similar patterns of variation, and can be divided into distinct subgroups of amino acid sequences. These findings have had important consequences in considering the possible origins of diversity in antibody molecules and have also aided in understanding the function and evolution of these molecules.

Many of the descriptions of experimental results are unnecessarily detailed, and this often detracts from the main thought. Although some clarity is provided by subtitles throughout the chapters and by summarizing sentences, in many cases these are not sufficient or come too late.

The major value of this book is in its compilation of the results of studies of the structure and biosynthesis of antibodies prior to the most recent surge of activity in the field. The translation into English is good, resulting in an easily read text. The account is well documented and does present a description of the problems and ideas that had emerged prior to 1968.

BRUCE A. CUNNINGHAM Rockefeller University, New York City

#### **Early Carbonate Petrology**

Carbonate Rocks. Limestones and Dolomites. LUCIEN CAYEUX. Translated from the French edition (Paris, 1935) and updated by Albert V. Carozzi. Hafner, Darien, Conn., 1970. xviii, 506 pp., illus. \$37.50. Sedimentary Rocks of France.

This book, published originally in 1935, is one of the classics in sedimentary geology. Its author was one of the early pioneers in the field now generally labeled "carbonate petrology." This book is his legacy in that field.

The book shows the wealth of data that were already in existence about 20 years before this subject became recognized as an important field of activity in sedimentary geology. Cayeux was one of that rare band of scientists who have been well ahead of their times. He made his mark as a researcher and teacher many years before his subject blossomed out. Yet the impact of his research and teaching activity, of which this book is one of the most solid documents, was practically lost when carbonate petrology became an established branch of sedimentary geology. Researchers in this field started from scratch without appreciating the heritage of the past. In part this lack of continuity was due to

the language barrier and in part to the unavailability of Cayeux's book.

Cayeux's book is organized in two parts, treating limestones and dolomites respectively. The limestones are considered under two separate headings, marine limestones and freshwater limestones. The marine limestones are further subdivided in terms of composition, textures, and structures. Descriptions follow of Recent carbonate sediments and ancient limestones. The treatment of dolomites, with many examples, is both descriptive and genetic. Most cited examples in this book are from France. Excellent photomicrographs illustrate the many fabrics this book discusses.

Hindsight reveals Cayeux as not only an astute and skilled observer but a giant in his field. The compilation of data in this book, especially the many interesting examples, can still serve a useful purpose today. Yet this book brings into sharp focus that it takes more than one man to develop a subject. Moreover it takes money. The sophisticated modeling of depositional environments and diagenetic patterns and sequences now almost taken for granted was the result of a massive infusion of funds by the world's major petroleum corporations. I wish Cayeux could have participated in that exciting period during the late 1950's and early 1960's.

Carozzi's translation comes out well and shows both author and translator as skilled writers. Carozzi attempts to update Cayeux's book by inserting in the text various remarks and references to show where the subject stands today. Although these comments are a useful adjunct to the book, they cannot really "update" Cayeux. The subject has developed in a different direction.

GERALD M. FRIEDMAN Department of Geology,

Rensselaer Polytechnic Institute, Troy, New York

#### **Books Received**

Advances in Blood Grouping, III. Alexander S. Wiener, Ed. Grune and Stratton, New York, 1970. xii, 658 pp., illus. \$19.75.

Advances in Quantum Electronics. Vol. 1. D. W. Goodwin, Ed. Academic Press,

New York, 1970. xiv, 274 pp., illus. \$12. Alkaloid-Bearing Plants and Their Contained Alkaloids, 1957–1968. J. J. Willaman and Hui-Lin Li. American Society of Pharmacognosy; Lloyd Library and Museum, Cincinnati, Ohio, 1970. viii, 286

pp., illus. Paper, \$6. Lloydia: Journal of Natural Products, vol. 33, No. 3A.

American Violence. A Documentary History. Richard Hofstadter and Michael Wallace, Eds. Knopf, New York, 1970. xvi, 496 pp. \$10.

The Americans and Civilization. Darcy Ribeiro. Translated from the Portuguese edition (1969) by Linton Lomas Barrett and Marie McDavid Barrett. Dutton, New York, 1971. 510 pp. \$15.75.

Analyse. Part 2, Topologie générale et analyse fonctionnelle. Laurent Schwartz. Hermann, Paris, 1970. 434 pp., illus. 58 F. Collection Enseignement des sciences, 11.

Annular Two-Phase Flow. G. F. Hewitt and N. S. Hall-Taylor. Pergamon, New York, 1970. x, 310 pp., illus. \$20.

