

Each table includes a brief introduction that defines the function, gives its source (frequently a recomputation, an inaccessible report, or a journal publication), contrasts it with other existing tables, and outlines its applications. The 251-entry bibliography supplements this information. In some cases, special interpolation techniques are given, although linear interpolation generally appears to be adequate.

The format is convenient. The number of the table appears at the outside bottom corner of each page, and the page number is at the top. In the interest of accuracy and economy, most of the tables have been reproduced photographically, either from computer listings or from the original publication. The result is unesthetic but legible. A detailed table of contents and an extensive index assist in making full use of the resources provided by this comprehensive, and relatively inexpensive, volume. It is recommended to all three of the classes of reader for which it was intended.

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## New Books

### Mathematics, Physical Sciences, and Engineering

**Acrolein.** C. W. Smith, Ed. Wiley, New York, 1962. 282 pp. Illus. \$12.50.

**Advanced Calculus for Applications.** Francis B. Hildebrand. Prentice-Hall, Englewood Cliffs, N.J., 1962. 655 pp. Illus. \$13.

**Advances in Inorganic Chemistry and Radiochemistry.** vol. 4. H. J. Emeleus and A. G. Sharpe, Eds. Academic Press, New York, 1962. 352 pp. Illus. \$11.

**Advances in Petroleum Chemistry and Refining.** vol. 5. John J. McKetta, Jr., Ed. Interscience (Wiley), New York, 1962. 559 pp. Illus. \$20.

**The Age of Electronics.** Carl F. J. Overhage, Ed. McGraw-Hill, New York, 1962. 227 pp. Illus. \$7.95.

**Artificial Earth Satellites.** A translation of *Iskusstvennye Sputniki Zemli*, vols. 7 and 8, 1961 (published by the Academy of Sciences of the U.S.S.R.). L. V. Kurnosova, Ed. Consultants Bureau, New York, 1962. 254 pp. Illus. Paper, \$15.

**Basic Astronautics.** An introduction to space science, engineering, and medicine. Frederick I. Ordway, III, James Patrick Gardner and Mitchell R. Sharpe, Jr. Prentice-Hall, Englewood Cliffs, N.J., 1962. 600 pp. Illus. \$16.

**Bibliography on Hydrocarbons.** 1946-1960. J. A. Muckleroy, Ed. Natural Gas Processors Assoc., Tulsa, Okla., 1962. 94 pp. \$15.

**The Collected Papers of Lord Rutherford of Nelson.** vol. 1, *New Zealand, Cambridge, Montreal.* Published under the direction of Sir James Chadwick. Interscience (Wiley), New York, 1962. 931 pp. Illus. \$19.50.

**Computation of Multistage Separation Processes.** Donald N. Hanson, John H. Duffin, and Graham F. Somerville. Reinhold, New York; Chapman and Hall, London, 1962. 368 pp. Illus. \$4.95.

**Geology and Earth Sciences Sourcebook.** For elementary and secondary schools. Robert L. Heller, Ed. Holt, Rinehart, and Winston, New York, 1962. 511 pp. Illus. Paper, \$2.40.

**Handbook of Adhesives.** Irving Skeist, Ed. Reinhold, New York; Chapman and Hall, London, 1962. 698 pp. Illus. \$23.50.

**Handbook of Nonparametric Statistics.** Investigation of randomness, moments, percentiles, and distributions. John E. Walsh. Van Nostrand, Princeton, N.J., 1962. 575 pp. Illus. \$15.

**Introduction to Calculus.** Kazimierz Kuratowski. Translated from the Polish by J. Musielak. Pergamon, London; Addison-Wesley, Reading, Mass., 1962. 315 pp. Illus. \$5.

**Introduction to Gas Dynamics.** Ralph M. Rotty. Wiley, New York, 1962. 285 pp. Illus. Plates. \$8.75.

**Introduction to Polymer Chemistry.** John K. Stille. Wiley, New York, 1962. 259 pp. Illus. \$6.95.

**Introduction to Set Theory and Topology.** Kazimierz Kuratowski. Translated from the revised Polish edition by Leo F. Boron. Pergamon, London; Addison-Wesley, Reading, Mass., 1962. 283 pp. \$6.50.

**Laboratory Planning.** For chemistry and chemical engineering. Harry F. Lewis, Ed. Reinhold, New York; Chapman and Hall, London, 1962. 536 pp. Illus. \$20.

**Laboratory Practice of Organic Chemistry.** G. Ross Robertson and Thomas L. Jacobs. Macmillan, New York, ed. 4, 1962. 392 pp. Illus. \$5.50.

