

The Theory of Atomic Collisions

Third Edition

By SIR NEVILL MOTT, *University of Cambridge*, and SIR HARRIE MASSEY, *University of London*. This completely revised and expanded edition takes account of the substantial research that has been done since the second edition appeared in 1949. While incorporating the new methods and results, this edition follows the general lines of its predecessor. Research has been extensive in the area of collision phenomena, partly due to their applications in the study of the upper atmosphere, astrophysics, plasma, and lasers.

191 figures. \$19.20

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By ARTHUR BRADBURY CLEGG, *University of Oxford*. Describing some significant features of reactions produced by bombarding nuclei with nucleons that have energies of 100MeV or more, this study makes an understanding of reaction mechanisms possible, from which considerable information about the structure of the nuclei involved can be derived. Particular attention is given to some relatively simple reactions, including elastic and inelastic scattering and knockout reactions.

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By A. R. UBBELOHDE, *Imperial College, London; President, Faraday Society*. In many ways the liquid state of matter presents one of the richest and most diversified groups of unsolved problems in modern physical chemistry. By surveying current information in the field, this book focuses attention on liquids considered as "melts." Quasi-crystalline models and anti-crystalline models related to them, may often be better suited to describe liquids not too near their critical points, than the quasi-gaseous analogy. Many new avenues for research on fluid condensed states of matter involve this approach, and the book has been written to stimulate and serve in their exploration.

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BOOKS RECEIVED

ACOUSTICS

Underwater Explosions. By Robert H. Cole. (Reprint of 1948 ed.) 437 pp. Dover, New York, 1965. Paper \$2.75.

Dynamics of Vibrations. By Enrico Volterra and E. C. Zachmanoglou. 622 pp. Charles E. Merrill, Columbus, Ohio, 1965. \$17.50.

ASTRONOMY & ASTROPHYSICS

Vistas in Astronomy, Volume 6. Arthur Beer, ed. 214 pp. Pergamon, New York, 1965. \$13.00.

Solar Radio Astronomy. By Mukul R. Kundu. 660 pp. Wiley, New York, 1965. \$19.75.

BIOPHYSICS & MEDICAL PHYSICS

The Strategy of Life. By Clifford Grobstein. 118 pp. Freeman, San Francisco, 1965. Cloth \$3.50, paper \$1.75.

Vision and Visual Perception. Clarence H. Graham, ed. 637 pp. Wiley, New York, 1965. \$23.50.

The Physics of the Ear. By T. S. Littler. 378 pp. Pergamon, New York, 1965. \$12.00.

CHEMISTRY & CHEMICAL PHYSICS

Adsorption from Solutions of Non-Electrolytes. By J. J. Kipling. 328 pp. Academic, New York, 1965. \$12.00.

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The Structure of Glass, Volume 5, Structural Transformations in Glasses at High Temperatures. N. A. Toropov and E. A. Porai-Koshits, eds. 223 pp. Consultants Bureau, New York, 1965. \$12.50.

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The Chemistry of Diamond-like Semiconductors. By N. A. Goryunova. Transl. from Russian by Scripta Technica. 236 pp. MIT Press, Cambridge, 1965. \$10.00.

GEOPHYSICS & EARTH SCIENCE

Radiative Heat Exchange in the Atmosphere. (Revised ed.) By K. Ya. Kondrat'yev. Transl. from Russian by O. Tedder. 411 pp. Pergamon, New York, 1965. \$8.50.

Physics of the Lower Ionosphere. By R. C. Whitten and I. G. Poppoff. 232 pp. Prentice-Hall, Englewood Cliffs, New Jersey, 1965. \$7.50.

Physical Climatology. By William D. Sellers. 272 pp. The University of Chicago Press, Chicago, 1965. \$7.50.

HANDBOOKS, TABLES, ETC.

Table of Meta-Stable Transitions for use in Mass Spectrometry. By J. H. Beynon, R. A. Saunders and A. E. Williams. 784 pp. American Elsevier, New York, 1965. \$16.50.

1965 Science Year. The World Book Science Annual. 393 pp. Science Year, Chicago, 1965.

CIRA 1965. (Cospar International Reference Atmosphere 1965.) Compiled by Cospar Working Group IV. 313 pp. North-Holland, Amsterdam, 1965. \$7.50.

