

New Books

Mathematics, Physical Sciences, and Engineering

Absorption Spectra in the Ultraviolet and Visible Region. vol. 3. L. Lang, Ed. Akademiai Kiado, Budapest, 1962; Academic Press, New York, 1963. 424 pp. Illus. \$20.

Abstract Harmonic Analysis. vol. 1, *Structure of Topological Groups, Integration Theory, and Group Representations.* Edwin Hewitt and Kenneth A. Ross. Springer, Berlin; Academic Press, New York, 1963. 527 pp. Illus. \$19.

American Institute of Physics Handbook. Dwight E. Gray, Ed. McGraw-Hill, New York, ed. 2, 1963. 9 sections. Illus. \$29.75.

Applied Thermodynamics. A. E. J. Hayes. Pergamon, London; Macmillan, New York, 1963. 280 pp. Illus. Paper, \$3.75.

Arches, Continuous Frames, Columns, and Conduits. Selected papers of Hardy Cross. With an introduction by Nathan M. Newmark. Univ. of Illinois Press, Urbana, 1963. 275 pp. Illus. \$5.

Calculus Problems and Solutions. Abraham Ginzburg. Holden-Day, San Francisco, Calif., 1963. 467 pp. Illus. \$7.75.

Collected Works of John von Neumann. vol. 5, *Design of Computers, Theory of Automata, and Numerical Analysis.* A. H. Taub, Ed. Pergamon, London; Macmillan, New York, 1963. 794 pp. Illus. \$14.

Colloidal Surfactants. Some physico-chemical properties. Kozo Shinoda, Toshio Nakagawa, Bun-ichi Tamamushi, and Toshizo Isemura. Academic Press, New York, 1963. 320 pp. Illus. \$11.50.

Combustion. A symposium (Ithaca, N.Y.), August 1962. Organized by the Combustion Institute. Academic Press, New York, 1963. 1117 pp. Illus. \$42.

Electrodeposition of Alloys. Principles and practice. vols. 1 and 2. Abner Brenner. Academic Press, New York, 1963 (vol. 1, 734 pp., \$24; vol. 2, 676 pp., \$22). Illus.

Elucidation of Structures by Physical and Chemical Methods. K. W. Bentley, Ed. Interscience (Wiley), New York, 1963 (pt. 1, 675 pp., \$19.50; pt. 2, 448 pp., \$16.50). Illus.

The Encyclopedia of Engineering Materials and Processes. H. R. Clauser, Robert Fabian, Donald Peckner, and Malcolm W. Riley, Eds. Chapman and Hall, London; Reinhold, New York, 1963. 799 pp. Illus. \$25.

Encyclopedia of Physics. vol. 8, pt. 2, *Fluid Dynamics.* S. Flugge, Ed. Springer, Berlin, 1963. 702 pp. Illus. DM. 198.

Fuel Cells. Will Mitchell, Jr., Ed. Academic Press, New York, 1963. 458 pp. Illus. \$15.

Fundamentals of General Chemistry. C. H. Sorum. Prentice-Hall, Englewood Cliffs, N.J., ed. 2, 1963. 719 pp. Illus. \$8.50.

Gamma-Rays of Radionuclides in Order of Increasing Energy. D. N. Slater. Butterworth, Washington, D.C., 1962. 209 pp. \$9.

Gas Chromatography Abstracts, 1962. C. E. H. Knapman and D. Ambrose, Eds. Butterworth, Washington, D.C., 1963. 205 pp. \$8.50.

Homology. Saunders MacLane. Springer, Berlin; Academic Press, New York, 1963. 423 pp. Illus. \$15.50.

Inorganic Adduct Molecules of Oxo-Compounds. Ingvar Lindquist. Academic Press, New York; Springer, Berlin, 1963. 135 pp. Illus. \$6.50.

Interplanetary Dynamical Processes. E. N. Parker. Interscience (Wiley), New York, 1963. 280 pp. Illus. \$12.50.

Introduction to Electronic Computers. Problem solving with the IBM 1620. Fred J. Gruenberger and Daniel D. McCracken. Wiley, New York, ed. 3, 1963. 177 pp. Paper, \$2.95.

An Introduction to Oceanography. Cuchlaine A. M. King. McGraw-Hill, New York, 1963. 349 pp. Illus. \$7.95.

Introduction to Quadratic Forms. O. T. O'Meara. Springer, Berlin; Academic Press, New York, 1963. 354 pp. Illus. \$12.

Limit Analysis of Rotationally Symmetric Plates and Shells. Philip G. Hodge, Jr. Prentice-Hall, Englewood Cliffs, N.J., 1963. 157 pp. Illus. \$7.95.

Linear Partial Differential Operators. Lars Hörmander. Springer, Berlin; Academic Press, New York, 1963. 295 pp. Illus. \$10.50.

Luminescence in Crystals. D. Curie. Translated from the French (*Luminescence Cristalline*, 1960) by G. F. J. Garlick. Methuen, London; Wiley, New York, 1963. 344 pp. Illus. \$8.50.

Magnetism and the Chemical Bond. John B. Goodenough. Interscience (Wiley), New York, 1963. 410 pp. Illus. \$12.50.