**Low-Temperature Physics.** Lectures delivered at Les Houches during the 1961 session of the Summer School for Theoretical Physics, University of Grenoble. C. DeWitt, B. Dreyfus, and P. G. de Gennes, Eds. Gordon and Breach, New York, 1962. 654 pp. Illus. Cloth, \$20; paper, \$9.50.

**Luminescence of Organic and Inorganic Materials.** Papers from the international conference held at New York University. Hartmut P. Kallmann and Grace Marmor Spruch, Eds. Wiley, New York, 1962. 688 pp. Illus. \$16.

**Marine Air Conditioning, Heating, and Ventilation.** Thermotank, Ltd. Pergamon, New York, 1962. 117 pp. Illus. \$10.

**Mathematics for the Physical Sciences.** Herbert S. Wilf. Wiley, New York, 1962. 296 pp. \$7.95.

**Mathematics for Quantum Mechanics.** An introductory survey of operators, eigenvalues, and linear vector spaces. John David Jackson. Benjamin, New York, 1962. 107 pp. Illus. Paper, \$3.50; cloth, \$4.75.

**Mechanical Properties of Polymers.** Lawrence E. Nielsen. Reinhold, New York; Chapman and Hall, London, 1962. 283 pp. Illus. \$11.

**Mechanics for Engineers.** Statics and dynamics. Ferdinand P. Beer and E. Russell Johnston, Jr. McGraw-Hill, New York, ed. 2, 1962. 785 pp. Illus. \$10.75.

**Neutron Physics.** Proceedings of the symposium held at Rensselaer Polytechnic Institute in May 1961. M. L. Yeater, Ed. Academic Press, New York, 1962. 311 pp. Illus. \$12.

**Nuclear Instruments.** Proceedings of the symposium held at Harwell in September 1961. J. B. Birks, Ed. Academic Press, New York, 1962. 252 pp. Illus. \$10.

**Numerical Mathematical Analysis.** James B. Scarborough. Johns Hopkins Press, Baltimore, Md.; Oxford Univ. Press, London, ed. 5, 1962. 615 pp. Illus. \$7.

**Physical Organic Chemistry.** Jack Hine. McGraw-Hill, New York, ed. 2, 1962. 562 pp. Illus. \$11.50.

**Physical Properties of Polymers.** F. Bueche. Wiley, New York, 1962. 364 pp. Illus. \$9.50.

**Principles of Radioisotope Methodology.** Grafton D. Chase and Joseph L. Rabinowitz. Burgess, Minneapolis, Minn., ed. 2, 1962. 380 pp. Illus. + charts. \$6.

**Progress in Astronautics and Rocketry.** vol. 8, *Guidance and Control.* Robert E. Roberson and James S. Farrior, Eds. Academic Press, New York, 1962. 685 pp. Illus. \$9.25.

**The Pyrimidines.** D. J. Brown. Wiley, New York, 1962. 799 pp. Illus. \$40.

**Quantum Statistical Mechanics.** Green's function methods in equilibrium and non-equilibrium problems. Leo P. Kadanoff and Gordon Baym. Benjamin, New York, 1962. 214 pp. Illus. Paper, \$4.95; cloth, \$6.95.

**Radio Noise of Terrestrial Origin.** F. Horner, Ed. Elsevier, New York, 1962. 202 pp. Illus. \$8.75. Proceedings of the session held by the fourth Commission on Radio Noise of Terrestrial Origin, during the 13th General Assembly of the International Scientific Radio Union (London, September 1960).

**Rhenium.** A symposium held by the Electrochemical Society in May 1960. B. W. Gonser, Ed. Elsevier, New York, 1962. 237 pp. Illus. \$11.

**A Short History of Astronomy.** From earliest times through the 19th century. Arthur Berry. Dover, New York, 1962 (reprint of the 1898 edition). 471 pp. Illus. Paper, \$2.

**Solar Activity and the Ionosphere.** For radio communications specialists. N. Ya. Bugoslavskaya. Translated from the Russian by G. O. Harding. Pergamon, New York, 1962. 50 pp. Illus. \$2.50.

**Stars and Stellar Systems.** Gerard P. Kuiper, Ed. vol. 2, *Astronomical Techniques.* W. A. Hiltner, Ed. Univ. of Chicago Press, Chicago, 1962. 656 pp. Illus. \$16.50.

**Static Power Convertors.** Performance and application. Robert Wells. Wiley, New York, 1962. 287 pp. Illus. Plates. \$7.

**Theory of Elementary Particles.** Paul Roman. North-Holland, Amsterdam; Interscience (Wiley), New York, ed. 2, 1962. 596 pp. Illus. \$12.75.

**Vectors.** A programmed text for introductory physics. Prepared by Basic Systems, Inc. Appleton-Century-Crofts, New York, 1962. 177 pp. (teacher's manual, 16 pp.). Illus. Paper, \$2.20.