

La Physique Cosmique. By Alexandre Dauvillier. 246 pp. (In French.) Flammarion, Editeur, Paris, France, 1951. 495 Frs.

This book brings together into one group a number of diverse topics. The first chapter is an introduction briefly discussing all the topics under the heading of "Cosmic Physics". The second chapter discusses the origin of the solar system, the third the origin of the surface features (mountains, deeps, and oceans) of the earth, the fourth the possible causes of the quaternary glaciation, the fifth and sixth chapters the geomagnetism in the earth and other astronomical bodies, the seventh cosmic rays, the eighth evolution, and the ninth the social value of science.

As is to be expected in so wide a coverage of subject matter not too much detail can be expected in each chapter. The chapters are, in the main, lectures or rewritten lectures, each a complete unit in itself. The level is nonmathematical, although a few simple formulae appear in the chapter on geomagnetism. The book is not suitable as a text, but makes interesting collateral reading and will indeed help not only to stimulate the students' interest in the various adjacent fields but also illustrates how these various fields hold together.

The author writes interestingly, and has evidently devoted much study to the subject. It is self-evident that no one can claim, nor does the author, to be an expert in each of the topics covered. Thus, for example, the author considers that the strongly magnetic stars of the type discovered by Babcock are the source of cosmic radiation. As this reviewer has pointed out on various occasions, such a view is untenable because of the total energy argument, there being nowhere near enough such stars. Similar points can be made regarding other specific points, but this still leaves us with a book that is both readable and interesting.

As is usual in books printed on the European continent, the paper is not of good quality, and the book is a paperback, uncut and untrimmed. On the other hand it has been carefully proofread and the typographical errors are few. In this reviewer's opinion the work would have greatly benefitted by the inclusion of tables, figures, and diagrams; but even without these it is an interesting compilation.

Serge A. Korff
New York University

Radiation Shielding

X-Ray Protection Design, by Harold O. Wyckoff and Lauriston S. Taylor, contains primary factual data and basic principles necessary for designing shielded x-ray installations. Based on the recommendations of the National Committee on Radiation Protection, this NBS handbook carries out detailed calculations showing how to arrive at optimum conditions providing sufficient protection for safe operation with the most economical form of radiation shielding. (National Bureau of Standards Handbook 50; 36 pp., 7 figures, 18 tables; \$0.15; Government Printing Office, Washington 25, D. C.)

Books Received

MISCELLANEOUS PHYSICAL AND CHEMICAL TECHNIQUES OF THE LOS ALAMOS PROJECT. Edited by Alvin C. Graves and Darol K. Froman. 323 pp. McGraw-Hill Book Company, Inc., New York, 1952. \$4.00.

THE PHYSICAL CHEMISTRY OF SURFACE FILMS. By William D. Harkins. 413 pp. Reinhold Publishing Corporation, New York, 1952. \$10.00.

ELECTRONIC ANALOG COMPUTERS. By Granino A. Korn and Theresa M. Korn. 378 pp. McGraw-Hill Book Company, Inc., New York, 1952. \$7.00.

ELEMENTARY HEAT POWER (Second Edition). By Harry L. Solberg, Orville C. Cromer, and Albert R. Spalding. 624 pp. John Wiley and Sons, Inc., New York, 1952. \$6.50.

INTERMEDIATE COLLEGE MECHANICS. By Dan Edwin Christie. 454 pp. McGraw-Hill Book Company, Inc., New York, 1952. \$7.00.

THE INDEX TO THE REPORTS OF THE NATIONAL CONFERENCE ON WEIGHTS AND MEASURES, FROM THE FIRST TO THE THIRTY-SIXTH, 1905 TO 1951. By William S. Bussey and Malcolm W. Jensen. 45 pp. NBS Miscellaneous Publication 203, Government Printing Office, Washington, D. C. \$0.20.

HANDBOOK OF ENGINEERING FUNDAMENTALS (Second Edition). Prepared by a Staff of Specialists Under the Editorship of Ovid W. Eshbach. 1082 pp. John Wiley and Sons, Inc., New York, 1952. \$10.00.

THE INITIATION AND GROWTH OF EXPLOSIONS IN LIQUIDS AND SOLIDS. By F. P. Bowden and A. D. Yoffe. 104 pp. Cambridge University Press, New York, 1952. \$4.50.

THE ORGAN, ITS EVOLUTION, PRINCIPLES OF CONSTRUCTION AND USE. By William Leslie Sumner. 436 pp. Philosophical Library, Inc., New York, 1952. \$10.00.

THERMODYNAMICS AND STATISTICAL MECHANICS. By William P. Allis and Melvin A. Herlin. 239 pp. McGraw-Hill Book Company, Inc., New York, 1952. \$6.00.

STATISTICAL THEORY WITH ENGINEERING APPLICATIONS. By A. Hald. 783 pp. John Wiley and Sons, Inc., New York, 1952. \$9.00.

STATISTICAL TABLES AND FORMULAS. By A. Hald. 97 pp. John Wiley and Sons, Inc., New York, 1952. \$2.50.

GEOMETRY AND THE IMAGINATION. By D. Hilbert and S. Cohn-Vossen. 358 pp. Chelsea Publishing Company, New York, 1952. \$5.00.

SYMPOSIUM ON RADIOBIOLOGY—THE BASIC ASPECTS OF RADIATION EFFECTS ON LIVING SYSTEMS. Oberlin College, June 14–18, 1950. Edited by James J. Nickson. 465 pp. John Wiley and Sons, Inc., New York, 1952. \$7.50.

ELECTRICAL ENGINEERING. By William H. Erickson and Nelson H. Bryant. 523 pp. John Wiley and Sons, Inc., New York, 1952. \$6.00.

TRANSLATIONS FROM THE PHILOSOPHICAL WRITINGS OF GOTTFRIED FREGE. By Peter Geach and Max Black. 244 pp. Philosophical Library, Inc., New York, 1952. \$5.75.

AN INTRODUCTION TO MODERN THERMODYNAMICAL PRINCIPLES (Second Edition). By A. R. Ubbelohde. 185 pp. Oxford University Press, New York, 1952. \$4.25.

THE STORY OF WATCHES. By T. P. Camerer Cuss. 172 pp. MacGibbon and Kee Ltd., London, England and Philosophical Library, Inc., New York, 1952. \$7.50.

THE WORLD VIEW OF PHYSICS. By C. F. v. Weizsäcker. 219 pp. University of Chicago Press, Chicago, Illinois, 1952. \$3.75.