# **books** of the week

Listing is an editorial service for readers' information. For convenient purchase of any book listed or any U.S. book in print, remit retail price (we pay postage) plus 25c handling charge if price is less than \$2 to Book Order Service, Science News, 1719 N St., N.W., Washington, D.C. 20036. Prices subject to publishers' changes. Be sure to include zip code in your address.

METALS IN THE MODERN WORLD: A Study in Materials Development—Edward Slade—Doubleday, 1968, 192 p., photographs, diagrams in color, \$5.95; paper, \$2.45. Outlines the nature of metals, crystals, alloys, the extraction and shaping of metals, new ways of fabricating, and modern ways of examining metals.

THE MIND OF A MNEMONIST: A Little Book About a Vast Memory—A. R. Luria, transl. from Russian by Lynn Solotaroff, foreword by Jerome S. Bruner—Basic Books, 1968, 160 p., \$4.95. Renowned Russian psychologist explores with clinical detail the strengths and weaknesses of an extraordinary memory, through 30 years of observation

THE NATURAL GARDENS OF NORTH CAR-OLINA with Keys and Descriptions of the Her-baceous Wild Flowers Found Therein—B. W. Wells—Univ. of N.C. Press, 1967, 458 p., illus., \$7.75. Reprint (1932) with short addendum by the author.

NUMERICAL ANALYSIS: Schaum's Outline of Theory and Problems—Francis Scheid—Schaum's Outline (McGraw-Hill), 1968, 422 p., diagrams, paper, \$4.50. Includes 775 problems completely

ORGANOMETALLIC COMPOUNDS, Vol. I: The Main Group Elements—G. E. Coates and K. Wade—Methuen (Barnes & Noble), 1968, 3rd ed., 573 p., diagrams, \$19. The emphasis in this volume tends towards preparative and coordination chemistry, and attempts have been made to include major developments up to 1966.

## **Mathematics** for Everyman

#### From Simple Numbers to the Calculus by EGMONT COLERUS

Egmont Colerus is one of that all-toosmall band of gifted teachers who know how to COMMUNICATE mathematics.

now to COMMUNICATE mathematics.

Once caught in his "trap" there is no escape—
one is compelled to go on at least as far as the
calculus, with fascinating glimpses of mathematical history and philosophy alorg the way.

Little or no previous knowledge of mathematics is assumed. Every point is illustrated with an
example. Such is Colerus' talent that long before
the reader knows what is happening, he finds,
amazingly, that he has acquired a ready grasp of
the fundamentals of mathematical operations and
mathematical reasoning. More, some of the magic,
the greatness, the beauty of the science has somehow rubbed off onto him, to his permanent enrichment.

richment.

PARTIAL CONTENTS: Numbers • The System of Tens
Other-Number Systems • Symbols and Commands •
Arrangement • Permutation • Combination • Other
Kinds of Arrangement • First Steps in Algebra
• Fractions • Equations • Negative and Fractional
Powers • Irrational Numbers • Generalized Decimal
Fractions • Algebraic Functions • The Theorem of
Pythagoras • Functions of Angles • Imaginary and
Complex Numbers • Co-ordinates • Analytical Geometry • Squaring the Circle • Calculating the Lengths
of Curves • Differentials and Integrals • Three Kinds
of Smallness • The Binomial Theorem • Archimedes'
Quadrature of the Parabola • Series • The Technique
of Differentiation • Mean Value and Definite Integrals
• Problems of Area • Logarithms • Interpolation, Extrapolation • Conclusion, Illustrations throughout.

ORDER NOW!

ORDER NOW!

MATHEMATICS FOR EVERYMAN by Egmont Colerus

\$4.95 Postfree • 10-Day Money-Back Guarantee

EMERSON BOOKS, Inc., Dept. 606-R 251 West 19th Street, New York 10011

POSSUM MOODS — Paule Ridpath — Taplinger, 1968, 72 p., 50 photographs, \$3.95. Relates observations of a group of possums on a porch at the edge of a forest of giant ferms in Australia.

PRACTICAL COLOR TV SERVICING TECH-NIQUES—Robert L. Goodman—TAB Bks., 1968, 295 p., 230 illus, \$7.95; paper, \$4.95. Trouble-shooter's practical advice.

PROBABILISTIC MODELS, Vol. 4 of Mathematics for Management Series — Clifford H. Springer and others—Dow Jones-Irwin, 1968, 301 p., paper, \$5.25. Prepared specifically to help management develop a greater awareness of the contribution modern mathematical techniques make to the decision-making process.

PROFILE OF THE SCHOOL DROPOUT: A Reader on America's Major Educational Problem —Daniel Schreiber, Ed.—Random House, 1967, 393 p., \$7.95. Presents a broad spectrum of opinion discussing the ability of schools in urban America to confront such problems as the socially damaged child, poverty, community apathy and other problems of the dropout.

REAL-TIME COMPUTERS: Technique and Applications in the Psychological Sciences—William R. Uttal—Harper, 1968, 338 p., illus., \$10. A practical introduction to a major new methodological trend in modern psychological research—real-time control by digital computers.

REFRACTORIES—F. H. Norton—McGraw-Hill, 1968, 4th ed., 450 p., 304 illus., \$18.50. Up-to-date reference on the manufacture, properties and uses of heavy refractories, with emphasis on the metallurgical, chemical and glass industries.

