

standing of how macroscopic physical properties follow from systems of equations which are essentially for functions on the microscopic scale.

These articles are followed by Delcroix's discussion of the microscopic theory of ionized gases in which he relates physical quantities to various distribution functions and describes several common approximations which are useful for plasmas. There are three articles by Kruskal: the first discusses energy principles for equilibrium of a plasma in a magnetic field; the second describes a generalization of the method of Kryloff and Bogoliubov for integrating ordinary differential equations with nearly periodic solutions (an illustrative example would have clarified this work); the third presents an all-too-brief account of the intricacies of Landon damping. The article by Kaufman on plasma transport theory is a long account of results which can be obtained by starting from the Liouville equation and using the more popular of the current approximations in plasma theory. Denisse then discusses some of the elementary and well-known results on the dispersion relations which can be obtained starting from the Boltzmann equation. In the final article, Schatzman applies some of the results of plasma theory to astrophysical data.

This volume is an interesting survey of current problems in statistical mechanics and plasma physics. However, for a photo-offset volume, the price is prohibitive.

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## New Books

### Biological and Medical Sciences

**Aids to Histology.** Geoffrey H. Bourne. Bailliere, Tindall and Cox, London, ed. 7, 1960 (order from Williams & Wilkins, Baltimore, Md.). 175 pp. Illus. \$3.

**Anatomy of the Monocotyledons. 1, Gramineae.** C. R. Metcalfe. Oxford Univ. Press, New York, 1960. 792 pp. \$13.45.

**The Biotic Associations of Cockroaches.** Miscellaneous Collections, vol. 141. Louis M. Roth and Edwin R. Willis. Smithsonian Institution, Washington, D.C., 1960. 476 pp. Illus. + plates. A compilation of material from approximately 1700 sources, including correspondence with other workers.

**Biological Activities of Steroids in Relation to Cancer.** Gregory Pincus and

Erwin P. Vollmer, Eds. Academic Press, New York, 1960. 546 pp. Illus. \$15. Proceedings of a conference attended by more than 200 scientists, 27 September–2 October 1959; 32 papers by 63 contributors.

**Analogue Computers. I. I. Eterman.** Translated from the Russian by G. Segal. B. H. Venning, Ed. Pergamon, New York, 1960. 273 pp. Illus. \$8.50.

**Biology Code of the Chemical-Biological Coordination Center.** vols. 1 and 2. Publ. No. 790. National Academy of Sciences–National Research Council, Washington, D.C., 1960. 230 pp.; 216 pp. \$7 each; \$12 per set. The Code was developed by the Center and was used for storing information on IBM punched cards. Volume 1 contains the series of classification schemes, code items, and symbols; volume 2 describes each of the lists and gives explanations and instructions for use of the code symbols.

**Chemobiodynamics and Drug Design.** F. W. Schueler. McGraw-Hill, New York, 1960. 652 pp. Illus. \$19.50.

**Comparative Biochemistry of Photo-reactive Systems.** Mary Belle Allen, Ed. Academic Press, New York, 1960. 449 pp. Illus. \$12.

**Developing Cell Systems and Their Control.** Dorothea Rudnick, Ed. Ronald, New York, 1960. 246 pp. Illus. \$8.

**The Disease Concept of Alcoholism.** E. M. Jellinek. Hillhouse Press, New Haven, Conn., 1960. 256 pp. \$6.

**The Enzymes.** vol. 4, pt. 4, *Hydrolytic Cleavage*. Peptide bond cleavage, other C=N bond cleavage, glycoside bond cleavage, carboxyl ester cleavage. Paul D. Boyer, Henry Lardy, and Karl Myrbäck, Eds. Academic Press, New York, 1960. 651 pp. Illus. \$18.

**Faune de France. 64. Isopodes Terrestres.** Albert Vandel. Lechevalier, Paris, 1960. 416 pp. Illus. NF. 115.

**Fundamentals and Possibilities in Anti-tuberculosis Vaccination.** Richard Prigge and Gunther Heymann. Translated by H. Chandler Elliott. Univ. of Toronto Press, Toronto, Canada, 1960. 116 pp. \$5.

**Genetics.** H. Eldon Sutton, Ed. Josiah Macy, Jr. Foundation, New York, 1960. 229 pp. Illus. \$6. Transactions of the first conference, 19–22 October 1959.

