

phere is clearly presented, to the probable discomfiture of the sixteen-little-men-from-Venus adherents. If Dr. Menzel is to be believed, confidence in the tangible physical existence of interplanetary flying saucers is on the same level of credulity as confidence in the tangible physical existence of Donald Duck.

Both pure speculation and circular reasoning are absent in the careful and detailed section of the book in which the actual causes of the phenomena which have been called flying saucers are explained. Such natural events as mirages, mock suns, the aurora, comets, and meteors come in for analysis, with an abundance of photographs and drawings adding to the clarity of the material. Simple experimental demonstrations of atmospheric refraction and the effects it produces are illustrated, with Dr. Menzel himself acting as the sorcerer in several pictures. The discussion of radar ghost images is especially pertinent in view of the totally unwarranted faith most laymen seem to have in the infallibility of radar.

After more than two hundred pages devoted essentially to debunking wild speculations, Dr. Menzel could not resist a few speculations of his own (of a more conservative nature to be sure). Hence chapters on space travel and visits to Mars and Venus which, partly because of the authority with which the author speaks, are quite interesting despite their nonsensational character.

Flying Saucers, according to the publisher, is written for "anyone with a spark of intellectual curiosity." Perhaps a bit of openmindedness is also needed, since it is probable that to many people Dr. Menzel is, as he likes to say, the man who shot Santa Claus. However that might be, the book is both fascinating and enlightening, a welcome addition to the unhappily small shelf of nontechnical but intelligent expositions of scientific ideas.

Arthur Beiser

New York University

Uranium Oxides

An Annotated Bibliography of Selected References on the Solid-State Reactions of the Uranium Oxides, by S. M. Lang, has recently been prepared by the National Bureau of Standards at the request of the Atomic Energy Commission. The 95-page bibliography contains 257 abstracted and about 60 nonabstracted references on the solid-state reactions of the uranium oxides with 36 other oxides as reported in the literature. The bibliography (NBS Circular 535) is available from the Government Printing Office, Washington 25, D. C., for 30 cents.

X-Ray Spectroscopy

An 82-page report has been issued on the Conference on the Application of X-Ray Spectroscopy to Solid State Problems, held at the University of Wisconsin in October 1950 under the joint sponsorship of the Wisconsin Alumni Research Foundation and the Office of Naval Research. The report (No. PB 111027) includes

sixteen papers presented by scientists from the United States, England, France, and Germany, and is available from the Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C., for \$2.25. Checks should be made out to the Treasurer of the United States.

Books Received

INTERNATIONAL TABLES FOR X-RAY CRYSTALLOGRAPHY. Vol. I. Symmetry Groups. Edited by Norman F. M. Henry and Kathleen Lonsdale. 558 pp. Kynoch Press, Birmingham, England, 1952.

STATISTICAL METHODS FOR CHEMICAL EXPERIMENTATION. By W. L. Gore. 210 pp. Interscience Publishers, Inc., New York, 1952. \$3.50.

INTRODUCTION TO THE FOUNDATIONS OF MATHEMATICS. By Raymond L. Wilder. 305 pp. John Wiley and Sons, Inc., New York, 1952. \$5.75.

VISION THROUGH THE ATMOSPHERE. By W. E. Knowles Middleton. 250 pp. University of Toronto Press, Toronto, Canada, 1952. \$8.50.

STATISTICAL THERMODYNAMICS (Second Edition). By Erwin Schrödinger. 95 pp. Cambridge University Press, New York, 1952. \$1.75.

THE MOLECULAR THEORY OF FLUIDS. By Herbert S. Green. 264 pp. North-Holland Publishing Company, Amsterdam; Interscience Publishers, Inc., New York, 1952. \$5.75.

PHOTOCONDUCTIVITY IN THE ELEMENTS. By Trevor Simpson Moss. 263 pp. Academic Press Inc., New York; Butterworths Scientific Publications, London, 1952. \$7.00.

HIGH FIDELITY SIMPLIFIED. By Harold D. Weiler. 208 pp. John F. Rider Publishers, Inc., New York, 1952. Paperbound, \$2.50.

CONTROL OF ELECTRIC MOTORS (Third Edition). By Paisley B. Harwood. 538 pp. John Wiley and Sons, Inc., New York, 1952. \$7.50.

ELECTRICAL MEASURING INSTRUMENTS. Part I: General Principles and Electrical Indication Instruments (Second Edition). By C. V. Drysdale and A. C. Jolley, revised by G. F. Tagg. 598 pp. John Wiley and Sons, Inc., New York, 1952. \$12.00.

FILTER DESIGN DATA FOR COMMUNICATION ENGINEERS. By J. H. Mole. 252 pp. John Wiley and Sons, Inc., New York, 1952. \$7.50.

NUCLEAR STABILITY RULES. By N. Feather. 162 pp. Cambridge University Press, New York, 1952. \$4.00.

AN INTERNATIONAL BIBLIOGRAPHY ON ATOMIC ENERGY. Vol. II. Scientific Aspects. Supplement No. 1. Atomic Energy Section, Department of Security Council Affairs, United Nations, New York, 1952; distributor, Columbia University Press, New York. \$3.50.

ESSENTIALS OF FLUID DYNAMICS. By Ludwig Prandtl. 452 pp. Hafner Publishing Company, New York, 1952. \$6.00.

DIE IONOSPHERE, IHRE BEDEUTUNG FÜR GEOPHYSIK UND RADIOVERKEHR. By Karl Rawer. 189 pp. P. Noordhoff N. V., Groningen, Holland, 1953.

REMOTE CONTROL BY RADIO. By A. H. Bruinsma. 96 pp. Philips Technical Library, Eindhoven, Netherlands; Elsevier Press, Inc., Houston, Texas, 1952. Paperbound, \$1.50.

ADVANCES IN GEOPHYSICS. Vol. I. Edited by H. E. Landsberg. 362 pp. Academic Press Inc., New York, 1952. \$7.80.