HISTORY & PHILOSOPHY OF SCIENCE

Encounter with the Future. By Fred Hoyle. 108 pp. Trident, New York, 1965. \$4.95.

The Scientific Revolution. By W. E. Knowles Middleton. 88 pp. Schenkman, Cambridge, 1965. Cloth \$2.65, paper \$1.25.

Matter and Method. By R. Harré. 124 pp. St. Martin's, New York, 1965. 16 s.

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Science in Canada. Selections from the Speeches of E. W. R. Steacie. J. D. Babbitt, ed. 198 pp. University of Toronto Press, Toronto, 1965. \$5.95.

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From Pythagoras to Einstein. By K. O. Friedrichs. 88 pp. Random House, New York, 1965. \$1.95.



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Calculus of Variations and Partial Differential Equations of the First Order. Part I: Partial Differential Equations of the First Order. By C. Carathéodory. Transl. from German by Robert B. Dean and Julius J. Brandstatter. 171 pp. Holden-Day, San Francisco, 1965. \$8.50.

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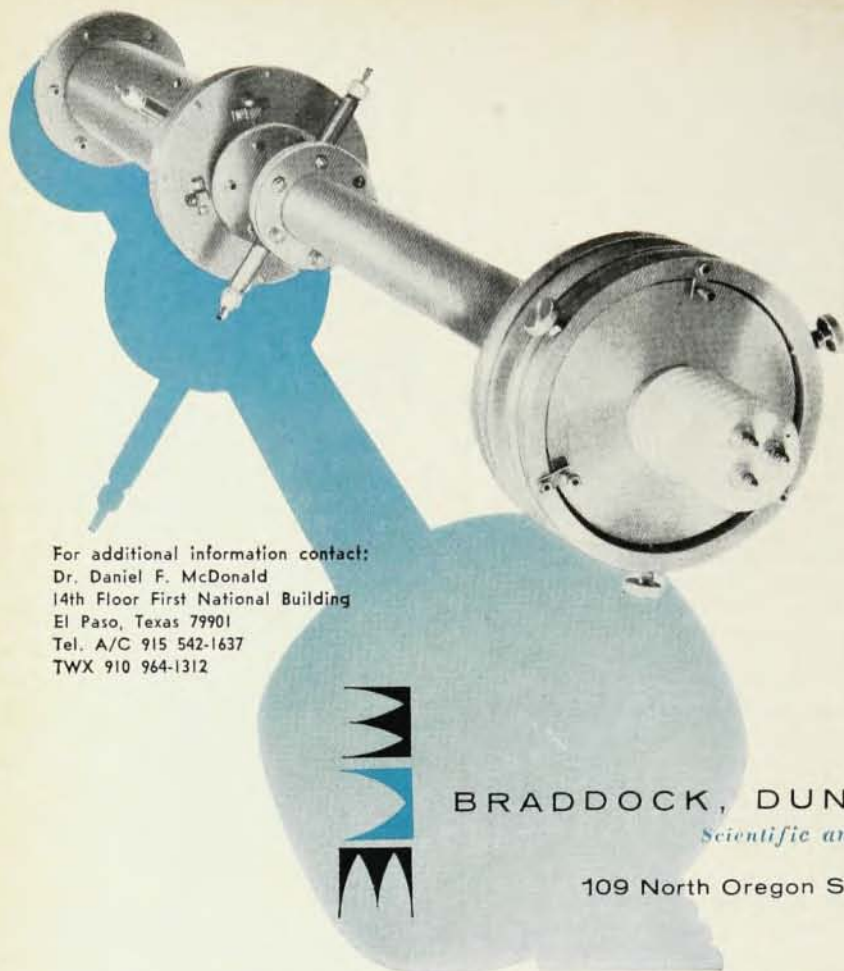
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Life Beyond the Earth. By Samuel Mofat and Elie A. Shneour. 156 pp. National Science Teachers Association, Washington, D. C. 1965. Paper 50 cents.

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Research Inspired by the Dutch Windmills. An Account of an Extensive Programme of Research and Development initiated and organized by the Prinsmolen-Committee. 200 pp. H. Veenman en Zonen, Wageningen, Netherlands, 1965. \$15.00.