Arctic Townsmen. Ethnic Backgrounds and Modernization. John J. and Irma Honigmann. Canadian Research Centre for Anthropology, St. Paul University, Ottawa, 1970. xx, 304 pp. + plates. Paper, \$7.

Asymmetric Organic Reactions. James D. Morrison and Harry S. Mosher. Prentice-Hall, Englewood Cliffs, N.J., 1971. xiv, 466 pp., illus. \$24.95. International Series in Chemistry.

Atherosclerosis. Proceedings of a symposium, Chicago, November 1969. Richard J. Jones, Ed. Springer-Verlag, New York, 1970. xxxii, 706 pp., illus. \$18. Atlas of Experimental Immunobiology

and Immunopathology. Byron H. Waksman. Yale University Press, New Haven, Conn., 1970. xx, 92 pp. + plates. \$20. Atmosphere, Weather, and Climate. R.

G. Barry and R. J. Chorley. Holt, Rinehart and Winston, New York, 1970. xvi, 320 pp., illus. \$9.50.

Autosensitization in Pemphigus and Bullous Pemphigoid. Ernst H. Beutner, Tadeusz P. Chorzelski, and Robert E. Jordon. Thomas, Springfield, Ill., 1970. xii, 194 pp., illus. \$22.75.

Basic Demonstrations in Biology. Edwin H. Battley and Edwin A. Phillips. Macmillan, New York, 1971. xii, 500 pp., illus. Paper, \$5.95. Biology Series.

Basic Ideas in Biology. Edwin A. Phillips. Macmillan, New York, 1971. xiv, 718 pp. + plates. \$10.95. Macmillan Core Series in Biology.

Beginner's Book of Geometry. Grace Chisholm Young and W. H. Young. Chelsea, New York, 1970. xvi, 236 pp., Young. illus. \$4.50. Reprint of the 1905 edition.

Beyond the Ivory Tower. The Frontiers of Public and Private Science. Solly Zuckerman. Taplinger, New York, 1971. xii, 244 pp., illus. \$7.95.

Bibliography of Non-Euclidean Geom-etry. D. M. Y. Sommerville. Chelsea, New York, ed. 2, 1970. xii, 436 pp. \$12. Biochimie de l'hérédité. François Presses Universitaires de Chapeville. France, Paris, 1970. 136 pp., illus. Paper. "Que sais-je?," No. 1409.

Biology. Gordon Alexander and Douglas G. Alexander. Barnes and Noble, New York, ed. 9, 1970. xxviii, 372 pp., illus. Paper, \$2.25. College Outline Series.

Biology of Bats. Vol. 1. William A. Wimsatt, Ed. Academic Press, New York, 1970. xii, 406 pp. + plates. \$25. Blaming the Victim. William Ryan.

(Continued on page 190)

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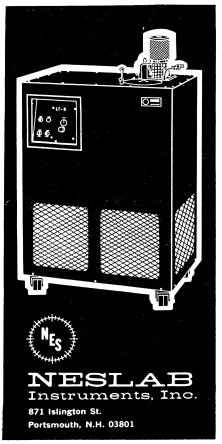
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#### BOOKS RECEIVED

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Pantheon (Random House), New York, 1971. xviii, 300 pp. \$6.95.

A Book of the Basques. Rodney Gallop. University of Nevada Press, Reno, 1970. xvi, 298 pp. + plates. \$7.

The Cambridge Ancient History. Vol. 1, Part 1, Prolegomena and Prehistory. I. E. S. Edwards, C. J. Gadd, and N. G. L. Hammond, Eds. Cambridge University Press, New York, ed. 3, 1971. xxiv, 758 pp. + plates. \$19.50.

Catalog of Chemical Analyses of Rocks from the Intersection of the African, Gulf of Aden, and Red Sea Rift Systems. Paul A. Mohr. Smithsonian Institution Press, Washington, D.C., 1970 (available from the Superintendent of Documents, Washington, D.C.). Unpaged. Paper, \$2.75.

Catalogue of Star Clusters and Associations. G. Alter, J. Ruprecht, and V. Vańysek. Second edition, edited by G. Alter, B. Balázs, and J. Ruprecht. Akadémiai Kiadó, Budapest, 1970. Booklet (76 pp.) + 3085 cards, boxed. \$36.

Catalyst Handbook. With Special Reference to Unit Processes in Ammonia and Hydrogen Manufacture. Wolfe, London; Springer-Verlag, New York, 1970. viii, 232 pp., illus. \$8.80.