Mathematical Aspects of Physics. An introduction. Francis Bitter. Doubleday, Garden City, N.Y., 1963. 199 pp. Illus. Paper, \$1.25.

Melting Point Tables of Organic Compounds. Walter Utermarck and Walter Schicke. Interscience (Wiley), New York, ed. 2, 1963. 747 pp. \$22.50.

Molecular Vib-Rotors. The theory and interpretation of high resolution infrared spectra. Harry C. Allen, Jr., and Paul C. Cross. Wiley, New York, 1963. 332 pp. Illus. \$13.50.

The Moon, Meteorites, and Comets. Barbara M. Middlehurst and Gerard P. Kuiper, Eds. Univ. of Chicago Press, Chicago, 1963. 832 pp. Illus. \$15.

Newer Methods of Preparative Organic Chemistry. vol. 2. Wilhelm Foerst. Translated from the German by F. K. Kirchner. Academic Press, New York, 1963. 433 pp. Illus. \$14.50.

Origin of the Solar System. Proceedings of a conference (New York, N.Y.), January 1962. Robert Jastrow and A. G. W. Cameron, Eds. Academic Press, New York, 1963. 190 pp. Illus. \$8.

Particle Size: Measurement, Interpretation, and Application. Riyad R. Irani and Clayton F. Callis. Wiley, New York, 1963. 175 pp. Illus. \$7.50.

Physical Science. Origins and principles. Robert T. Lagemann. Little, Brown, Boston, 1963. 476 pp. Illus.

The Physics of Engineering Solids. T. S. Hutchison and D. C. Baird. Wiley, New York, 1963. 380 pp. Illus. \$8.

Processes of Creep and Fatigue in Metals. A. J. Kennedy. Wiley, New York, 1963. 494 pp. Illus. \$12.

Progress in Astronautics and Aeronautics. vols. 9 and 10. vol. 9, *Electric Propulsion Development.* Papers based on a conference (Berkeley, Calif.), March 1962. Ernst Stuhlinger, Ed. (762 pp., \$10.50); vol. 10, *Technology of Lunar Exploration.* Papers based on a meeting (Cleveland, Ohio), July 1962. Clifford I. Cummings and Harold R. Lawrence, Eds. 1005 pp., \$13.75). Academic Press, New York, 1963. Illus.

Quantitative Chemistry. Glenn H. Brown and Eugene M. Sallee. Prentice-Hall, Englewood Cliffs, N.J., 1963. 681 pp. Illus. \$13.

Radioactive Dating. Proceedings of a symposium (Athens, Greece), November 1962. International Atomic Energy Agency, Vienna, Austria, 1963. 448 pp. Illus. Paper. \$8.50.

Random Vibration in Mechanical Systems. Stephen H. Crandall and William D. Mark. Academic Press, New York, 1963. 176 pp. Illus. \$6.50.

Rates and Equilibria of Organic Reactions. As treated by statistical, thermodynamic, and extrathermodynamic methods. John E. Leffler and Ernest Grunwald. Wiley, New York, 1963. 474 pp. Illus. \$11.

Refractory Metals and Alloys. 2. Proceedings of a Technical Conference sponsored by the Metallurgical Society (Chicago, Ill.), April 1962. M. Semchyshen and I. Perlmutter, Eds. Interscience (Wiley), New York, 1963. 460 pp. Illus. \$19.50.

Set Theory and Logic. Robert R. Stoll. Freeman, San Francisco, 1963. 488 pp. Illus. \$9.

Strange Particles. Robert Kemp Adair and Earle Cabell Fowler. Interscience (Wiley), New York, 1963. 159 pp. Illus. \$4.75.

The Structure of Molecules. An introduction to molecular spectroscopy. Gordon M. Barrow. Benjamin, New York, 1963. 168 pp. Illus. Paper, \$1.95; cloth, \$3.95.

Study Projects in Physical Chemistry. F. E. Condon. Academic Press, New York, 1963. 215 pp. Illus. \$4.75.

Sur le Probleme de la Propagation de la Chaleur dans les Corps solides (Memorial des Sciences physiques. vol. 67). Assene Datzeff. Gauthier-Villars, Paris, 1963 (order from Pergamon Press, New York). 136 pp. Illus. NF. 26.

Theory of Elasticity of an Anisotropic Elastic Body. S. G. Lekhnitskii. Translated by P. Fern. Julius J. Brandstatter, Ed. Holden-Day, San Francisco, 1963. 416 pp. Illus. \$10.95.

Thermodynamics of Small Systems. pt. 1. Terrell L. Hill. Benjamin, New York, 1963. 183 pp. Illus. Paper, \$5.95; cloth, \$9.

Treatise on Analytical Chemistry. pt. 2, *Analytical Chemistry of the Elements.* vol. 8, *The Rare Earths, Bi, V, Cr, and the Platinum Metals.* I. M. Kolthoff, Philip J. Elving, and Ernest B. Sandell, Eds. Interscience (Wiley), New York, 1963. 576 pp. Illus. \$20.

Vacuum Microbalance Techniques. vol. 3. Proceedings of a conference (Los Angeles), October 1962. Klaus H. Behrndt, Ed. Plenum Press, New York, 1963. 241 pp. Illus. \$9.50.