

## New Books

### Mathematics, Physical Sciences, and Engineering

**Acetal Resins.** Russell B. Akin. Reinhold, New York, 1962. 189 pp. Illus. \$6.25.

**Advances in Chemical Engineering.** vol. 3. Thomas B. Drew, John W. Hoopes, Jr., and Theodore Vermeulen, Eds. Academic Press, New York, 1962. 355 pp. Illus. \$12.

**Advances in Cryogenic Engineering.** vol. 7. Proceedings of the 1961 Cryogenic Engineering Conference, held at the University of Michigan, 15-17 August 1961. K. D. Timmerhaus, Ed. Plenum Press, New York, 1962. 592 pp. Illus. \$15.

**Advances in Spectroscopy.** vol. 2. H. W. Thompson, Ed. Interscience (Wiley), New York, 1961. 494 pp. Illus. \$13.

**Analytical Chemistry of Polymers.** vol. 12, pt. 2, *Analysis of Molecular Structure and Chemical Groups* (632 pp. \$17.50); pt. 3, *Identification Procedures and Chemical Analysis* (578 pp. \$16.50). Gordon M. Kline, Ed. Interscience (Wiley), New York, 1962. Illus.

**Applied Dynamic Programming.** Richard E. Bellman and Stuart Dreyfus. Princeton Univ. Press, Princeton, N.J., 1962. 385 pp. Illus. \$8.50.

**The Astronomical Universe.** Wasley S. Krogdahl. Macmillan, New York, ed. 2, 1962. 602 pp. Illus. Maps. \$7.95.

**Atomic and Molecular Processes.** D. R. Bates, Ed. Academic Press, New York, 1962. 919 pp. Illus. \$19.50.

**Beta Decay for Pedestrians.** Harry J. Lipkin. North-Holland, Amsterdam; Interscience (Wiley), New York, 1962. 125 pp. Illus. \$6.

**Challenge of the Universe.** J. Allen Hynek. Scholastic Book Services, New York, 1962. 144 pp. Illus. Paper, \$0.50.

**Clathrate Inclusion Compounds.** Sister Martinette Hagan. Reinhold, New York, 1962. 202 pp. Illus. \$6.50.

**Curvature and Homology.** Samuel I. Goldberg. Academic Press, New York, 1962. 332 pp. Illus. \$8.50.

**Differential Equations.** C. W. Leininger. Harper, New York, 1962. 281 pp. Illus. \$6.

**Dynamics.** vol. 1, *Particles, Rigid Bodies, and Systems.* Robert L. Halfman. Addison-Wesley, Reading, Mass., 1962. 391 pp. Illus. \$7.50.

**The Dynamics of Automatic Control Systems.** E. P. Popov. Translated from the Russian by A. D. Booth. Translation of *Dinamika sistem avtomaticheskogo regulirovaniya* (Gostekhizdat, Moscow, 1956). Pergamon, London; Addison-Wesley, Reading, Mass., 1962. 774 pp. Illus. \$10.75.

**Electrical Engineering Fundamentals.** Robert Brownell Angus, Jr. Addison-Wesley, Reading, Mass., 1961. 528 pp. Illus. \$8.

**Elements of Finite Mathematics.** Francis J. Scheid. Addison-Wesley, Reading, Mass., 1962. 286 pp. Illus. \$6.75.

**The Encyclopedia of Electronics.** Charles Susskind, Ed. Reinhold, New York, 1962. 995 pp. Illus. \$22.50.

**Low Temperature Physics.** L. C. Jackson. Methuen, London; Wiley, New York, ed. 5, 1962. 165 pp. Illus. \$3.50.

**Modern College Physics.** James A. Richards, Jr., Francis Weston Sears, M. Russell Wehr, and Mark W. Zemansky. Addison-Wesley, Reading, Mass., 1962. 1125 pp. Illus. \$10.75 (based on *College Physics* by Sears and Zemansky and *Introductory Atomic Physics* by Wehr and Richards).

**Modern Very High Pressure Techniques.** R. H. Wentorf, Jr., Ed. Butterworth, Washington, D.C., 1962. 247 pp. Illus. \$11.25.

**Moon Atlas.** V. A. Firsoff. Viking, New York, 1962. 32 pp. Illus. Maps. \$10.

**The Mössbauer Effect.** Proceedings of the Second International Conference on the Mössbauer Effect, held at Saclay, France, September 1961. D. M. J. Compton and A. H. Schoen, Eds. Wiley, New York, 1962. 331 pp. Illus. \$16.50.

**Natural Organic Macromolecules.** Bruno Jorgensons. Pergamon, New York, 1962. 474 pp. Illus. \$15.

**Neutron Diffraction.** G. E. Bacon. Oxford Univ. Press, New York, ed. 2, 1962. 438 pp. Illus. Plates. \$8.80.

**The New World of Physics.** Arthur March and Ira M. Freeman. Random House, New York, 1962. 204 pp. Illus. \$4.95.

**Non-Equilibrium Thermodynamics.** S. R. De Groot and P. Mazur. North-Holland, Amsterdam; Wiley, New York, 1962. 520 pp. Illus. \$15.50.

**Nonlinear Transformations of Random Processes.** Ralph Deutsch. Prentice-Hall, Englewood Cliffs, N.J., 1962. 168 pp. Illus.