Celestial Mechanics. Part 2. Shlomo Sternberg. Benjamin, New York, 1969. xviii, 304 pp., illus. Cloth, \$17.50; paper, \$7.95. Mathematics Lecture Note Series.

Cells and Organelles. Alex B. Novikoff and Eric Holtzman. Holt, Rinehart and Winston, New York, 1970. x, 338 pp., illus. Paper, \$6.25.

Central Concepts of Biology. Adela S. Baer, William E. Hazen, David L. Jameson, and William C. Sloan. Macmillan, New York, 1971. x, 386 pp., illus. \$8.95.

Changes in Differences in Earnings and Occupational Status of Men and Women, 1947–1967. Vernon T. Clover. Department of Economics, Texas Tech University, Lubbock, 1970. vi, 78 pp., illus. Paper. Studies in Economics and Business.

Changes in School Science Teaching. Evans, London; Methuen Educational, London, 1970 (order from Methuen Educational). 72 pp., illus. Paper, \$1.

Chemical and Biological Aspects of Steroid Conjugation. Seymour Bernstein and Samuel Solomon, Eds. Springer-Verlag, New York, 1970. xiv, 530 pp., illus. \$28.

Chemical Technology: An Encyclopedic Treatment. The Economic Application of Modern Technological Developments. Based upon a Work Originally Devised by the Late Dr. J. F. van Oss. Vol. 2, Non-Metallic Ores, Silicate Industries, and Solid Mineral Fuels. T. J. W. van Thoor, General Ed. Barnes and Noble, New York, 1971. xxviii, 828 pp., illus. \$40.

The Chemical Technology of Wood. Hermann F. J. Wenzl. Translated from the German by Friedrich E. Brauns and Dorothy A. Brauns. Academic Press, New York, 1970. xviii, 692 pp., illus. \$35.

La Chimiothérapie. Michel Privat de Garilhe. Presses Universitaires de France, Paris, 1970. 136 pp., illus. Paper. "Que sais-je?," No. 1401.

Chordate Structure and Function. Allyn J. Waterman. Macmillan, New York, 1971. xvi, 588 pp., illus. \$12.95.

**Cities of the Prairie**. The Metropolitan Frontier and American Politics. Daniel J. Elazar. Basic Books, New York, 1970. xiv, 514 pp., illus. \$15. Studies in Federalism.

**Civil Engineering Management.** James M. Antill. Elsevier, New York, 1970. x, 340 pp. + plates. \$16.

Concise Anatomy. Linden F. Edwards and George R. L. Gaughran. McGraw-Hill, New York, ed. 3, 1971. x, 582 pp., illus. \$11.95.

Contemporary Scientific Psychology. Albert R. Gilgen, Ed. Academic Press, New York, 1970. xvi, 328 pp., illus. \$12.

The Contexts of Social Mobility. Ideology and Theory. Anselm L. Strauss. Aldine, Chicago, 1971. xvi, 264 pp. \$8.50. Current Problems in Dermatology. Vol.

3. J. W. H. Mali, Ed. Karger, New York, 1970. vi, 194 pp., illus. \$16.55.

The Design of Discord. Studies of Anomie. Elwin H. Powell. Oxford University Press, New York, 1970. xvi, 248 pp., illus. \$7.50.

Detonics of High Explosives. C. H. Johansson and P. S. Persson. Academic Press, New York, 1970. xiv, 330 pp., illus. \$15.

Development of Species Identification in Birds. An Inquiry into the Prenatal Determinants of Perception. Gilbert Gottlieb. University of Chicago Press, Chicago, 1971. xii, 176 pp., illus. \$7.50.

Dictionary of Science and Technology. German-English. Compiled and arranged by A. F. Dorian with the cooperation of L. da Costa Monsanto. Elsevier, New York, 1970. xii, 880 pp. \$30.50.

The Education of Indian Children and Youth. Summary Report and Recommendations, Series 4, No. 6. Robert J. Havighurst. Training Center for Community Programs, University of Minnesota, Minneapolis, 1970. iv, 65 pp., illus. Paper, \$1. The National Study of American Indian Education.

Effects of Metals on Cells, Subcellular Elements, and Macromolecules. Proceedings of a conference, Rochester, N.Y. Jack Maniloff, James R. Coleman, and Morton W. Miller, Eds. Thomas, Springfield, Ill., 1970. xvi, 398 pp., illus. \$20.50.