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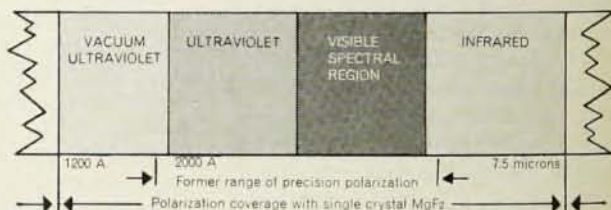


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Introduction to Space Science. Wilmot N. Hess, ed. 919 pp. Gordon and Breach, New York, 1965. Professional edition: \$10.00, Reference edition: \$29.75.

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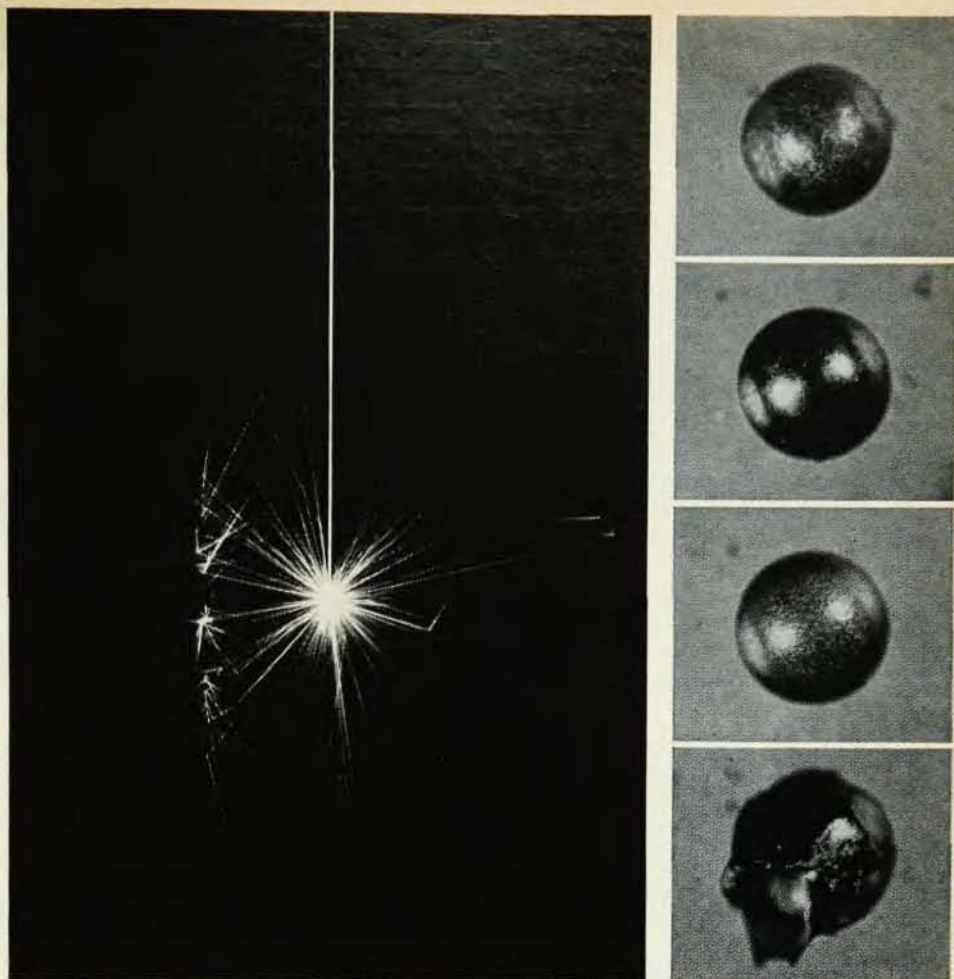
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The Theory of Relativity and A Priori Knowledge. By Hans Reichenbach. Transl. from German by Maria Reichenbach. University of California Press, Berkeley, 1965. \$5.00.

THERMAL PHENOMENA

Theory of Energy and Mass Transfer. By A. V. Luikov and Yu. A. Mikhailov. Transl. from Russian by L. A. Fenn. 392 pp. Pergamon, New York, 1965. \$12.75.



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