## BOOKS RECEIVED

Elementary Solid State Physics: A Short Course. By Charles Kittel. 339 pp. John Wiley & Sons, Inc., New York, 1962. \$8.75.

Decomposition of Austenite by Diffusional Processes. V. F. Zackay and H. I. Aaronson, eds. Symp. Proc. (Philadelphia, Oct. 1960). 621 pp. Interscience Division, John Wiley & Sons, Inc., New York, 1962, \$35.00.

Reactor Handbook (2nd ed.), Vol. 3, Part B, Shielding. Everitt P, Blizard and Lorraine S, Abbott, eds. 287 pp. Interscience Division, John Wiley & Sons, Inc., New York, 1962, Paperbound \$9.00.

Semiconductor and Conventional Strain Gages. Mills Dean, III, and Richard D. Douglas, eds. 381 pp. Academic Press Inc., New York, 1962, \$15.00.

Nuclear Graphite. R. E. Nightingale, ed. 547 pp. Academic Press Inc., New York, 1962. \$15.80.

Fuel Cells. Power for the Future. By David R. Adams, et al. 160 pp. Fuel Cell Research Associates, Willow Grove, Pa., 1960. \$8.75.

A Sophisticate's Primer of Relativity. By P. W. Bridgman. 191 pp. Wesleyan Univ. Press, Middletown, Conn., 1962. \$4.50.

Clouds, Rain and Rainmaking. By B. J. Mason. 145 pp. Cambridge Univ. Press, New York, 1962. \$4.50.

Metals Reference Book (3rd ed.). By Colin J. Smithells. Vol. 1, 584 pp; Vol. 2, 537 pp. Butterworths, Washington. D. C., 1962. \$32.50 per set.

Principles Underlying Systems Engineering. By Daniel O. Dommasch and Charles W. Landeman. 480 pp. Pitman Publishing Corp., New York, 1962. \$12.00.

Asphalt. Science and Technology, By Edwin J. Barth, 700 pp. Gordon & Breach, Inc., New York, 1962, \$32.50.

Encyclopaedic Dictionary of Physics. Vol. 6, General, Nuclear, Solid State, Molecular, Chemical, Metal and Vacuum Physics, Astronomy, Geophysics, Biophysics and Related Subjects. J. Thewlis, R. C. Glass, D. J. Hughes, A. R. Meetham, eds. 883 pp. Pergamon Press, New York, 1962. \$298 per set.

Physics for the Modern World, By E. N. da C. Andrade. 100 pp. Barnes & Noble, Inc., New York, 1962. \$2,00.

Modern Communications. By Thomas H. Crowley, Gerard G. Harris, Stewart E. Miller, John R. Pierce, John P. Runyon. 340 pp. Columbia Univ. Press, New York, 1962. \$9.75.

The Universe. By David Bergamini and The Editors of Life. 192 pp. Time Inc., New York, 1962. \$3.95.

Topics on Radiofrequency Spectroscopy. Proc. of the Internat'l School of Physics "Enrico Fermi" (Varenna, Italy, August 1960). 312 pp. Academic Press Inc., New York, 1962, \$10.00.

Directory of Nuclear Reactors (Rev. ed.). Vol. 4, Power Reactors. 324 pp. IAEA, Vienna, 1962. Distr. in US by Internat'l Publications, Inc. Paperbound \$5.00.

Reactor Safety and Hazards Evaluation Techniques. Symp. Proc. (Vienna, May 1962). Vol. 1, 544 pp. \$10.00; Vol. 2, 544 pp. \$10.00. IAEA, Vienna, 1962. Distr. in US by Internat'l Publications, Inc. Group Theory and Solid State Physics. By L. Mariot, Transl. from French by Allen Nussbaum. 114 pp. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1962. \$5.00.

Physicochemical Hydrodynamics. By Veniamin G. Levich. Transl. from Russian by Scripta Technica, Inc., 700 pp. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1962, \$20.00.

Orbitals in Atoms and Molecules. By Chr. Klixbüll Jørgensen. 162 pp. Academic Press Inc., New York, 1962. 35s.

Evolution. By Ruth Moore and The Editors of Life, 192 pp. Time Inc., New York, 1962. \$3.95.