**Electrical Papers.** Oliver Heaviside. Chelsea, New York, 1970. In two volumes, xxxvi, 1178 pp., illus. \$29.50. Reprint of the 1892 edition.

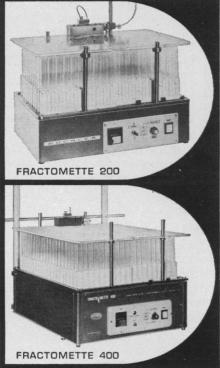
Electron Microscopes. J. A. Swift. Kogan Page, London; Barnes and Noble, New York, 1970. 98 pp., illus. \$6.50. Laboratory Instruments and Techniques Series.

Elements of Quantum Mechanics with Chemical Applications. Jean Barriol. Translated from the French edition (Paris, 1966) by J. Warren Blaker. Barnes and Noble, New York, 1971. xviii, 378 pp., illus. Paper, \$7.95. International Textbook Series.

Elsevier's Dictionary of Metal Cutting Tools. In seven languages: English, German, Dutch, French, Spanish, Italian, and Russian. Compiled and arranged by G. Schuurmans Stekhoven and W. B. Valk. Elsevier, New York, 1970. viii, 458 pp., illus. \$25.

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**Elsevier's Dictionary of Nuclear Science** and Technology. In six languages-English, French, Spanish, Italian, Dutch, and German. Compiled and arranged by W. E. Clason. Elsevier, New York, ed. 2, 1970. x, 788 pp. \$30. Environment. A Challenge for Modern

Society. Lynton Keith Caldwell. Published for the American Museum of Natural History by the Natural History Press, Garden City, N.Y., 1970. xviii, 292 pp. \$7.95.

Evolution of the Plant Kingdom. Benjamin Zarr. Published by the author, P.O. Box 495, Worcester, Mass., 1970. 102 pp. Paper, \$3.

Excavations at Hacilar. James Mellaart. Published for the British Institute of Archaeology at Ankara by the Edinburgh University Press, Edinburgh, 1970 (U.S. distributor, Aldine, Chicago). Vol. 1, xiv, 250 pp. + plates; vol. 2, viii, 526 pp., illus. Boxed, \$50. Occasional Publications of the British Institute of Archaeology at Ankara, No. 9.

**Experimental Neutron Resonance Spec**troscopy. J. A. Harvey, Ed. Academic Press, New York, 1970. xiv, 534 pp., illus. \$29.50.

Explanation in the Behavioural Sciences. Robert Borger and Frank Gioffi, Eds. Cambridge University Press, New York, 1971. xiv, 520 pp., illus. \$15.

The Fat-Soluble Vitamins. Proceedings of a symposium, Madison, Wis., 1969. H. F. DeLuca and J. W. Suttie, Eds. University of Wisconsin Press, Madison, 1970. xviii, 532 pp., illus. \$15. Ferroelectric Materials and Ferroelec-tricity. Compiled by T. F. Connolly and

Errett Turner. IFI/Plenum, New York, 1970. xii, 686 pp. \$35. Solid State Physics Literature Guides, vol. 1.

Fifty Years with Science. J. G. Crowther. Barrie and Jenkins, London, 1970 (U.S. distributor, Humanities Press, New York). 348 pp. \$10.50.

Foreign Investment in the Petroleum and Mineral Industries. Case Studies of Investor-Host Country Relations. Raymond F. Mikesell. Published for Resources for the Future by Johns Hopkins Press, Baltimore, Md., 1971. xviii, 460 pp., illus. \$15.

**Formulas and Theorems in Pure Mathematics.** George S. Carr. Chelsea, New York, 1970. xl, 952 pp., + foldout plates. \$12.50. Second edition of A Synopsis of Elementary Results in Pure Mathematics (1886).

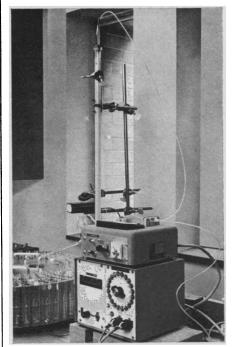
Gas Chromatography. C. Simpson. Kogan Page, London; Barnes and Noble, New York, 1970. 148 pp., illus. \$8. Lab-Instruments oratory and Techniques Series.

General Chemistry Laboratory Opera-tions. Lawrence E. Conroy, R. Stuart Tobias, and Robert C. Brasted. Macmillan, New York, ed. 2, 1971. x, 296 pp., illus. Spiral bound, \$5.50.

