

BOOKS RECEIVED

ASTRONOMY & ASTROPHYSICS

The Solar Corona. John W. Evans, ed. Internat'l Astronomical Union Symp. Proc. (Cloudcroft, N. M., Aug. 1961). 344 pp. Academic, New York, 1963. \$14.00.

A Treatise on Radiative Transfer. By V. V. Sobolev. Transl. from Russian by S. I. Gaposchkin. 319 pp. Van Nostrand, New York, 1963. \$9.75.

CHEMISTRY & CHEMICAL PHYSICS

Elementary Reaction Kinetics. By J. L. Latham. 120 pp. Butterworths, London, 1962. Paperbound \$2.95.

Chemical Thermodynamics. By John G. Kirkwood and Irwin Oppenheim. 261 pp. McGraw-Hill, New York, 1961. \$8.75.

Reaction Heats and Bond Strengths. By C. T. Mortimer. 230 pp. Pergamon, London, 1962. Distr. in US by Addison-Wesley, Reading, Mass. \$5.00.

Use of the Chemical Literature. R. T. Bottle, ed. 231 pp. Butterworths, London, 1962. \$7.00.

COMPUTATION & COMMUNICATION

An Introduction to Digital Computing. By Bruce W. Arden. 389 pp. Addison-Wesley, Reading, Mass., 1963. \$8.75.

A Fortran Primer. By Elliott I. Organick. 186 pp. Addison-Wesley, Reading, Mass., 1963. Paperbound \$3.95.

Self-Organizing Systems 1962. Marshall C. Yovits, George T. Jacobi, Gordon D. Goldstein, eds. Conf. Proc. (Chicago, May 1962). 563 pp. Spartan Books, Washington, D. C., 1962. \$12.00.

ELECTRICITY & MAGNETISM

Magnetism. By E. W. Lee. 287 pp. Penguin, Baltimore, Md., 1963. Paperbound \$1.65.

Classical Electromagnetic Theory. By Nunzio Tralli. 308 pp. McGraw-Hill, New York, 1963. \$9.95.

Introduction to Electromagnetic Theory. By George E. Owen. 506 pp. Allyn & Bacon, Boston, 1963. \$10.95.

ELECTRONICS

Cold Cathode Discharge Tubes. By J. R. Acton and J. D. Swift. 351 pp. Academic, New York, 1963. \$12.00.

Electronic Circuits and Instrumentation Systems. By Jack J. Studer. 423 pp. John Wiley, New York, 1963. \$10.75.

GEOPHYSICS & EARTH SCIENCES

The Ionosphere. Conf. Proc. (Imperial Col., London, July 1962). 528 pp. The Inst. of Physics and The Physical Soc., London, 1963. Distr. by Chapman & Hall, London. £5 5s.

Ice and Snow. Properties, Processes, and Applications. W. D. Kingery, ed. Conf. Proc. (MIT, Feb. 1962). 684 pp. M.I.T. Press, Cambridge, Mass., 1963. \$16.00.

Entstehung und Stoffbestand der Salzlagerstätten. By Otto Braitsch. Vol. 3 of Mineralogie und Petrographie in Einzeldarstellungen, edited by W. v. Engelhardt and J. Zemmann. 232 pp. Springer-Verlag, Berlin, 1962. Paperbound DM 56.

NUCLEAR PHYSICS

Nuclear Physics. Luke C. L. Yuan and Chien-Shiung Wu, eds. Vol. 5, Part B, Methods of Experimental Physics, edited by L. Marton and Claire Marton. 886 pp. Academic, New York, 1963. \$22.50.

Electron Scattering and Nuclear and Nucleon Structure. A Collection of Reprints. Robert Hofstadter, ed. 690 pp. W. A. Benjamin, New York, 1963. Clothbound \$10.00, paperbound \$6.95.

Nuclear Physics (2nd ed.). By Irving Kaplan. 770 pp. Addison-Wesley, Reading, Mass., 1963. \$11.50.