**Guide to the Study of the Anatomy of the Shark, *Necturus*, and the Cat.** Samuel Eddy, Clarence P. Oliver, and John P. Turner. Wiley, New York, ed. 3, 1960. 141 pp. Illus. \$3.50.

**International Review of Cytology.** vol. 9. G. H. Bourne and J. F. Danielli, Eds. Academic Press, New York, 1960. 434 pp. Illus. \$13.

**Lectures on Haematology.** F. G. J. Hayhoe, Ed. Cambridge Univ. Press, New York, 1960. 257 pp. Illus. \$11.50.

**Lipide Metabolism.** Konrad Bloch, Ed. Wiley, New York, 1960. 424 pp. Illus. \$10.50.

**The Mango.** Botany, cultivation, and utilization. Lal Behari Singh. Hill, London; Interscience, New York, 1960. 451 pp. Illus. \$13.25.

**A Monograph of the Immature Stages of Neotropical Timber Beetles (*Cerambycidae*).** E. A. J. Duffy. British Museum

(Natural History), London, 1960. 335 pp. Illus. + plates. £6 6s. This volume, the third in a series, deals with the *Cerambycidae* of the Neotropical region: the greater part of Mexico, Central America, the Caribbean and the whole of the South American continent. No attempt is made to deal with strictly North American (Nearctic) *Cerambycidae*, except when a species extends in distribution as far south as Mexico or occurs in both regions.

**The Nature of Animal Colors.** H. Munro Fox and Gwynne Vevers. Macmillan, New York, 1960. 256 pp. Illus. \$6.50. An account of animal colors from physical, chemical, and physiological standpoints.

**Nematology.** Fundamentals and recent advances with emphasis on plant parasitic and soil forms. J. N. Sasser and W. R. Jenkins, Ed. Univ. of North Carolina, Chapel Hill, 1960. 497 pp. Illus.

**The Nucleic Acids.** vol. 3. Erwin Chargaff and J. J. Davidson, Eds. Academic Press, New York, 1960. 604 pp. Illus. \$18.

**Nucleic Acid Outlines.** vol. 1, *Structure and Metabolism*. Van R. Potter. Burgess, Minneapolis, Minn., 1960. 300 pp. \$5.

**The Organization of Cells and Other Organisms.** Laurence Picken. Oxford Univ. Press, London, 1960. 666 pp. 84s.

**Phosphorus Metabolism of Brain.** P. J. Heald. Pergamon, New York, 1960. 202 pp. Illus. \$6.50.

**Plant Disease Handbook.** Cynthia Westcott. Van Nostrand, Princeton, N.J., ed. 2, 1960. 832 pp. Illus. \$13.50.

**Plant Physiology.** A treatise. vol. 1B, *Photosynthesis and Chemosynthesis*. F. C. Steward, Ed. Academic Press, New York, 1960. 365 pp. Illus. \$12.

**Principles of Genetics.** Eldon J. Gardner. Wiley, New York, 1960. 373 pp. Illus. \$7.50.

**Proceedings of the Centenary and Bicentenary Congress of Biology, Singapore, 2–9 December 1958.** R. D. Purchon, Ed. Univ. of Malaya Press, Singapore, 1960. 341 pp. Illus. \$13.50. Papers delivered in commemoration of the works of Darwin, Wallace, and Linnaeus.

**Radioisotope Laboratory Techniques.** R. A. Faies and B. H. Parks. Pitman, New York, ed. 2, 1960. 256 pp. Illus. \$5.75.

**Standard Methods for the Examination of Water and Wastewater.** Including bottom sediments and sludges. American Public Health Assoc., New York, ed. 11, 1960. 647 pp. \$10.

**Stochastic Population Models.** In ecology and epidemiology. M. S. Bartlett, Methuen, London; Wiley, New York, 1960. 100 pp. \$2.

**Survey of Research in Gestation and the Developmental Sciences.** Jack Davies. Williams and Wilkins, Baltimore, Md., 1960. 211 pp. \$6.

**Tätigkeitsbericht der Forschungsgemeinschaft der Naturwissenschaftlichen. Technischen und Medizinischen Institut der Deutschen Akademie der Wissenschaftler zu Berlin, 1959.** Akademie Verlag, Berlin, 1960. 398 pp.

**Textbook of Pharmacognosy.** T. E. Wallis. Churchill, London; Little, Brown, Boston, Mass., ed. 4, 1960. 651 pp. Illus. \$10.