

by radiation. The authors are concerned solely with the conduction of heat in solids; in this one area, the reader is not likely to find another book so complete in its treatment of mathematical theory *plus* practical examples.

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Manufacture and Application of Lubricating Greases. C. J. Boner. Reinhold, New York 22, 1954. v+977 pp. Illus. \$18.50.

This book by C. J. Boner gives complete information on the subject and the fundamentals of the various lubricating greases. With its presentation of theories and concepts of structure, as well as of the more practical phases, it should be valuable for research, for technical lubricating problems arising in industry, and for the use of equipment designers. Since no one lubricating grease is best for all applications, this book will guide maintenance men in selecting the right grease for each specific use and in determining how best to apply it in order to reduce wear and tear on machinery and down-time.

There are some lubricating applications for which greases are superior and others for which the use of oils is not even feasible. There is no truly all-purpose

lubricating grease, but there are, however, multipurpose greases. The type of grease best suited for heavy shock loads is not necessarily best for other purposes that may be required of it. The same can be said for use at high temperature, against corrosive chemicals or abrasive dusts, and other uses. Application requirement and care can differ from one type of lubricating grease to another, coupled with the fact that a component of some types of grease may be deleterious if it enters the product being made.

This should make an excellent textbook for advanced study and for those in the technical phase of lubricating grease manufacture. The numerous illustrations, micrographs, plates, graphs, and tables greatly contribute to the understanding of the subject matter. There is a complete bibliography for each phase, and the subdivisions of each chapter, as well as each illustration, are numbered and titled for easy reference.

The complete raw materials section is not only an aid to improvements for the lubricating grease manufacturers but it is also an aid for the suppliers of these raw materials. I have already put to practical use, both privately and professionally, this interesting and instructive book on lubricating greases.

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New Books

Atomic and Nuclear Physics. Robert S. Shankland. Macmillan, New York, 1955. 529 pp. \$7.75.

Protective Coatings for Metals. R. M. Burns and W. W. Bradley. Reinhold, New York, ed. 2, 1955. 643 pp. \$12.

Mechanisms of Microbial Pathogenicity. 5th symposium of the Society for General Microbiology held at the Royal Institution, London, April 1955. J. W. Howie and A. J. O'Hea, Eds. Cambridge Univ. Press, New York, 1955. 333 pp. \$5.

The Skin, a Clinicopathologic Treatise. Arthur C. Allen. Mosby, St. Louis, 1954. 1048 pp. \$25.

Psychology in Living. Wendell White. Macmillan, New York, ed. 3, 1955. 317 pp. \$4.50.

The Care of Your Skin. Herbert Lawrence. Little, Brown, Boston, 1955. 95 pp. \$2.50.

Biological Specificity and Growth. Elmer G. Butler, Ed. Princeton Univ. Press, Princeton, N.J., 1955. 233 pp. \$5.

Speech: Code, Meaning, and Communication. John W. Black and Wilbur E. Moore. McGraw-Hill, New York-London, 1955. 430 pp. \$4.50.

Elementary Qualitative Analysis on the Small Scale. Peter Woodward. Oxford Univ. Press, New York, 1955. 92 pp. \$2.

Introduction to Theoretical Organic Chemistry. P. H. Hermans. Elsevier, New York-London, rev. ed., 1954. 507 pp. \$9.75.

Man in a Cold Environment. Physiological and pathological effects of exposure to low temperatures. Alan C. Burton and Otto G. Edholm. Arnold, London; Williams & Wilkins, Baltimore, 1955. 273 pp. \$6.75.

Advances in Geophysics. vol. 2. H. E. Landsberg, Ed. Academic Press, New York, 1955. 286 pp. \$7.50.

Mammals. A guide to familiar American species. Herbert S. Zim and Donald F. Hoffmeister. Simon and Schuster, New York, 1955. 160 pp. Paper, \$1; cloth, \$1.95.

Blutkrankheiten: Methodik, Klinik und Therapie. Hanns Fleischhacker. Wilhelm Maudrich, Wien-Bonn, 1955. 247 pp. \$7.50.

Zoology. A. M. Winchester and Harvey B. Lovell. Van Nostrand, New York-London, ed. 2, 1955. 582 pp. \$6.25.

Thoughts about Life. Felix Friedberg. Philosophical Library, New York, 1954. 40 pp. \$2.50.

Elementary Theory of Nuclear Shell Structure. Maria Goeppert Mayer and J. Hans D. Jensen. Wiley, New York; Chapman & Hall, London, 1955. 269 pp. \$7.75.

Airborne Contagion and Air Hygiene. An ecological study of droplet infections. William Firth Wells. Harvard Univ. Press, Cambridge, 1955. 423 pp. \$6.

Plane Algebraic Curves. E. J. F. Primrose. Macmillan, London; St. Martin's Press, New York, 1955. 111 pp. \$3.

Life Science. A college textbook of general biology. Thomas S. Hall and Florence Moog. Wiley, New York; Chapman & Hall, London, 1955. 502 pp. \$6.50.

The Armenian Community. The historical development of a social and ideological conflict. Sarkis Atamian. Philosophical Library, New York, 1955. 479 pp. \$4.75.

Politics and Science. William Esslinger. Philosophical Library, New York, 1955. 167 pp. \$3.

Cytologie des Weiblichen Genitalkarzinoms. Edmund Schuller. Wilhelm Maudrich, Wien-Bonn, 1955. 129 pp. Paper, \$6.

Shell Theory of the Nucleus. Investigations in physics. Eugene Feenberg. Princeton Univ. Press, Princeton, N.J., 1955. 211 pp. Paper, \$4.

Letalfaktoren in ihrer Bedeutung fur Erbpathologie und Genphysiologie der Entwicklung. Ernst Hadorn. Thieme, Stuttgart, 1955. 338 pp. \$9.30.