tion in the Modern World" by Lord James of Rusholme, vice-chancellor of the University of York.

* * *

*The reviewer is Hazard Professor of Physics in Brown University. His own 1963 book* The Role of Science in Civilization *touches on many of the matters discussed in the volume under review.*

## NEW BOOKS

### ELEMENTARY PARTICLES & FIELDS

**Classical and Quantum Theories of Spinning Particles.** By H. C. Corben. 279 pp. Holden-Day, San Francisco, 1968. $8.75

**Symmetry Principles at High Energy.** Conf. proc. (Coral Gables, Fla., Jan. 1968). Arnold Perlmutter, C. Angas Hurst, Behram Kursunoglu, eds. 383 pp. W. A. Benjamin, New York, 1968. $15.00

### ATOMS & MOLECULES

**Advances in Atomic and Molecular Physics,** Vol. 4. D. R. Bates, Immanuel Estermann, H. S. W. Massey, eds. 465 pp. Academic Press, New York, 1968. $20.00

### FLUIDS, PLASMAS

**Proceedings of the 1968 Heat Transfer and Fluid Mechanics Institute.** Conf. proc. (Seattle, Wash., June 1968). Ashley F. Emery, Creighton A. Depew, eds. 272 pp. Stanford U. Press, Stanford, Calif., 1968. $10.00

**Simple Dense Fluids.** H. L. Frisch, Z. W. Salsburg, eds. 430 pp. Academic Press, New York, 1968. $19.50

### SOLIDS

**Dislocation Dynamics.** Conf. proc. (Seattle, Wash., Harrison, B.C., Can., May 1967). Alan R. Rosenfield, George T. Hahn, Arden L. Bement Jr, Robert I. Jaffee, eds. 776 pp. McGraw-Hill, New York, 1968. $25.00

**Precipitation Hardening.** By J. W. Martin. 231 pp. Pergamon Press, Oxford, 1968. Cloth $6.50, paper $5.00

**Point Defects and Diffusion in Strained Metals.** By L. A. Girifalco, D. O. Welch. 169 pp. Gordon and Breach, New York, 1968. Cloth $6.50, paper $3.25

**Quantum Theory of Matter.** (2nd edition) By John C. Slater. 763 pp. McGraw-Hill, New York, 1968. $15.00

### CLASSICAL PHYSICS

**Damping of Materials and Members in Structural Mechanics.** By Benjamin J. Lazan. 317 pp. Pergamon Press, Oxford, 1968. $13.00

### MATHEMATICS & MATHEMATICAL PHYSICS

**Abelian l-Adic Representations and Elliptic Curves.** By Jean-Pierre Serre. 53

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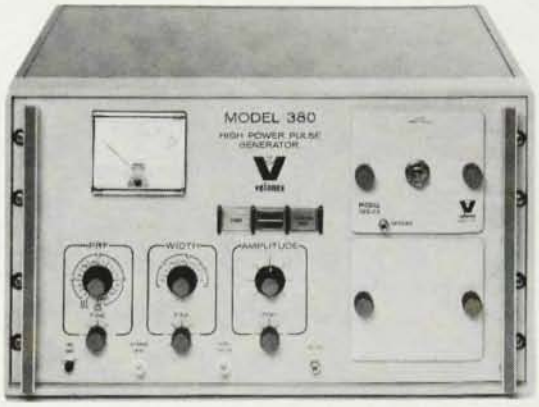


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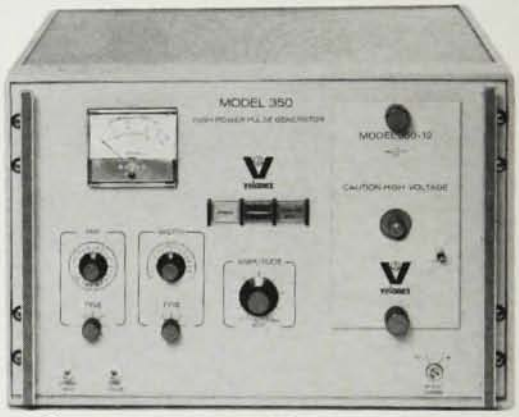


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pp. W. A. Benjamin, New York, 1968. Cloth $8.50, paper $3.95

**Applied Group Theory.** By Arthur P. Cracknell. 417 pp. Pergamon Press, Oxford, 1968. Cloth $7.50, paper $6.00

**Approximation Methods of Quantum Mechanics.** By Arkadii Beinusovich Migdal, V. P. Krainov. Trans. from Russian. 144 pp. Neo Press, Ann Arbor, Mich., 1968. Cloth $4.00, paper $2.00

**Foundations of Global Non-Linear Analysis.** By Richard S. Palais. 131 pp. W. A. Benjamin, New York, 1968. Cloth $8.50, paper $3.95

**Hilbert Spaces of Entire Functions.** By Louis de Branges. 326 pp. Prentice-Hall, Englewood Cliffs, N.J., 1968. $11.00

**Introduction to Probability and Statistics.** (4th edition) By Henry L. Alder, Edward B. Roessler. 333 pp. W. H. Freeman, San Francisco, 1968. $7.00

