

# BOOKS RECEIVED

## ASTRONOMY & ASTROPHYSICS

**The Moon Meteorites and Comets.** Barbara M. Middlehurst and Gerard P. Kuiper, eds. Vol. 4 of *The Solar System*. 810 pp. Univ. of Chicago Press, Chicago, 1963. \$15.00.

**Radio Astronomical and Satellite Studies of the Atmosphere.** Jules Aarons, ed. Summer School Proc. (Corfu, Athens, June 1962). 561 pp. North-Holland, Amsterdam, 1963. Distr. in US by Interscience, New York. \$17.50.

**Technology of Lunar Exploration.** Clifford I. Cummings and Harold R. Lawrence, eds. Meeting Proc. (Cleveland, July 1962). Vol. 10 of *Progress in Astronautics and Rocketry*, edited by Martin Summerfield. 989 pp. Academic, New York, 1963. \$13.75.

## BIOPHYSICS & MEDICAL PHYSICS

**The Machinery of the Brain.** By Dean E. Wooldridge. 252 pp. McGraw-Hill, New York, 1963. Paper \$2.95.

## CHEMISTRY & CHEMICAL PHYSICS

**Combustion.** Proc. of 9th Internat'l Symp. (Cornell Univ., Aug.-Sept. 1962). 1091 pp. Academic, New York, 1963. \$42.00.

**The Shape of Carbon Compounds.** An Introduction to Organic Chemistry. By Werner Herz. 152 pp. Benjamin, New York, 1963. Paper \$1.95, cloth \$3.95.

**Fundamentals of General Chemistry** (2nd ed.). By C. H. Sorum. 707 pp. Prentice-Hall, Englewood Cliffs, N. J., 1963. \$8.50.

**Refractory Metals and Alloys II, Volume 17.** M. Semchyshen and I. Perlmutter, eds. Conf. Proc. (Chicago, Apr. 1962). 448 pp. Interscience, New York, 1963. \$19.50.

**Fuel Cells.** Will Mitchell, ed. Vol. 1 of *Chemical Technology Monographs*, edited by Raymond F. Baddour. 442 pp. Academic, New York, 1963. \$15.00.

**How Chemical Reactions Occur.** An Introduction to Chemical Kinetics and Reaction Mechanisms. By Edward L. King. 148 pp. Benjamin, New York, 1963. Paper \$1.95, cloth \$3.95.

**Elementary Chemical Thermodynamics.** By Bruce H. Mahan. 155 pp. Benjamin, New York, 1963. Paper \$1.95, cloth \$3.95.

**The Structure of Molecules.** An Introduction to Molecular Spectroscopy. By Gordon M. Barrow. 156 pp. Benjamin, New York, 1963. Paper \$1.95, cloth \$3.95.

**An Introduction to Polymer Chemistry.** By W. R. Moore. 270 pp. Aldine, Chicago, 1963. \$7.50.

**Thin Film Chromatography.** By E. Vernon Truter. 205 pp. Interscience, New York, 1963. \$7.00.

## COMPUTATION & COMMUNICATION

**Mathematical Methods for the Study of Automatic Control Systems.** By V. I. Zubov. Transl. from 1959 Russian ed. by Yaakov Schorr-Kon. 327 pp. Pergamon, London, 1963. Distr. in US by Macmillan, New York. \$12.50.

**The Minds of Robots.** Sense Data, Memory Images, and Behavior in Conscious Automata. By James T. Culbertson. 466 pp. Univ. of Illinois Press, Urbana, Ill., 1963. \$10.00.

**A Servomechanism Primer.** By Ira Ritow. 184 pp. Doubleday, Garden City, N. Y., 1963. Paper \$1.95.

## EDUCATION

**General Science Revision Notes.** By C. W. Wood. 179 pp. (Pergamon, London) Macmillan, New York, 1963. Paper \$1.95.

## ELECTRONICS

**Electroluminescence and Related Effects.** By Henry F. Ivey. Supplement 1 of *Advances in Electronics and Electron Physics*, edited by L. Marton and Claire Marton. 276 pp. Academic, New York, 1963. \$11.00.

**Microelectronics.** Theory, Design, and Fabrication. Edward Keonjian, ed. 383 pp. McGraw-Hill, New York, 1963. \$12.50.

**Advances in Electronic Circuit Packaging, Volume 3.** Lawrence L. Rosine, ed. Symp. Proc. (Univ. of Colo., Aug. 1962). 457 pp. Plenum, New York, 1963. \$16.50.

**Printed and Integrated Circuitry.** Materials and Processes. By T. D. Schlabach and D. K. Rider. 420 pp. McGraw-Hill, New York, 1963. \$13.50.

**Electronic Instrumentation.** By Sol D. Prenskey. 534 pp. Prentice-Hall, Englewood Cliffs, N. J., 1963. \$13.35.

**An Introduction to Semiconductor Electronics.** By Rajendra P. Nanavati. 422 pp. McGraw-Hill, New York, 1963. \$12.50.

## EXPERIMENTAL TECHNIQUES

**An Introduction to Vacuum Technique.** By A. H. Turnbull, R. S. Barton, J. C. Rivière. 190 pp. Wiley, New York, 1962. \$7.75.

