatia. Stephen Gazi. Philosophical Library, New York, 1973. xvi, 362 pp. + illus. \$11.95.

Hormonal Proteins and Peptides. Vol. 2. Choh Hao Li, Ed. Academic Press, New York, 1973. xii, 292 pp., illus. \$17.50.

How to Save Your Life. Earl Ubell. Harcourt Brace Jovanovich, New York, 1973. xii, 308 pp., illus. \$7.50.

Human Reproduction. Vol. 8, No. 86. Formulated by the Committee on Preventive Psychiatry. Group for the Advancement of Psychiatry, New York, 1973. ii pp. + pp. 383-516. Paper, \$4.

Hunters of the Northern Forest. Designs for Survival among the Alaskan Kutchin. Richard K. Nelson. University of Chicago Press, Chicago, 1973. xvi, 340 pp., illus. \$10.50.

Recommended Practice for IEEE Grounding of Industrial and Commercial Power Systems. Institute of Electrical

and Electronics Engineers, New York, 1972 (distributor, Wiley, New York). 96 pp., illus. \$7.95. IEEE Std 142-1972.

Infant Death. An Analysis by Maternal Risk and Health Care. David M. Kessner, Project Director. National Academy of Sciences, Washington, D.C., 1973. xviii, 204 pp., illus. Paper, \$6. Contrasts in Health Status, vol. 1.

The Inflammatory Process. Vol. 2. Benjamin W. Zweifach, Lester Grant, and Robert T. McCluskey, Eds. Academic Press, New York, ed. 2, 1973. xvi, 420 pp., illus. \$28.

Infra-Red Studies of Crystal Defects. R. C. Newman. Taylor and Francis, London, and Barnes and Noble (Harper and Row), New York, 1973. x, 188 pp., illus. Paper, \$12. Taylor and Francis Monographs on Physics. Reprinted from Advances in Physics, vol. 18, No. 75, 1969.

Initial Reports of the Deep Sea Drilling Project. A project by and carried out with the advice of the Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES). Vol. 17, covering leg 17 of the cruises of Glomar Challenger, Apr.-May 1971. Edward L. Winterer and eight others, participating scientists. Prepared for the National Science Foundation by the Scripps Institution of Oceanography, La Jolla, Calif., 1973 (available from the Superintendent of Documents, Washington, D.C.). xviii, 930 pp., illus. + maps. \$12.25.

International Union of Pure and Applied Chemistry Symposium Proceedings. Butterworths, London, 1973 (U.S. distributor, Crane, Russak, New York). Carotenoids Other Than Vitamin A-3. Cluj, Romania, 1973. vi, 130 pp., illus. \$11.40. Reprinted from Pure and Applied Chemistry, vol. 35, No. 1, 1973.

Introduction à la Cosmologie. Jean Heidmann. Presses Universitaires de France, Paris, 1973. 240 pp., illus. Paper, 29 F. Collection SUP, Le Physicien, vol.

Introduction à la Géochimie. Claude-Jean Allègre and Gil Michard. Presses Universitaires de France, Paris, 1973. 220 pp., illus. Paper, 29 F. Collection SUP, Le Chimiste, vol. 8.

Introduction to the Physics and Psychophysics of Music. Juan G. Roederer. English Universities Press, London, and Springer-Verlag, New York, 1973. xii, 162 pp., illus. Paper, \$5.90. Heidelberg Science Library, vol. 16.

A Mathematical Theory of Global Program Optimization. Marvin Schaefer, Prentice-Hall, Englewood Cliffs, N.J., 1973. xx, 198 pp., illus. \$9.95. Prentice-Hall Series in Automatic Computation.

The Mathematics of Finite Elements and Applications. Proceedings of a conference, Uxbridge, England, Apr. 1972. J. R. Whiteman, Ed. Academic Press, New York, 1973. xiv, 520 pp., illus. \$35.

Mechanical Properties of Bone. F. Gaynor Evans. Thomas, Springfield, Ill., 1973. xiv, 322 pp., illus. \$25.75. American Lecture Series, No. 881.

Mechanisms of Elimination Reactions. William H. Saunders, Jr., and Anthony F. Cockerill. Wiley-Interscience, New York, 1973. xii, 640 pp., illus. \$19.95.

Methods in Cancer Research. Vol. 8.



And it often succeeds where other instruments fail.

Homogenization by sound waves means that tissues are broken down quickly to subcellular level without destruction of enzyme activity. You'd be hard-pressed to do that with other kinds of mixers.

In the applications field, the Polytron has proved so effective in inducing physical and chemical change that it has already revolutionized many procedures. Whether it be for dispersing, homogenizing, emulsifying or disrupting, a Polytron is available in the size to meet your specific requirements.

Contact us if you have any questions. Both literature and a demonstration are available on request.



Brinkmann Instruments, Inc. Cantiague Road, Westbury, L. I., N.Y. 11590 Brinkmann Instruments (Canada), Ltd. 50 Galaxy Boulevard, Rexdale (Toronto), Ontario,

Harris Busch, Ed. Academic Press, New York, 1973. xx, 424 pp., illus. \$28.50.

Photochemistry. Vol. 4. A Review of the Literature Published between July 1971 and June 1972. D. Bryce-Smith, Senior Reporter. Chemical Society, London, 1973. xiv, 980 pp., illus. £16. A Specialist Periodical Report.