RONTGEN and the Discovery of X Rays—Bern Dibner—Watts, F., 1968, 149 p., photographs, diagrams, \$2.95. Concise biography, annotated, discusses in some detail the research and results of Rontgen's experiments with rays and radiation.

SAFETY IN THE AIR—Maurice Allward—Abelard-Schuman, 1968, 175 p., photographs, \$5. Presents to the general reader the problems involved in air safety, methods of testing new aircraft, reconstruction of accidents and various approaches to greater air safety in passenger travel.

SCIENCE FORUM: A Canadian Journal of Science and Technology, Vol. 1, No. 1, February 1968—David Spurgeon, Ed.—Univ. of Toronto Press, 36 p., illus., paper, bi-monthly; subscription, six issues per year, \$6. Designed primarily as a national forum in which Canadian scientists and engineers can discuss their vital issues.

A SELECTION OF EARLY STATISTICAL PA-PERS OF J. NEYMAN—Jerzy Neyman and oth-ers—Univ. of Calif. Press, 1967, 429 p., illus, \$14.75. Includes papers written before 1945, on subjects ranging from purely mathematical the-orems to theoretical statistics and application of statistical theory to several fields statistical theory to several fields.

SEX IN THE ADOLESCENT YEARS: New Directions in Guiding and Teaching Youth—Isadore Rubin and Lester A. Kirkendall, Eds.—Assn. Press, 1968, 223 p., \$4.95. Counsel for those who work and live with young people, based on latest findings and insights in the behavioral sciences.

SOLAR ENERGY—John Hoke, foreword by Hubert Humphrey—Watts, F., 1968, 83 p., photographs, diagrams, \$2.65. Tells how solar energy has been developed and used, lists solar materials and suggests experiments.

SPACE-CHARGE FLOW — Peter T. Kirstein, Gordon S. Kino and William E. Waters—McGraw-Hill, 1967, 509 p., illus., \$22.50. A comprehensive summary of the most important features of the theory of electron guns and focusing sys-

STATISTICAL DICTIONARY OF TERMS AND SYMBOLS—Albert K. Kurtz and Harold A. Edgerton—Hafner Pub. Co., 1967, 191 p., \$7.50. Facsimile reprint of 1939 edition.

STRONG WATER: Nitric Acid, Sources, Methods of Manufacture and Uses—Thomas H. Chilton—M.I.T. Press, 170 p., photographs, diagrams, \$7.50. Describes the history, the chemistry of nitrogen oxides, and the technical processes in the production of nitric acids, within the economic and political framework of the time.

### LANGUAGES? Easy!

Listen & Learn. Only course designed for travel, everyday life. 3 12" records, full of practical phrases, English & language recorded. Full manual with record text, phonetic transcription. Separate sets: Spanish, French, German, Italian, Russian, Japanese, Portuguese, Greek, Hebrew. \$5.95 each. Money-back guarantee. Dept. SNL, Dover, 180 Variek St., N.Y., N.Y. 10014

THE THREE FACES OF POWER—Adolf A. Berle—Harcourt, 1968, 83 p., \$3.95. Three essays relating to the acquisition and exercise by the Supreme Court of senior legislative power, to a like power over economic organization and the possible redistribution of power in the United States

UFOs IDENTIFIED—Philip J. Klass—Random House, 1968, 290 p., photographs, \$6.95. Deals with the speculations concerning Unidentified Flying Objects and shows that the documented UFOs have all the characteristics of freak atmospheric electrical phenomena.

THE USES OF ENGLISH: Guidelines for the Teaching of English from the Anglo-American Conference at Dartmouth College—Herbert J. Muller—Holt, 1968, 198 p., \$3.95. Deals with the teaching of English in the context of the whole society and reflects the views not only of teachers of English but also linguists, psychologists and social scientists.

#### TEXTBOOKS

ATOMIC STRUCTURE AND VALENCY: For General Students of Chemistry—B. Stevens—Chapman & Hall (Barnes & Noble), 1968, 103 p., diagrams, paper, \$1.75. Short monograph written primarily for the nonspecialist who is reading chemistry as a subsidiary subject.

THE CALCULUS with Analytic Geometry—Louis Leithold—Harper, 1968, 976 p., diagrams, \$12.95. Comprehensive text designed for prospective mathematics majors, as well as for students whose primary interest is in engineering, the physical sciences or nontechnical fields.

CHEMICAL EQUILIBRIUM—Allen J. Bard—Harper, 1967, 206 p., diagrams, paper, \$3.75. Reprint (1966), presents the theory of chemical equilibrium to undergraduates, introducing material balance and electroneutrality as problem solving techniques. solving techniques

ELECTROLYTE THEORY: An Elementary Introduction to a Microscopic Approach—Pierre M. V. Resibois—Harper, 1968, 166 p., diagrams, \$11.25. Advanced text introducing the student to many concepts of theoretical physical chemistry as they apply to equilibrium and nonequilibrium properties of electrolytes.



### ambassador?

Your \$5 sends John F. Kennedy's Profiles in Courage, and nine other carefully chosen American paperbacks, to underdeveloped, book-hungry countries where these books can do the most good. Ed Murrow started BOOKS USA "to help close the book gap." President Johnson says: "I urge all Americans to give BOOKS USA their generous support." Answer the President's appeal; send book packets abroad in your name. Send Food for Thought — Give to BOOKS USA, Box 1960-A, Washington, D.C. 20013.



Make checks payable to BOOKS USA. Contributions are tax-deductible. Space donated by this publication.

9 march 1968/vol. 93/science news/237