Selected Topics in Nuclear Theory. Summer School Lectures (Czechoslovakia, Aug.-Sept. 1962). 453 pp. IAEA, Vienna, 1963. Distr. in US by Internat'l Publications, New York. Paperbound \$10.00.

PHYSICS OF FLUIDS

Mécanique Expérimentale des Fluides. By R. Comolet. Vol. 2, Dynamique des Fluides Réels Turbomachines. 442 pp. Masson, Paris, 1963. 72 NF.

An Introduction to Waves, Rays and Radiation in Plasma Media. By J. J. Brandstatter. 690 pp. McGraw-Hill, New York, 1963. \$15.00.

Plasma Physics and Magnetofluidmechanics. By Ali Bulent Cambel. 304 pp. McGraw-Hill, New York, 1963. \$11.50.

SOLID-STATE PHYSICS

Semiconductor Materials. N. Kh. Abrikosov, ed. Transl. from 1961 Russian edition of Conf. Proc. (A. A. Baikov Inst. of Metallurgy). 139 pp. Consultants Bureau, New York, 1963. Paperbound \$17.50.

Solids Under Pressure. William Paul and Douglas M. Warschauer, eds. 478 pp. McGraw-Hill, New York, 1963. \$15.00.

Theory of Lattice Dynamics in the Harmonic Approximation. By A. A. Maradudin, E. W. Montroll, G. H. Weiss. Supplement 3, Solid State Physics Advances in Research and Applications, edited by Frederick Seitz and David Turnbull. 319 pp. Academic, New York, 1963. \$10.00.

Tunnel-Diode and Semiconductor Circuits. By John M. Carroll. 405 pp. McGraw-Hill, New York, 1963. \$9.75.

Principles of Magnetic Resonance with Examples from Solid State Physics. By Charles P. Slichter. 246 pp. Harper & Row, New York, 1963. \$8.25.

Der Transistor. Physikalische und technische Grundlagen. By H. Salow, H. Beneking, H. Krömer, W. von Münch. Vol. 15, Technische Physik in Einzeldarstellungen, edited by W. Meissner and M. Näbauer. 426 pp. Springer-Verlag, Berlin, 1963. DM 82.

Electrons in Metals. A Short Guide to the Fermi Surface. By J. M. Ziman. 80 pp. Taylor & Francis, London, 1963. Clothbound \$3.00, paperbound \$2.10.

Lectures in Materials Science. The Cornell Materials Science Center Lecture Series. Paul Leurgans, ed. 109 pp. W. A. Benjamin, New York, 1963. Clothbound \$7.00, paperbound \$3.95.

SPACE SCIENCES & AERODYNAMICS

Dynamics and Thermodynamics of Planetary Entry. By W. H. T. Loh. 268 pp. Prentice-Hall, Englewood Cliffs, N. J., 1963. \$12.00.

Flight Performance Handbook for Orbital Operations. Orbital Mechanics and Astrodynamical Formulae, Theorems, Techniques and Applications. Raymond W. Wolverton, ed. John Wiley, New York, 1963. \$25.00.

Air, Space and Instruments. Draper Anniversary Volume. Sidney Lees, ed. 516 pp. McGraw-Hill, New York, 1963. \$15.00.

Space Chemistry. By Paul W. Merrill. 166 pp. Univ. of Michigan Press, Ann Arbor, 1963. Paperbound \$1.95, cloth-bound \$5.00.

TEXTBOOKS

Introductory Applied Physics (2nd ed.). By Norman C. Harris and Edwin M. Hemmerling. 789 pp. McGraw-Hill, New York, 1963. \$8.50.

Experiments in Applied Physics for Colleges and Technical Institutes. By Norman C. Harris. 256 pp. McGraw-Hill, New York, 1963. Paperbound \$4.50.

Essentials of Physical Science. By David E. Goldberg. Edited by William E. Schmidt. 315 pp. Sigma Press, Washington, D. C., 1963. Paperbound \$4.25.