Physical Processes in Lasers. D. V. Skobel'tsn, Ed. Translated from the Russian edition (Moscow, 1971) by James S. Wood. Consultants Bureau (Plenum), New York, 1973. viii, 182 pp., illus. Paper, \$29.50. Proceedings (Trudy) of the P. N. Lebedev Physics Institute, vol. 56

Physico-Chemical Properties of Nucleic

Acids. Vol. 2, Structural Studies on Nucleic Acids and Other Biopolymers. J. Duchesne, Ed. Academic Press, New York, 1973. xvi, 374 pp., illus. \$21.

Prediction and Development of Industrial Work Performance. Gavriel Salvendy and W. Douglas Seymour. Wiley-Interscience, New York, 1973. xvi, 352 pp., illus. \$19.95. Wiley Series in Human Factors.

Primate Locomotion. Some Links with Evolution and Morphology. Jack T. Stern and Charles E. Oxnard. Karger, New York, 1973. vi, 94 pp., illus. Paper, \$23.60. Primatologia, vol. 4, Lieferung

Principles of Immunology. Noel R.

Rose, Felix Milgrom, and Carel J. van Oss, Eds. Macmillan, New York, and Collier Macmillan, London, 1973. xii, 468 pp., illus. Cloth, \$14.95; paper, \$9.95.

Probability and Statistical Inference in Ancient and Medieval Jewish Literature. Nachum L. Rabinovitch. University of Toronto Press, Buffalo, N.Y., 1973. xiv, 206 pp. \$12.50.

The Proceedings of the Bertrand Russell Memorial Logic Conference. Uldum, Denmark, 1971. John Bell, Julian Cole, Graham Priest, and Alan Slomson, Eds. Bertrand Russell Memorial Logic Conference, Leeds, England, 1973. vi, 404 pp., illus. Paper, £5.

Stochastic Analysis. A Tribute to the Memory of Rollo Davidson. D. G. Kendall and E. F. Harding, Eds. Wiley, New York, 1973. xiv, 466 pp., illus. \$29.95. Wiley Series in Probability and Mathematical Statistics.

The Story of Southwest Research Center. A Private, Nonprofit, Scientific Research Adventure. Harold Vagtborg. Southwest Research Institute, San Antonio, Tex., 1973 (distributor, University of Texas Press, Austin). xiv, 610 pp., illus. \$15.

Structured Learning Therapy. Toward a Psychotherapy for the Poor. Arnold P. Goldstein. Academic Press, New York. 1973. xviii, 422 pp. \$19.50.

Sub-Regional Planning Studies. An Evaluation. T. M. Cowling and G. C. Steeley. Pergamon, New York, 1973. xii, 202 pp. \$11.50. Urban and Regional Planning Series, vol. 6.

Surface and Defect Properties of Solids. Vol. 2. A Review of the Recent Literature Published up to Apr. 1972. M. W. Roberts and J. M. Thomas, Senior Reporters. Chemical Society, London, 1973. xii, 278 pp., illus. £7.50. A Specialist Periodical Report.

Synopsis of Endocrine Pharmacology. John A. Thomas and Michael G. Mawhinney. University Park Press, Baltimore, 1973. xiv, 232 pp., illus. \$12.50.

Techniques in Protein Biosynthesis. Vol. 3. P. N. Campbell and J. R. Sargent, Eds. Academic Press, New York, 1973. xiv, 266 pp., illus, \$16.50.

Technological Injury. The Effect of Technological Advances on Environment, Life, and Society. J. Rose, Ed. Gordon and Breach, New York, ed. 2, 1973. xx, 224 pp., illus. Paper, \$7.15.

Traces on the Rhodian Shore. Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century. Clarence J. Glacken. University of California Press, Berkeley, 1973. xxx, 764 pp., illus. \$24. Reprint of the 1967 edition.

**Treatise on Adhesion and Adhesives.** Vol. 3. Robert L. Patrick, Ed. Dekker. New York, 1973. xiv, 240 pp., illus. \$21.75.

A Triune Concept of the Brain and Behaviour. Paul D. MacLean. Including papers presented at Queen's University, Kingston, Ontario, Feb. 1969. Published for the Ontario Mental Health Foundation by University of Toronto Press, Buffalo, N.Y., 1973. xii, 166 pp., illus. \$9.50. The Clarence M. Hincks Memorial Lectures, 1969.



# new benchtop CO₂ incubator

Designed to meet the most stringent research requirements, this new CO<sub>2</sub> incubator provides a carefully controlled, high-humidity CO<sub>2</sub> environment. The unit has an 8½ cubic foot working chamber, yet needs

little bench space. Temperature is electronically controlled from ambient to 70°C, and CO<sub>2</sub> tension is maintained from ambient to 20%. Other features include an automatic CO<sub>2</sub> recovery system, a visible water reservoir and a self-decontamination system. NBS manufactures a broad line of environmental chambers for incubation, humidification, refrigeration and controlled temperature shaking.

**ASK FOR BULLETIN CO-20S/174** 



Biological bench-top incubator



### NEW BRUNSWICK SCIENTIFIC CO., INC.

1130 Somerset Street, New Brunswick, N.J. 08903 • 201/846-4600 With NBS, Advanced Technology is a Way of Life.