Geochemical Exploration of the Moon and Planets. I. Adler and J. I. Trombka. Springer-Verlag, New York, 1970. x, 244 pp., illus. \$16. Physics and Chemistry in Space, vol. 3.

Geochemical Facies Analysis. Werner Ernst. Elsevier, New York, 1970. vi, 152 pp., illus. \$9.50. Methods in Geochemistry and Geophysics, vol. 11.

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Geology and Virginia. Richard V. Dietrich. University Press of Virginia, Charlottesville, 1971. xiv, 214 pp. + plates. \$12.95.

Geology of Clays. Weathering, Sedimentology, Geochemistry. Georges Millot. Translated from the French edition by W. R. Farrand and Helénè Paquet. Masson, Paris; Chapman and Hall, London; Springer-Verlag, New York, 1970. xvi,

430 pp., illus. \$16.80. Geology of Giant Petroleum Fields. A Symposium of Papers on Giant Fields of the World including Those Presented at the 53rd Annual Meeting of the Association in Oklahoma City, April 1968. Michel T. Halbouty, Ed. American Association of Petroleum Geologists, Tulsa, Okla., 1970. viii, 576 pp., illus. \$20.

A Handbook of Aids for Teaching Junior-Senior High School Mathematics. Stephen Krulik. Saunders, Philadelphia, 1971. viii, 120 pp., illus. Paper, \$2.95.

Handbook of Clinical Neurology. Vol. 8. Diseases of Nerves, Part 2. P. J. Vinken and G. W. Bruyn, Ed. North-Holland, Amsterdam; Elsevier, New York, 1970. xii, 556 pp., illus. \$51.50.

Histological Laboratory Methods. Brenda D. Disbrey and J. H. Rack. Livingstone, Edinburgh, 1970 (U.S. distributor, Williams and Wilkins, Baltimore, Md.). xvi, 414 pp., illus. \$10.25.

Historia Natural del Conejillo de Indias. Cuy, Curí, Cobayo. Laurentino Muñoz. Published by the author, Bogotá, Colombia, 1970. 614 pp., illus. Paper, \$8.

A History of Formal Logic. I. M. Bocheński. Translated from the German edition (Munich, 1956) and edited by Ivo Thomas. Chelsea, New York, ed. 2, 1970. xxii, 578 pp. \$11.50.

Hospital Modernization and Expansion. E. Todd Wheeler. McGraw-Hill, New York, 1971. xvi, 262 pp., illus. \$22.50.

Intellectual Maturity of Children as Measured by the Goodenough-Harris Drawing Test, United States. Public Health Service, Rockville, Md., 1970 (available from the Superintendent of Documents, Washington, D.C.). iv, 40 pp., illus. Paper, 50¢.

An Introduction to Blood Group Serology. Theory, Techniques, Practical Applications. Kathleen E. Boorman and Barbara E. Dodd. Churchill, London, ed. 4, 1970 (U.S. distributor, Williams and Wilkins, Baltimore, Md.). xvi, 464 pp., illus. \$15.

Introduction to the Anatomy and Physiology of the Nervous System. David Bowsher. Davis, Philadelphia, ed. 2, 1970. viii, 186 pp., illus. Paper, \$3.50.

Introduction to the Fine Structure of Plant Cells. Myron C. Ledbetter and Keith R. Porter. Springer-Verlag, New York, 1970. xii, 188 pp., illus. \$14.80.

Ion Exchange in the Process Industries. A conference, London, July 1969. Society of Chemical Industry, London, 1970. vi, 450 pp., illus. \$24.

The Irreducible Representations of Space Groups. J. Zak, A. Cashier, M. Glück, and Y. Gur, Eds. Benjamin, New York, 1969. x, 272 pp., illus. \$35.

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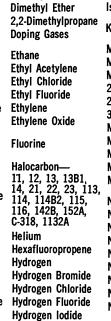
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cis- and trans-2-Butene **Carbon Dioxide** Carbon Monoxide **Carbonyl Fluoride Carbonyl Sulfide Carrier Gases** Chlorine **Chlorine Trifluoride** Chlorotrifluoroethylene Cyanogen Cyclopropane



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Service. Pat L. Walter, Ed. Elsevier, New York, 1970. viii, 548 pp. \$20.25. Electroencephalography and Clinical Neurophysiology, Suppl. 29.

Laboratory Directions for Analytical Separation and Determinations. A Manual for Quantitative Analysis. C. T. Kenner. Macmillan, New York, 1971, viii, 216 pp., illus. Paper, \$3.95.