The World of Atoms (2nd ed.). An Introduction to Physical Science. By J. J. G. McCue and Kenneth W. Sherk. 775 pp. Ronald Press, New York, 1963. \$8.50.

Recueil de Problèmes (5th ed.). By J. Roig. 547 pp. Masson, Paris, 1962. 50 NF.

THEORETICAL PHYSICS

Theoretical Physics. M. E. Rose, ed. Conf. Proc. (Univ. of Virginia, Oct. 1962). 462 pp. Gordon & Breach, New York, 1963. Paperbound \$5.00.

Weak Interactions and Topics in Dispersion Physics. Christian Fronsdal, ed. Lecture Notes (2nd Bergen Internat'l School of Physics, 1962). W. A. Benjamin, New York, 1963. Clothbound \$8.00, paperbound \$4.95.

Theoretical Physics. Seminar Proc. (Trieste, July-Aug. 1962). 637 pp. IAEA, Vienna, 1963. Distr. in US by Internat'l Publications, New York. Paperbound \$12.00.

The Quantum Theory of Many-Particle Systems. Harry L. Morrison, ed. Vol. 2, Internat'l Science Review Series, edited by Lewis Klein. 345 pp. Gordon & Breach, New York, 1962. \$4.95.

THERMAL PHENOMENA

Engineering Heat Transfer. By Shao Ti Hsu. 613 pp. Van Nostrand, New York, 1963. \$14.50.

Thermodynamics (2nd ed.). An Introductory Text for Engineering Students. By John F. Lee and Francis Weston Sears. 622 pp. Addison-Wesley, Reading, Mass., 1963. \$9.75.

Transmission de la Chaleur. Conduction, Convection, Rayonnement, Echangeurs de Chaleur. Vol. 2 of Génie Chimique by René Gibert. 272 pp. Eyrolles, Paris, 1963. Paperbound 39,40 NF.

Non-Equilibrium Statistical Mechanics. By I. Prigogine. Vol. 1 in Monographs in Statistical Physics and Thermodynamics, edited by I. Prigogine. 319 pp. Interscience, New York, 1962. \$12.50.

Introductory Statistical Mechanics for Physicists. By D. K. C. MacDonald. 176 pp. John Wiley, New York, 1963. \$6.75.

Modern Developments in Heat Transfer. Warren Ibele, ed. 493 pp. Academic, New York, 1963. \$18.00.

SECTION HEAD SOLID STATE PHYSICS

for the

DEFENCE RESEARCH TELECOMMUNICATIONS ESTABLISHMENT

DEFENCE RESEARCH BOARD
OTTAWA, ONTARIO, CANADA

The DRTE solid state research program is flexible, but has centred on fundamental electrical and optical effects in elemental semi-conductors or semi-insulating compounds. Magnetic resonance and magneto-resistance in semi-metals have been investigated, with special attention to properties potentially applicable to generation of coherent light, or to broad-band microwave or optical modulation.

The Laboratory is equipped for crystal growing and for a wide range of electrical and magnetic measurements. Optical equipment includes a recording spectrometer ranging from infra-red to ultra-violet. Cryogenic apparatus permits measurements down to the temperature of liquid helium.

Because of the recent death of the Section Leader, an experienced researcher with leadership ability is needed to head the team of four scientists plus technical staff. It is anticipated that work will expand under the new Head.

QUALIFICATIONS:

Preferably a Ph.D. degree, with several years experience and ability to conduct and direct original research.

CITIZENSHIP:

Candidates must be Canadian citizens or British subjects.

SALARY:

Up to \$13,600, depending on qualifications and experience.

Please apply, enclosing curriculum vitae, to:

Chief of Personnel
Defence Research Board
National Defence Headquarters
Ottawa, Ontario, Canada
and refer to File 63-DRTE-1A

Present staff is aware of this advertisement.