## GEOPHYSICS & EARTH SCIENCES

**Rocket and Satellite Meteorology.** H. Wexler and J. E. Caskey, Jr., eds. Symp. Proc. (Washington, D. C., Apr. 1962). 441 pp. North-Holland, Amsterdam, 1963. Distr. in US by Interscience, New York. \$15.50.

**Ionospheric Sporadic E.** Ernest K. Smith, Jr. and Sadami Matsushita, eds. Vol. 2 of *Series on Electromagnetic Waves*. 391 pp. Pergamon, London, 1962. Distr. in US by Macmillan, New York. \$15.50.

## HANDBOOKS, TABLES, ETC.

**American Institute of Physics Handbook** (2nd ed.). Dwight E. Gray, coordinating ed. McGraw-Hill, New York, 1963. \$29.75.

**Weights and Measures: An Informal Guide.** By Stacy V. Jones. 141 pp. Public Affairs Press, Washington, D. C., 1963. \$3.50.

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**International Dictionary of Refrigeration in Six Languages: English, French, German, Russian, Italian, Spanish.** By the Internat'l Institute of Refrigeration. 278 pp. Pergamon, Oxford, 1962. Distr. in US by Macmillan, New York. \$13.50.

**Bibliographic Guide to Refrigeration 1953-1960.** By the Internat'l Institute of Refrigeration. 1112 pp. Pergamon, Oxford, 1962. Distr. in US by Macmillan, New York. \$20.00.

### HISTORY & PHILOSOPHY OF SCIENCE

**Man and His Physical Universe (2nd ed.).** By Richard Wistar. 376 pp. Wiley, New York, 1963. \$7.95.

**The Natural Philosophy of Time (1961 ed.).** By C. J. Whitrow. 324 pp. Harper & Row, New York, 1963. Paperbound \$1.95.

**Philosophy of Science, Volume 1.** The Delaware Seminar. Bernard Baumrin, ed. 370 pp. Interscience, New York, 1963. \$9.75.

**William Herschel.** By Angus Armitage. 158 pp. Doubleday, Garden City, N. Y., 1963. \$3.95.

**The Boundaries of Science (1961 ed.).** By Magnus Pyke. 208 pp. Penguin, Baltimore, Md., 1963. Paper \$0.95.

**Introduction to Dynamic Morphology.** By Edmund Mayer. 545 pp. Academic, New York, 1963. \$16.00.

**The Ancient Engineers.** By L. Sprague De Camp. 408 pp. Doubleday, Garden City, N. Y., 1963. \$4.95.

**Man and Energy (2nd ed.).** By A. R. Ubbelohde. 124 pp. Penguin, Baltimore, Md., 1963. Paperbound \$1.25.

**Progress and Decline.** The Group in Evolution. By Hugh Miller. 287 pp. Ritchie, Los Angeles, 1963. \$10.00.

**Understanding Physics Today.** By W. H. Watson. 219 pp. Cambridge Univ. Press, New York, 1963. \$5.50.

**Science in Progress, 13th Series.** Wallace R. Brode, ed. Sigma Xi—RESA Nat'l Lectureships, 1961. 305 pp. Yale Univ. Press, New Haven, Conn., 1963. \$7.50.

**On Formally Undecidable Propositions of Principia Mathematica and Related Systems.** By Kurt Gödel. Transl. from German by B. Meltzer. 72 pp. Basic Books, New York, 1962. \$3.00.

**Induction: Some Current Issues.** Henry E. Kyburg, Jr. and Ernest Nagel, eds. Symp. Proc. (Wesleyan Univ., June 1961). 220 pp. Wesleyan Univ. Press, Middletown, Conn., 1963. \$10.00.

### NUCLEAR PHYSICS

**Nuclear Fusion.** Plasma Physics and Controlled Nuclear Fusion Research. 1962 Supplement, Part 2 of *Nuclear Fusion*. Conf. Proc. (Salzburg, Sept. 1961). IAEA, Vienna, 1963. Distr. in US by National Agency for Internat'l Publications, New York. Paper \$10.00.

**On the Interaction Between Atomic Nuclei and Electrons (1936 ed.).** By H. B. G. Casimir. 90 pp. Freeman, San Francisco, 1963. Paper \$2.00.

### NUCLEAR POWER & TECHNOLOGY

**Production and Use of Short-Lived Radioisotopes from Reactors.** Seminar Proc. (Vienna, Nov. 1962). Vol. 1, 433 pp., \$8.50; Vol. 2, 272 pp., \$5.50. IAEA, Vienna, 1963. Distr. in US by National Agency for Internat'l Publications, New York. Both paper.

**Nuclear Power Technology.** F. J. Pearson, ed. 355 pp. Oxford Univ. Press, New York, 1963. \$6.75.