

Books Received

TABLES OF CIRCULAR AND HYPERBOLIC SINES AND COSINES FOR RADIAN ARGUMENTS. NBS Applied Mathematics Series 36 (A reissue of Mathematical Table 3, with corrections). 407 pp. U. S. Government Printing Office, Washington 25, D. C., 1953. \$3.00.

BIOLOGICAL EFFECTS OF EXTERNAL X AND GAMMA RADIATION. Part I. Edited by Raymond E. Zirkle. 530 pp. McGraw-Hill Book Company, Inc., New York, 1954. \$7.25.

A GLOSSARY OF TERMS IN NUCLEAR SCIENCE AND TECHNOLOGY. R. C. Gibbs, chairman, National Research Council Conference on Glossary of Terms in Nuclear Science and Technology. 200 pp. The American Society of Mechanical Engineers, New York, 1953. Paperbound \$7.00.

THE MECHANISM OF ECONOMIC SYSTEMS. By Arnold Tustin. 161 pp. Harvard University Press, Cambridge, Massachusetts, 1954. \$5.00.

MAGNETIC COOLING. Harvard Monographs in Applied Science Number 4. By C. G. B. Garrett. 110 pp. Harvard University Press, Cambridge, Massachusetts and John Wiley & Sons, Inc., New York, 1954. \$4.50.

THE DETERMINATION OF CRYSTAL STRUCTURES. THE CRYSTALLINE STATE, Volume III. By H. Lipson and W. Cochran. 345 pp. G. Bell and Sons Ltd., London, England, 1953. Distributed by The Macmillan Company, New York, 1954. \$8.00.

THE CHALLENGE OF MAN'S FUTURE. By Harrison Brown. 290 pp. The Viking Press, New York, 1954. \$3.75.

ELECTROLYTE (Second revised edition). By Hans Falkenhagen. 263 pp. S. Hirzel Verlag, Leipzig, Germany, 1953. DM 15.60.

RADIO RECEIVER DESIGN. Part I, RADIO FREQUENCY AMPLIFICATION AND DETECTION (Second revised edition). By K. R. Sturley. 667 pp. John Wiley & Sons, Inc., New York, 1954. \$10.00.

OPTICAL INSTRUMENTATION. Edited by George S. Monk and W. H. McCorkle. 262 pp. McGraw-Hill Book Company, Inc., New York, 1954. \$3.75.

MATTER ENERGY MECHANICS. By Jakob Mandelker. 73 pp. Philosophical Library, New York, 1954. \$3.75.

APPLIED ELECTRONICS. A FIRST COURSE IN ELECTRONICS, ELECTRON TUBES, AND ASSOCIATED CIRCUITS (Second edition). By Truman S. Gray. 881 pp. The Technology Press, Massachusetts Institute of Technology, and John Wiley & Sons, Inc., New York, 1954. \$9.00.

THE COLLECTED PAPERS OF PETER J. W. DEBYE. 700 pp. Interscience Publishers, Inc., New York, 1954. \$9.50.

CHROMIUM. METALLURGY OF THE RARER METALS, No. 1. By A. H. Sully. 272 pp. Academic Press Inc., New York, 1954. \$5.50.

ZIRCONIUM. METALLURGY OF THE RARER METALS, No. 2. By G. L. Miller. 382 pp. Academic Press Inc., New York, 1954. \$7.50.

FÜNFSTELLIGE TAFEL DER TRIGONOMETRISCHEN FUNKTIONEN. Ausgabe A für Altgradteilung. By Bernhard Sticker. 52 pp. Ferd. Dümmlers Verlag, Bonn, Germany, 1954. DM 7.60.

TABLES OF LAGRANGIAN COEFFICIENTS FOR SEXAGESIMAL INTERPOLATION. NBS Applied Mathematics Series 35. 157 pp. U. S. Government Printing Office, Washington 25, D. C. \$2.00.

**NEW
REVISED!
EDITION!**

HEAT CONDUCTION

**WITH ENGINEERING,
GEOLOGICAL AND
OTHER APPLICATIONS**

**By Leonard R. Ingersoll,
Otto J. Zobel, and
Alfred C. Ingersoll**

HEAT CONDUCTION is the only book which specializes in relatively simple applications of heat conduction and the necessary accompanying theory. The applications include such varied subjects as cooking and canning operations, electric welding, fireproof walls, ice formation, and post-glacial calculations.

The present edition is supplemented by two new chapters giving the latest applications to a theory which has proved its timelessness in spite of the contemporary emphasis on other fields of physics. The heat pump, the most modern system of year-round air conditioning, is discussed at length in Chapter 13. The authors' theory (now generally accepted) on the use of the ground as a source of heat for the heat pump is treated with much detail and is probably the most important single feature of the book. The mathematical theory of drying of porous solids is given in Chapter 14 and also an introduction to the Terzaghi theory of soil consolidation, a matter of growing importance to those interested in soil mechanics.

340 pages. \$5.00

**The University of Wisconsin Press
811 State Street Madison 5, Wisconsin**