Throughout the work, which is impressively comprehensive in numerical methods performable on desk calculators, Dr. Buckingham keeps his mind on this definition of his art, and maintains at all times the very practical idea that speedy, accurate completion of the calculation is the fundamentally important matter, above and beyond the elaborateness of the method.

The book opens with a survey of tabulation errors, and then covers the usual ground of interpolation formulas and methods of divided differences, with applications to differentiation and integration. While most of this material has existed in the literature since the early 18th century, it is refreshing to find references to Aitken, Hartree, and Milne keeping pace with those to Newton, Stirling, and Bessel.

A very large section of the book is devoted to symbolic methods and to the solution of differential equations. A good deal of this material is algebraic in character, rather than numerical, but the two are very nicely wedded together. The coverage of differential equations extends to the standard quantum mechanical methods, such as perturbation theory, WKB, Hartree method, etc.

Following differential equations, the topics of iteration methods and curve fitting by least squares are presented. Matrix and determinantal methods are given in connection with solutions of simultaneous linear equations, and the text closes with chapters on integral equations and partial differential equations.

There is a large number (135) of worked examples scattered throughout the book, and about the same number of unsolved problems appears at the ends of the chapters. Thus the book is well adapted as an instructional text, as well as for reference work. Dr. Buckingham has furnished numerous references to literature in the field of computation. Especially useful are the references to the location of useful auxiliary tables.

This is a valuable book. Unfortunately it is also a high-priced book, so that it will probably be possessed mainly by libraries and reviewers. A cheaper edition would be highly desirable.

Books Received

SOVIET EDUCATION FOR SCIENCE AND TECHNOLOGY. By Alexander G. Korol. 513 pp. The Technology Press of Mass. Inst. of Technology & John Wiley & Sons, Inc., New York, 1957. $8.50.

ADVANCES IN ELECTRONICS AND ELECTRON PHYSICS, Vol. 9. Edited by L. Marton. 347 pp. Academic Press Inc., New York, 1957. $9.00.

REPORTS ON PROGRESS IN PHYSICS. Vol. 20, 1957. Edited by A. C. Stickland. 568 pp. The Physical Society, London, England, 1957. £3 3*s*; postage 1*s* 8*d*.

GUIDE TO THE MICROSCOPE. By Arthur Beiser. 127 pp. E. P. Dutton & Co., Inc., New York, 1957. $3.25

PRINCIPLES OF MICRORADIOGRAPHY: Bibliography, Microradiography and Soft X-Ray Radiography. Prepared by Kodak Research Labs. 48 pp. Philips Electronics, Inc., 750 S. Fulton Ave., Mt. Vernon, N. Y., 1957. Paperbound, no charge.

THE SPACE ENCYCLOPAEDIA: A Guide to Astronomy and Space Research. Edited by M. T. Bizony. 287 pp. E. P. Dutton & Co., Inc., New York, 1957. $6.95.

RHÉNIUM ET TECHNÉTIUM. By S. Tribalat. 172 pp. Gauthier-Villars, Paris, France, 1957. Clothbound $8.00; paperbound $7.30.

THE CREATIVE POWER OF MIND: The Scientific Use of Your Thought for Abundant Living. Edited by Willis H. Kinnear. 351 pp. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1957. $4.95.

THE PLANET VENUS. By Patrick Moore. 132 pp. The Macmillan Co., New York, 1957. $3.00.

ARTIFICIAL STIMULATION OF RAIN: Proceedings of 1st Conf. on Physics of Cloud & Precipitation Particles (Woods Hole, Mass., Sept. 1955). Edited by Helmut Weickmann and Waldo Smith. 427 pp. Pergamon Press, London & New York, 1957. $15.00.

PHOTOGRAPHY THROUGH THE MICROSCOPE (2nd Revised Edition). Kodak Handbook. 72 pp. Eastman Kodak Co., Rochester, N. Y., 1957. Paperbound $.75.

IDEAS, INVENTIONS, AND PATENTS: How to Develop and Protect Them. By Robert A. Buckles. 270 pp. John Wiley & Sons., Inc., New York, 1957. $5.95.

NATURAL MAGICK. By John Baptista Porta. Edited by Derek J. Price. 415 pp. (Thomas Young & Samuel Speed, London, 1658) Basic Books, Inc., New York, 1957. $7.50.

EXPERIMENTAL CRYSTAL PHYSICS. By W. A. Wooster. 115 pp. Oxford U. Press, New York, 1957. $2.90.

MATHEMATICS AND WAVE MECHANICS. By R. H. Atkin. 348 pp. John Wiley & Sons, Inc., New York, 1957. $6.00.

ROOTS OF SCIENTIFIC THOUGHT: A Cultural Perspective. Edited by Philip P. Wiener and Aaron Noland. 677 pp. Basic Books, Inc., New York, 1957. $8.00.

RADIOLOGICAL PHYSICS. By M. E. J. Young. 365 pp. Academic Press Inc., New York, 1957. $7.50.

RESEARCH IN PHOTOSYNTHESIS (Gatlinburg Conf., Oct. 1955). Edited by H. Gaffron, A. H. Brown, C. S. French, R. Livingston, E. I. Rabinowitch, B. L. Strehler, N. E. Tolbert. 524 pp. Interscience Publishers, Inc., New York, 1957. $12.00.

SAFETY ASPECTS OF NUCLEAR REACTORS (Geneva Series on the Peaceful Uses of Atomic Energy). Edited by C. Rogers McCullough. 237 pp. D. Van Nostrand Co., Inc., Princeton, N. J., 1957. $8.50.

GRAIN BOUNDARIES IN METALS. By D. McLean. 346 pp. Oxford U. Press, New York, 1957. $8.00.

AN INTRODUCTION TO TRANSISTOR CIRCUITS. By E. H. Cooke-Yarborough. 154 pp. (Oliver & Boyd, England) Interscience Publishers, Inc., New York, 1957. $2.75.

ATOMIC POWER: An Appraisal. Vol. 1 of Internat'l Series of Monographs on the Economic Aspects of Nuclear Energy. Edited by Corbin Allardice. 151 pp. Pergamon Press, London & New York, 1957. $3.50.

PRINCIPLES OF ELECTRICAL MEASUREMENTS. By H. Buckingham and E. M. Price. 600 pp. Philosophical Library, Inc., New York, 1957. $15.00.

NUCLEAR ENERGY IN THE SOUTH. Edited by Redding S. Sugg, Jr. 151 pp. Louisiana State U. Press, Baton Rouge, La., 1957. $3.50.

HIGH-SPEED AERODYNAMICS (Translated from Roumanian). By Elie Carafoli. 702 pp. Pergamon Press, London & New York, 1957. $15.00.