Laboratory Exercises in Physical Science. Erwin F. Lange. Pacific Books, Palo Alto, Calif., ed. 3, 1970. xii, 146 pp., illus. Paper, \$3.95.

The Later Years of Childbearing. Larry L. Bumpass and Charles F. Westoff. Princeton University Press, Princeton, N.J., 1971. xvi, 168 pp., illus. \$7.50.

Logic, Computers, and Sets. Hao Wang. Chelsea, New York, 1970. xii, 684 pp. \$9.95. Reprint of A Survey of Mathematical Logic (1962).

Man in Ecological Perspective. James F. Metress, Ed. MSS Educational Publishing Co., New York, 1971. 256 pp., illus. Paper, \$7.50.

Management of Lakes and Ponds. George W. Bennett. Van Nostrand Reinhold, New York, ed. 2, 1971. xxii, 376 pp., illus. \$15.95. Mental Subnormality in the Commu-

nity. A Clinical and Epidemiologic Study. Herbert G. Birch, Stephen A. Richardson, Dugald Baird, Gordon Horobin, and Raymond Illsley. Williams and Wilkins, Baltimore, Md., 1970. x, 200 pp., illus. \$12.50.

Metallorganische Verbindungen. Li, Na, K, Rb, Cs, Cu, Ag, Au. C. Bähr, P. Burba, H. F. Ebel, A. Lüttringhaus, and U. Schöllkopf, Eds. Thieme, Stuttgart, 1970. xxviii, 904 pp., illus. DM 302.40. Methoden der organischen Chemie (ed. 4), vol. 13, part 1.

Microtechniques. A Laboratory Guide. Ruth L. Willey. Macmillan, New York, 1971. x, 100 pp., illus. Paper, \$3.95.

The Minority Student on the Campus. Expectations and Possibilities. Papers from the Twelfth Annual College and University Self-Study Institute, Berkeley, July 1970. Robert A. Altman and Patricia O. Snyder, Eds. Center for Research and Development in Higher Education, University of California, Berkeley; Western Interstate Commission for Higher Education, Boulder, Colo., 1970. xii, 220 pp. Paper. \$3.50.

Modern Materials. Advances in Development and Applications. Vol. 7. Bruce W. Gonser, Ed. Academic Press, New York, 1970. xiv, 354 pp., illus. \$18.50.

Monetary and Fiscal Policy in a Growing Economy. Duncan K. Foley and Miguel Sidrauski. Macmillan, New York, 1971. xvi, 304 pp., illus. \$9.95.

Numerical Control Users' Handbook. W. H. P. Leslie, Ed. McGraw-Hill, New York, 1970. xii, 482 pp., illus. \$25.

Oceanology Today. Man Exploits the Sea. Robert Barton. Doubleday, New York, 1971. 192 pp., illus. \$5.95. Science Series.

Old World Monkeys. Evolution, Systematics, and Behavior. Proceedings of a conference, Burg Wartenstein, Austria, July 1969. J. R. Napier and P. H. Napier, Eds. Academic Press, New York, 1971. xvi, 660 pp., illus. \$19.50.

Phase Equilibrium in Process Design. Harold R. Null. Wiley-Interscience, New York, 1971. xii, 275 pp., illus. \$16.95.

Physiology of Color and Pattern Vision. Koiti Motokawa. Igaku Shoin, Tokyo; Springer-Verlag, New York, 1970. iv, 284 pp., illus. \$18.

Physics and Beyond. Encounters and Conversations. Werner Heisenberg. Translated from the German by Arnold J. Pomerans. Harper and Row, New York, 1971. xx, 250 pp. \$7.95. World Perspectives, vol. 42.

The Prehistory of the Tehuacan Valley. Vol. 3, Ceramics. Richard S. MacNeish, Frederick A. Peterson, and Kent V. Flannery. Published for the Robert S. Peabody Foundation by the University of Texas Press, Austin, 1971. xiv, 306 pp. + plates. \$15.

Principes de physiologie gastro-intestinale. G. B. J. Glass. Hermann, Paris, ed. 2, 1970. 244 pp., illus. Paper, 30 F. Collection méthodes.

Principles and Practice of Cholera Control. World Health Organization, Geneva, 1970 (available from the American Public Health Association, New York). 140 pp., illus. Paper, \$2.75. Public Health Papers, No. 40.

Proceedings of the North American Paleontological Convention, Chicago, September 1969. Allen, Lawrence, Kan., 1970. Part E, Evolution of Communities. pp. 409-550, illus. Paper, \$5.25. Part F, Correlation by Fossils. pp. 551-703, illus. Paper, \$5.25.

