

marks about effects of a nuclear war imply that it would not necessarily lead to genetic degradation of the human race.

Three chapters deal with molecular biology. E. P. Geiduschek and A. Holtzer open their chapter on DNA and muscle protein molecular structure with a statement of a stern criterion in molecular biology. They point out that an understanding of a biological process means "that it is possible to trace individual molecular events that give rise to the observed macroscopic behavior". This degree of understanding is not yet available, but their review of the DNA and muscle protein problems is timely and excellent. In other directions in molecular biology R. P. Durbin, P. F. Curran, and A. K. Solomon review ion and water transport in the intestinal tract, and S. A. Berson and R. S. Yalow review the use of isotopic tracers in the study of diabetes.

There are four chapters that might be classified under physical techniques in biology. W. J. Fry describes extensively the uses of ultrasound in the study of the central nervous system. W. H. Freygang, Jr., and L. Sokoloff describe the measurement of the circulation about the central nervous system by means of radioactive inert gas. B. Jacobson and R. S. Mackay review radiological contrast enhancing methods, and B. Theorell gives a summary of current cell studies with microspectrography.

One of the most fascinating subjects of modern cytology is the deliberate change of growth in living cells. E. Zeuthen describes artificial and induced periodicity in living cells. The controlled perturbation of cell division by means of heat or cold or chemical environment promises to be an important means for finding out about the growth process, as is well shown in Zeuthen's review.

Volume 6 is highly commendable for its selection of topics which, along with those topics given in previous volumes of this series, review subjects of major importance to the biophysicist.

The Neutron Story. By Donald J. Hughes. 158 pp. Doubleday and Co., Inc., New York, 1959. Paperbound \$95. Reviewed by E. R. Rae, *AERE, Harwell, England*.

THE author of this little pocket book is too well known in the field of neutron physics to need any introduction to specialists in this subject. *The Neutron Story* is not, of course, intended for such readers, but is one of a number of popular expositions on fundamental topics in physics entitled the "Science Study Series". As such, the book is aimed primarily at the high-school student, and the intelligent layman, and it gives a lively account of the history of the neutron from its discovery to its use in the study of nuclear and molecular structure, in cosmology, and in the operation of the nuclear reactor and the atomic bomb. The description is lucid and is devoid of the complication of mathematics. The text is copiously illustrated and a colored version of one of the illustrations appears on the cover. This cover illustration is unfortunate in that the dif-

ference between the proton and neutron, which are shown interacting with matter, is by no means obvious. The confusion is increased by the fact that the neutron is colored red and the proton blue!

Despite the cover, however, this book, and no doubt others in the series, will certainly appeal to the intelligent layman with little or no training in mathematics, who nevertheless wishes to understand the background of modern physics.

Correction

In a review appearing on page 54 of the December issue of *Physics Today*, the author of *Détecteurs de Particules (Compteurs et Scintillateurs): Mécanisme et Réalisation* was inadvertently given as Y. Rocard. The author of the book is Daniel Blanc; Prof. Rocard wrote the preface.

Books Received

OUT OF THE SKY: An Introduction to Meteoritics (Reprint of 1952 ed.). By H. H. Nininger. 336 pp. Dover Publications, Inc., New York, 1959. Paperbound \$1.85.

PROCEEDINGS OF THE EIGHTH JAPAN NATIONAL CONGRESS FOR APPLIED MECHANICS, 1958 (U. of Tokyo, Sept. 1958). Spons'd by Japan Nat'l Comm. for Theoretical & Applied Mechanics. 494 pp. Science Council of Japan, Tokyo, 1959. Paperbound.

APPLICATIONS OF THE THEORY OF MATRICES. By F. R. Gantmacher. Translated from Russian & revised by J. L. Brenner, D. W. Bushaw, S. Evanusa. 317 pp. Interscience Publishers, Inc., New York, 1959. \$9.00.

PRINTED CIRCUITS. By Morris Moses. 224 pp. Gernsback Library, Inc., New York, 1959. Clothbound \$4.60; paperbound \$2.90.

MEASUREMENT: Definitions and Theories. Edited by C. West Churchman and Philburn Ratoosh. 274 pp. John Wiley & Sons, Inc., New York, 1959. \$7.95.

THE THIRTEEN STEPS TO THE ATOM: A Photographic Exploration. By Charles-Noël Martin. Translated from French by B. B. Rafter. 256 pp. Franklin Watts, Inc., New York, 1959. \$4.95.

GROUPES FINIS DE SYMÉTRIE ET RECHERCHE DE SOLUTIONS DE L'EQUATION DE SCHRÖDINGER. By L. Mariot. 106 pp. Dunod, Paris, France, 1959. 960 fr.

LA THÉORIE PHYSIQUE AU SENS DE BOLTZMANN ET SES Prolongements Modernes. By René Dugas. 308 pp. (Editions du Griffon, Neuchâtel) Dunod, Paris, France, 1959. 3700 fr.