**Nuclear Reactor Fuel Elements.** Metallurgy and fabrication. Albert R. Kaufmann, Ed. Interscience (Wiley), New York, 1962. 751 pp. Illus. \$27.

**Operational Methods for Linear Systems.** Wilfred Kaplan. Addison-Wesley, Reading, Mass., 1962. 588 pp. Illus. \$10.75.

**Organic Reactions.** vol. 12. Arthur C. Cope, Ed. Wiley, New York, 1962. 545 pp. Illus. \$13.

**Organophosphorus Monomers and Polymers.** Ye. L. Gefter. Translated from the Russian by J. Burdon. Pergamon, New York, 1962. 309 pp. Illus. \$12.50.

**Oxide Magnetic Materials.** K. J. Standley. Oxford Univ. Press, New York, 1962. 204 pp. Illus. \$5.60.

**Peroxide Reaction Mechanisms.** John O. Edwards, Ed. Interscience (Wiley), New York, 1962. 254 pp. Illus. \$8.

**Photo and Thermoelectric Effects in Semiconductors.** Jan Tauc. Translated by Margaret Laner. Pergamon, New York, 1962. 259 pp. Illus. \$10.

**Physical Metallurgy for Engineers.** Albert G. Guy. Addison-Wesley, Reading, Mass., 1962. 383 pp. Illus. \$8.75.

**The Physics of Rainclouds.** N. H. Fletcher. Cambridge Univ. Press, New York, 1962. 396 pp. Illus. \$11.50.

**The Planet Saturn.** A history of observation, theory, and discovery. A. F. O'D. Alexander. Macmillan, New York, 1962. 416 pp. Illus. Plates. \$12.

**Polymerization and Polycondensation Processes.** A collection of papers based on the Symposium on Polymerization and Polycondensation Processes, held at the 140th meeting of the American Chemical Society Chicago, Ill., September 1961.

Norbert A. J. Platzer, Chairman. American Chemical Soc., Washington, D.C., 1962. Paper, \$8.

**Progress in Aeronautical Sciences.** vol. 2, *Boundary Layer Problems.* Antonio Ferri, D. Kuchemann, and L. H. G. Sterne, Eds. Pergamon, New York, 1962. 296 pp. Illus. \$14.

**Properties of Reactor Materials and the Effects of Radiation Damage.** Proceedings of the International Conference, Gloucestershire, England, May 1961. D. J. Litter, Ed. Butterworth, Washington, D.C., 1962. 577 pp. Illus. \$21.

**Radiation Chemistry of Polymeric Systems.** Adolphe Chapiro. Interscience (Wiley), New York, 1962. 728 pp. Illus. \$21.

**Reviews in Engineering.** vol. 1. Thomas Fluhr and Robert F. Legget, Eds. Geological Soc. of America, New York, 1962. 293 pp. Illus. Plates.

**Semiconductor Physics.** J. S. Blakemore. Pergamon, New York, 1962. 393 pp. Illus. \$12.50.

**Shell Research.** Proceedings of the Symposium on Shell Research, Delft, Netherlands, 1961. A. M. Haas and A. L. Bouma, Eds. North-Holland, Amsterdam; Interscience (Wiley), New York, 1961. 372 pp. Illus. Plates. \$14.75.

**Square-Loop Ferrite Circuitry.** Storage and logic techniques. C. J. Quartly. Prentice-Hall, Englewood Cliffs, N.J., 1962. 173 pp. Illus. Trade ed., \$8; text ed., \$6.

**Statistical Strength Theory.** S. D. Volkov. Translated from the Russian by Royer and Roger, Inc. Gordon and Breach, New York, 1962. 279 pp. Illus. \$11.50.

**Statistical Techniques Based on Probabilistic Models.** G. A. Baker. Univ. of California Press, Berkeley, 1962. 131 pp. Illus.

**Sulfur Bonding.** Charles C. Price and Shigeru Oae. Ronald, New York, 1962. 213 pp. Illus. \$8.

**Tables of Spectral-Line Intensities.** NBS Monograph 32, pt. 1 (arranged by elements). William F. Meggers, Charles H. Corliss, and Bourdon F. Scribner. Superintendent of Documents, GPO, Washington, D.C., 1962. 486 pp. \$4.

**Teaching Chemistry with Models.** R. T. Sanderson. Van Nostrand, Princeton, N.J., 1962. 184 pp. Plates. \$5.75.

**Tectonics.** Jean Goguel. Translated from the French by Hans E. Thalmann. Freeman, San Francisco, Calif., 1962 (*Traité de Tectonique*, Paris, 1952). 392 pp. Illus. \$10.

**The Theory of Transonic Flow.** K. G. Guderley. Translated from the German by J. R. Moszynski. Pergamon, London; Addison-Wesley, Reading, Mass., 1962. 362 pp. Illus. \$9.

**Topics in Modern Algebra.** Charles P. Benner, Albert Newhouse, Cortez B. Rader, and Richard L. Yates. Harper, New York, 1962. 154 pp. \$3.75.

**The Universe.** Otto Struve. Massachusetts Institute of Technology Press, Cambridge, 1962. 165 pp. Illus. \$4.95.

**The Wave Mechanics of Electrons in Metals.** Stanley Raimes. Interscience (Wiley), New York, 1961. 378 pp. Illus. \$13.

**Well Spacing in the Aneth Reservoir.** Frank W. Cole. Univ. of Oklahoma Press, Norman, 1962. 109 pp. Illus. \$6.95.