**Proceedings of the Tenth International** Conference on the Physics of Semiconductors. Cambridge, Mass., August 1970. Seymour P. Keller, John C. Hensel, and Frank Stern, Eds. U.S. Atomic Energy Commission, Oak Ridge, Tenn., 1970 (available as CONF-700801 from the National Technical Information Service, Springfield, Va.). xiv, 866 pp., illus. Paper,

Progress in Phytochemistry. Vol. 2. L. Reinhold and Y. Liwschitz, Eds. Interscience (Wiley), New York, 1970. x, 512 pp., illus. \$27.50.

Psychopharmacology and the Individual Patient. Proceedings of a meeting, San Juan, Puerto Rico, December 1968. J. R. Wittenborn, Solomon C. Goldberg, and Philip R. A. May, Eds. Raven, New York, 1970. 256 pp., illus. \$12.95.

Pulsed High Magnetic Fields. Physical Effects and Generation Methods concerning Pulsed Fields up to the Megaoersted Level. Heinz Knoepfel. North-Holland, Amsterdam; Elsevier, New York, 1970. xxiv, 372 pp., illus. \$23.

The Quality of Mercy. A Report on the Critical Condition of Hospital and Medical Care in America. Selig Greenberg. Atheneum, New York, 1971. xx, 388 pp., illus. \$6.95.

Quantum Kinematics and Dynamics. Julian Schwinger. Benjamin, New York, 1970. x, 378 pp. Cloth, \$17.50; paper, \$7.95. Frontiers in Physics.

Radiation Biochemistry. Vol. 2, Tissues and Body Fluids. Georg B. Gerber and Kurt I. Altman. Academic Press, New York, 1970. xvi, 396 pp., illus. \$17

Readings in Behavior. Joseph M. Notterman. Random House, New York, 1970. xiv, 386 pp., illus. Paper, \$4.

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E. LEITZ, INC., Rockleigh, N.J. 07647 Circle No. 83 on Readers' Service Card Recent Trends in Yeast Research. A symposium, Plattsburgh, N.Y., August 1969. Donald G. Ahearn, Ed. School of Arts and Sciences, Georgia State University, Atlanta, 1970. vi, 206 pp., illus. Paper, \$4.50. Spectrum: Monograph Series in the Arts and Sciences, vol. 1.

Redistribution Reactions. J. C. Lockhart. Academic Press, New York, 1970. xiv, 174 pp., illus. \$9.50.

Regulation of Body Fluid Volumes by the Kidney. Proceedings of a symposium, Smolenice Castle, Czechoslovakia, June 1969. J. H. Cort and B. Lichardus, Eds. Karger, New York, 1970. viii, 192 pp., illus. \$13.70.

Respiration and Circulation. Compiled and edited by Philip L. Altman and Dorothy S. Dittmer. Federation of American Societies for Experimental Biology, Bethesda, Md., 1971. 930 pp., illus. \$30.

Rice Breeding with Induced Mutations II. Report of a meeting, Oiso, Japan, August 1968. International Atomic Energy Agency, Vienna, 1970 (U.S. distributor, UNIPUB, New York). viii, 128 pp., illus. Paper, \$4. Technical Reports Series, No. 102.

Sanitary Techniques in Food Service. Karla Longrée and Gertrude G. Blaker. Wiley, New York, 1971. xiv, 226 pp., illus. Cloth, \$7.50; paper, \$4.95.

La Science contre la faim. Michel Cépède. Presses Universitaires de France, Paris, 1970. 136 pp., illus. Paper, 18 F. La Science Vivante.

A Science Policy for Canada. Report of the Senate Special Committee on Science Policy. Maurice Lamontagne, Chairman. Vol. 1, A Critical Review: Past and Present. Queen's Printer, Ottawa, 1970. viii, 328 pp., illus. \$3.50.

The Science of Fluids. Irving Michelson. Van Nostrand Reinhold, New York, 1970. xiv, 300 pp., illus. \$11.95.

Selective History of Theories of Visual Perception, 1650–1950. Nicholas Pastore. Oxford University Press, New York, 1971. x, 454 pp., illus. \$10.

Signals for Survival. Niko Tinbergen and Hugh Falkus. Drawing by Eric Ennion. Clarendon (Oxford University Press), New York, 1971. 80 pp. \$8.