**Matrix Methods in Quantum Mechanics.** (Reprint) By H. S. Green. 118 pp. Barnes & Noble, New York, 1968. Paper $2.25

**Mathematical Methods for Physicists and Engineers.** By Royal Eugene Collins. 385 pp. Reinhold, New York, 1968. $12.50

**Numerical Methods for Two-Point Boundary-Value Problems.** By Herbert B. Keller. 184 pp. Blaisdell, Waltham, Mass., 1968. $7.50

**Ordinary Differential Equations.** By George F. Carrier, Carl E. Pearson. 229 pp. Blaisdell, Waltham, Mass., 1968. $8.50

**Symposia on Theoretical Physics and Mathematics,** Vol. 6. Conf. proc. (Madras, India 1966). Alladi Ramakrishnan, ed. 294 pp. Plenum Press, New York, 1968. $15.00

**Symposia on Theoretical Physics and Mathematics,** Vol. 7. Conf. proc. (Summer School of the Mathematical Sciences, Madras, India 1966). Alladi Ramakrishnan, ed. 193 pp. Plenum Press, New York, 1968. $12.50

**The Theory of Random Clumping.** By S. A. Roach. 94 pp. Methuen, London (Barnes & Noble, New York), 1968. $4.00

**Tables of Summable Series and Integrals Involving Bessel Functions.** By Albert D. Wheelon. 125 pp. Holden-Day, San Francisco, 1968. $8.50

## INSTRUMENTATION & TECHNIQUES

**Applied Spectroscopy Reviews,** Vol. 1. Edward G. Brame Jr, ed. 455 pp. Dekker, New York, 1968. $16.50

**Microphotography: Photography and Photofabrication at Extreme Resolution.** (2nd edition) By G. W. W. Stevens. 510 pp. Wiley, New York, 1968. $25.00

**Solid State Physical Electronics.** (2nd edition) By Aldert van der Ziel. 633 pp. Prentice-Hall, Englewood Cliffs, N.J., 1968. $13.75

**Transistor Circuits and Applications.** By Laurence G. Cowles. 323 pp. Prentice-

Hall, Englewood Cliffs, N.J., 1968. $10.95

## ASTRONOMY, SPACE, GEOPHYSICS

**Catalog of Emission Lines in Astrophysical Objects.** By Aden B. Meinel, Anthony F. Aveni, Martha W. Stockton. 162 pp. Optical Sciences Center, U. of Arizona, Tucson, 1968. Paper $4.00

**Earth's Particles and Fields.** Conf. proc. (Germany, July-Aug. 1967). Billy M. McCormac, ed. 464 pp. Reinhold, New York, 1968. $27.50

**High Energy Astrophysics,** Vol. 3: General Relativity and High Density Astrophysics. Conf. proc. (Les Houches, 1966). C. DeWitt, E. Schatzman, P. Vérnon, eds. 449 pp. Gordon and Breach, New York, 1967. Cloth $12.50, paper $8.50

**Meteorites and the Origin of Planets.** By John A. Wood. 117 pp. McGraw-Hill, New York, 1968. Cloth $4.95, paper $2.95

**The Structure of the Quiet Photosphere and the Low Chromosphere.** Conf. proc. (Arnhem, Holland, April 1967). C. deJager, ed. 240 pp. D. Reidel, Dordrecht-Holland (Springer-Verlag, New York), 1968. $9.00

**Winds and Turbulence in Stratosphere, Mesosphere and Ionosphere.** Conf. proc. (Lindau, Federal Republic of Germany, Sept.-Oct., 1966). K. Rawer, ed. 421 pp. North-Holland, Amsterdam (Interscience, New York), 1968. $18.50

## CHEMISTRY & CHEMICAL PHYSICS

**Anisotropy in Single-Crystal Refractory Compounds,** Vols. 1 & 2. Fred W. Vahldiek, Stanley A. Mersol, eds. Conf. proc. (Dayton, Ohio, June 1967). 895 pp. Plenum Press, New York, 1968. $45.00 per set.

**Inorganic Syntheses,** Vol. 11. William L. Jolly, ed. 231 pp. McGraw-Hill, New York, 1968. $10.50

**Study Week on Molecular Forces.** (Pontifical Academy of Science, April 1966) 754 pp. North-Holland, Amsterdam (Interscience, New York), 1967. $24.00

## TEXTBOOKS

**General Mechanics.** By Henri Cabannes. Trans. from the 2nd French edition. 426 pp. Blaisdell, Waltham, Mass., 1968. $11.50

## MISCELLANEOUS

**Dictionary of Russian Technical and Scientific Abbreviations.** Henryk Zaucki, ed. 387 pp. American Elsevier, New York, 1968. $16.50

**Methods of Radar Cross-Section Analysis.** J. W. Crispin Jr, K. M. Siegel, eds. 426 pp. Academic Press, New York, 1968. $20.00

**Practical Technical Writing.** By Ritchie R. Ward. 269 pp. Alfred A. Knopf, New York, 1968. $5.50 □