PRINCIPLES OF ELECTRONICS. By M. R. Gavin and J. E. Houldin. 348 pp. D. Van Nostrand Co., Inc., Princeton, N. J., 1959. \$5.75.

ADVENTURES OF THE MIND (From The Saturday Evening Post). Edited by Richard Thruelsen and John Kobler. 285 pp. Alfred A. Knopf, New York, 1959. \$4.50.

ATOMIC ENERGY IN THE COMMUNIST BLOC. By George A. Modelski. 226 pp. Melbourne U. Press for the Australian Nat'l U. Distributed in US by Cambridge U. Press, New York, 1959. \$5.50.

DIGEST OF LITERATURE ON DIELECTRICS, Vol. 22, 1958. Edited by Robert A. Soderman and Louis J. Frisco. 293 pp. NAS-NRC Publ. 713. Nat'l Academy of Sciences—Nat'l Research Council, Washington, D. C., 1959. Paperbound \$5.00.

THE CHEMICAL ELEMENTS (2nd Revised Ed.). By Helen Miles Davis. Revisions by Glenn T. Seaborg. 198 pp. Science Service and Ballantine Books, New York, 1959. Paperbound \$5.00.

THE PHYSICO-CHEMICAL CONSTANTS OF BINARY SYSTEMS IN CONCENTRATED SOLUTIONS, Vol. 2 (two organic compounds, at least one a hydroxyl derivative). By Jean Timmermans. 1272 pp. Interscience Publishers, Inc., New York, 1959. \$29.00.

ADVANCES IN ELECTRONICS AND ELECTRON PHYSICS, Vol. 11. Edited by L. Marton and C. Marton. 523 pp. Academic Press Inc., New York, 1959. \$15.00.

THE MAGNETODYNAMICS OF CONDUCTING FLUIDS: Symp. Proc. (Palo Alto, Calif., Nov. 1958). Edited by Daniel Bershad. 145 pp. Stanford U. Press, Stanford, Calif., 1959. \$4.50.

TECHNISCHE KUNSTGRIFFE BEI PHYSIKALISCHEN UNTERSUCHUNGEN (12th Revised Ed.). By E. von Angerer. Edited by Hermann Ebert. 464 pp. Friedr. Vieweg & Sohn, Braunschweig, Germany, 1959. DM 24.80.

SEMICONDUCTORS AND TRANSISTORS. By Douglas Warschauer. 267 pp. McGraw-Hill Book Co., Inc., New York, 1959. \$6.50.

LABORATORY EXPERIMENTS IN GENERAL PHYSICS (Revised Ed.). By W. L. Erickson. 174 pp. Burgess Publishing Co., Minneapolis, Minn., 1959. Paperbound \$4.25.

ENGINEERING MECHANICS. By Dwight F. Gunder and Derald A. Stuart. 391 pp. John Wiley & Sons, Inc., New York, 1959. \$7.75.

RELATIVITY FOR THE LAYMAN: A Simplified Account of the History, Theory, and Proofs of Relativity (Reissue). By James A. Coleman. 127 pp. The Macmillan Co., New York, 1959. \$3.50.

THE UNITY OF THE UNIVERSE. By D. W. Sciama. 228 pp. Doubleday & Co., Inc., Garden City, N. Y., 1959. \$3.95.

EFFECTS OF NUCLEAR RADIATION ON MEN AND MATERIALS. By T. C. Helvey. 56 pp. John F. Rider Publisher, Inc., New York, 1959. Paperbound \$1.80.

COLLEGE PHYSICS (3rd Revised Ed.). By Robert L. Weber, Marsh W. White, Kenneth V. Manning. 640 pp. McGraw-Hill Book Co., Inc., New York, 1959. \$7.50.

INTRODUCTION TO QUANTUM MECHANICS. By Chalmers W. Sherwin. 385 pp. Henry Holt & Co., New York, 1959. \$7.50.

PROPERTIES OF MATTER (3rd Revised Ed.). By F. C. Champion and N. Davy. 334 pp. Philosophical Library, Inc., New York, 1959. \$10.00.

UNDERSTANDING TRANSISTORS. By Milton S. Kiver. 64 pp. Allied Radio Corp., Chicago, Ill., 1959. Paperbound \$5.00.

BIOPHYSICAL SCIENCE—A STUDY PROGRAM (Based on Program held in Boulder, Colo., July-Aug. 1958). Edited by J. L. Oncley (editor-in-chief), F. O. Schmitt, R. C. Williams, M. D. Rosenberg, R. H. Bolt. 607 pp. (Also published in Jan. & Apr. 1959 *Revs. Modern Phys.*) John Wiley & Sons, Inc., New York, 1959. \$6.50.

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