The Social Responsibility of the Scientist. Martin Brown, Ed. Free Press, New York, 1971. xiv, 282 pp., illus. Cloth, \$7.95; paper, \$3.95.

Sound. From Communication to Noise Pollution. Graham Chedd. Doubleday, New York, 1971. 192 pp., illus. \$5.95.

Sources of Color Science. David L. MacAdam, Ed. M.I.T. Press, Cambridge, Mass., 1970. xiv, 282 pp., illus. \$12.50.

Spectroscopies de la molécule. Jean Barriol and Jean-Louis Rivail. Presses Universitaires de France, Paris, 1970. 224 pp., illus. Paper, 18 F. Le Chimiste.

The Stars in Their Courses. Isaac Asimov. Doubleday, New York, 1971. xiv, 200 pp. \$5.95.

Stratigraphy of the Upper Devonian Shell Rock Formation of North-Central Iowa. Donald L. Koch. Iowa Geological Survey, Iowa City, 1970. iv, 124 pp. + plates + map. Paper. Report of Investigations 10.

Talking about Relativity. J. L. Synge.

North-Holland, Amsterdam, 1971 (U.S. distributor, Elsevier, New York). 194 pp., illus. \$5.75.

Textbook of Medical Physiology. Arthur C. Guyton. Saunders, Philadelphia, ed. 4, 1971. xxxvi, 1032 pp., illus. \$18.50.

Theory of Cost and Production Functions. Ronald W. Shephard. Princeton University Press, Princeton, N.J., 1971. xii, 308 pp., illus. \$15. Studies in Mathematical Economics, No. 4.

Theory of Viscoelasticity. An Introduction. R. M. Christensen. Academic Press, New York, 1971. xiv, 246 pp. \$13.50.

**Topics-Aids.** Instructional Resources for General Chemistry. Rod O'Connor, Harry Zeitlin, and Ann Zeitlin. Advisory Council on College Chemistry, 1970. vi, 74 pp., illus. Paper. Serial Publication No. 48.

**Topics in Ring Theory.** Jacob Barshay. Benjamin, New York, 1969. xiv, 146 pp., illus. Cloth, \$15; paper, \$6.95. Mathematics Lecture Note Series.

Touch, Tickle and Pain. Part 1. Yngve Zotterman. Pergamon, New York, 1970. xvi, 270 pp., illus. \$8.

Traité de paléobotanique. Tome 4, Fascicule 1, Filicophyta. H. N. Andrews, C. A. Arnold, Ed. Boureau, J. Doubinger, and S. Leclercq. Masson, Paris, 1970. iv, 520 pp., illus. 290 F.

A Tropical Rain Forest. A Study of Irradiation and Ecology at El Verde, Puerto Rico. Howard T. Odum and Robert F. Pigeon, Eds. U.S. Atomic Energy Commission, Washington, D.C., 1970 (available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Va.). Unpaged, illus. \$10.

Understanding Drug Use. An Adult's Guide to Drugs and the Young. Peter Marin and Allan Y. Cohen. Harper and Row, New York, 1971. x, 164 pp. \$5.95.

Venous Thrombosis and Pulmonary Embolism. Michael Hume, Simon Sevitt, and Duncan P. Thomas. Harvard University Press, Cambridge, Mass., 1970. xviii, 456 pp., illus. \$16. A Commonwealth Fund Book.

Victory over Pain. Morton's Discovery of Anaesthesia. Betty MacQuitty. Taplinger, New York, 1971. 208 pp., illus. \$5.95.

Visual Perception of Form. Leonard Zusne. Academic Press, New York, 1971. xii, 548 pp., illus. \$19.50.

With Man in Mind. An Interdisciplinary Prospectus for Environmental Design. Constance Perin. M.I.T. Press, Cambridge, Mass., 1970. xii, 186 pp. \$7.50.

A Wittgenstein Workbook. Christopher Coope, Peter Geach, Timothy Potts, and Roger White. University of California Press, Berkeley, 1971. 52 pp. Paper, \$1.75.

Worked Examples in X-Ray Spectrometry. R. H. Jenkins and J. L. de Vries. Springer-Verlag, New York, 1970. xii, 134 pp., illus. \$5.80. Philips Technical Library.

Yearbook of the Association of Pacific Coast Geographers. Vol. 32, 1970. John F. Gaines, Ed. Published for the Association by Oregon State University Press, The Yeasts. A Taxonomic Study. J.

Lodder, Ed. North-Holland, Amsterdam, ed. 2, 1970. xvi, 1386 pp., illus. \$65.