Creep in Structures. Colloq. Proc. (Stanford Univ., July 1960). Nicholas J. Hoff, ed. 375 pp. (Springer-Verlag, Berlin) Academic Press Inc., New York, 1962. \$15.00.

Lectures on the Many-Body Problem. 2nd Internat'l Spring School of Physics, Univ. of Naples. E. R. Caianiello, ed. 344 pp. Academic Press Inc., New York, 1962. \$10.50.

Physique des Explosifs solides. By J. Berger and J. Viard. 329 pp. Dunod, Paris, 1962. 74 NF.

Basic Concepts of Physics. By Arthur Beiser. 341 pp. Addison-Wesley Publishing Co., Inc., Reading, Mass., 1961. \$7.75.

Magnetism and Crystallography. Conf. Proc. (Kyoto, Japan, Sept. 1961). Vol. 1, Magnetism, 718 pp. \$9.00; Vol. 2, Electron and Neutron Diffraction, 397 pp. \$6.00; Vol. 3, Neutron Diffraction Study of Magnetic Materials, 71 pp. \$1.00. Physical Society of Japan, Tokyo, 1962. \$15.00 per set. All paperbound.

Physics for Students of Science and Engineering. Combined Edition; Part I, First Edition; Part 2, Second Edition. By David Halliday and Robert Resnick. 1177 pp. John Wiley & Sons, Inc., New York, 1962. \$11.50.

Annual Review of Physical Chemistry, Volume 13. H. Eyring, C. J. Christensen, H. S. Johnston, eds. 528 pp. Annual Reviews, Inc., Palo Alto, Calif., 1962. \$8.50.

Magnetohydrodynamics. Symp. Proc. (Evanston, Ill., Aug. 1961). Ali Bulent Cambel, Thomas P. Anderson, Milton M. Slawsky, eds. 393 pp. Northwestern Univ. Press, Evanston, Ill., 1962. \$15.00.

Flows in Networks. By L. R. Ford, Jr. and D. R. Fulkerson. 194 pp. Princeton Univ. Press, Princeton, N. J., 1962. \$6.00.

Rare Earth Research. Conf. Proc. (Colorado, Sept. 1961). Joseph F. Nachman and Charles E. Lundin, eds. 354 pp. Gordon & Breach, New York, 1962. \$14.50.

Physicomathematical Aspects of Biology. Proc. of Internat'l School of Physics "Enrico Fermi" (Varenna, Italy, July 1960). N. Rashevski, ed. 524 pp. Academic Press Inc., New York, 1962, \$16.00.

Topics of Modern Physics. Vol. 1, Geometrodynamics. By J. A. Wheeler. 334 pp. Academic Press Inc., New York, 1962. \$6.50.

Quantum Theory of Scattering. By Ta-You Wu and Takashi Ohmura. 495 pp. Prentice-Hall Inc., Englewood Cliffs, N. J., 1962. \$16.00.

Advances in Space Science and Technology, Volume 4. Frederick I. Ordway, III, ed. 431 pp. Academic Press Inc., New York, 1962, \$14.00.

The Structure of Scientific Revolutions. By Thomas S. Kuhn. 172 pp. Univ. of Chicago Press, Chicago, Ill., 1962. \$4.00.

Technical Aspects of Sound. Vol. 3, Recent Developments in Acoustics. E. G. Richardson and E. Meyer, eds. 346 pp. American Elsevier Publishing Co., Inc., New York, 1962, \$14.00.

Ergodic Theories. Proc. of the Internat'l School of Physics "Enrico Fermi" (Varenna, Italy, May 1960). 241 pp. Academic Press Inc., New York, 1962, \$7.50.

Spectroscopy and Relaxation at Radiofrequencies. Proc. of 9th Colloque Ampère (Leipzig, Sept. 1961). 531 pp. North-Holland Publishing Co., Amsterdam, 1962, \$14.00.

Introduction to Electromagnetic Fields and Waves. By Dale R. Corson and Paul Lorrain. 552 pp. W. H. Freeman & Co., San Francisco, 1962, \$12.00.

Modern Quantum Theory. By Behram Kurşunoğlu. 518 pp. W. H. Freeman & Co., San Francisco, 1962, \$14.00.

Introduction to Automatic Control Systems, By Robert N. Clark, 467 pp. John Wiley & Sons, Inc., New York, 1962, \$10.50.

Optimization Techniques with Applications to Aerospace Systems. George Leitmann, ed. Vol. 5 of Mathematics in Science and Engineering, edited by Richard Bellman. 453 pp. Academic Press Inc., New York, 1962, \$16.00.

Oxidation of Metals and Alloys (2nd ed.). By O. Kubaschewski and B. E. Hopkins. 319 pp. Butterworths, London, 1962. \$11.00.

Statistical Treatment of Experimental Data. By Hugh D. Young. 172 pp. McGraw-Hill Book Co., Inc., New York, 1962. Paperbound \$2.95.

Nuclear Radiation in Geophysics. H. Israël and A. Krebs, eds. 430 pp. (Springer-Verlag, Berlin) Academic Press Inc., New York, 1962, \$18.00.

Differential Geometry and Symmetric Spaces. By Sigurdur Helgason, 486 pp. Academic Press Inc., New York, 1962, \$12.50.

Microwave Ferrites and Ferrimagnetics. By Benjamin Lax and Kenneth J. Button. 752 pp. McGraw-Hill Book Co., Inc., New York, 1962, \$16.50.

Basic Nuclear Physics. By I. R. Williams and M. W. Williams. 280 pp. George Newnes, Ltd., London, 1962. 42s.

Knowledge and Wonder. The Natural World as Man Knows It. By Victor F. Weisskopf. 222 pp. Doubleday & Co., Inc., Garden City, N. Y., 1962. \$4.95.

Recent Developments in General Relativity. 472 pp. (PWN-Polish Scientific Publishers, Warsaw) Pergamon Press, New York, 1962. \$8.00.

The Laminar Boundary Layer Equations, By N. Curle. 162 pp. Oxford Univ. Press, London, 1962. Paperbound \$4.80.

Electronics for Scientists. Principles and Experiments for Those Who use Instruments. By H. V. Halmstadt, C. G. Enke, E. C. Toren, Jr. 619 pp. W. A. Benjamin, Inc., New York, 1962. \$10.75.

Introduction to Ligand Field Theory. By Carl J. Ballhausen. 298 pp. McGraw-Hill Book Co., Inc., New York, 1962, \$11.75.

## NOW PUBLISHED...

## INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE

Editor-in-Chief: A. C. Eringen, Purdue University. Regional Editor: I. N. Sneddon, University of Glasgow. Assisted by an International Editorial Advisory Board.

This new international journal provides a medium of communication among physicists, chemists, mathematicians and engineers. It publishes original papers on the application of natural and mathematical sciences to engineering—particularly research which focuses on the cross-fertilization of such fields as mechanics, electricity and magnetism, thermodynamics and physical chemistry, both from continuum and molecular points of view.

The scope of the papers is theoretical, experimental or both. Papers will be published in English, French and German, with abstracts in English, French, German, Italian and Russian.

## Some papers to be published in early issues:

R. P. Nordgren and P. M. Naghdi-Loading and unloading solutions for an elastic/plastic annular plate in the state of plane stress under combined pressure and couple; Kazuo Kondo-Non-Riemannian and Finslerian approaches to the theory of yielding; D. S. Dugdale-Effect of internal stress on the flexural stiffness of discs; O. O. Mangasarian-Numerical solution of the first biharmonic problem by kinear programming; B. Fraeijis de Veubeke—The inertial tensor of an incompressible fluid bounded by walls in rigid body motion; S. Kaliski and W. Nowacki-Combined elastic and electro-magnetic waves produced by thermal-shock in the case of a medium of finite electric conductivity; Ekkehart Kroner-On the physical reality of torque stresses in continuum mechanics; R. A. Toupin—A dynamical theory of elastic dielectrics; J. E. Adkins and R. S. Rivlin-The Faraday and allied effects in circular waveguides; H. S. Green-The thermodynamics of complicated systems.

Published quarterly. Annual subscription rates: "A" to libraries and other institutions, \$30.00; "B" to individuals, \$10.00.

Sample copy sent on request.



PERGAMON PRESS, INC. Dept. PT 13, 122 East 55th Street New York 22, N.Y.