

the confusion about the paternity of vital statistics: On page 179, a passage reads: "John Graunt (1620-74), the founder of vital statistics . . ."; on page 181, "The science of vital statistics was founded by . . . Quetelet (1796-1874)"; and on page 717, "The founder of vital statistics, William Farr (1807-83) . . .". Even the useful 34-page list of references is much too long and much too unselective.

This is still a good one-volume history of medicine, which retains some of the scholarly flavor of Singer. It could recapture more of that flavor, if the next edition were pruned to "as small a space as may be," and Philosophy recognized once again, despite timid readers and timid revisionists.

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Chemical Analysis

Handbook of Analytical Chemistry. Louis Meites, Ed. McGraw-Hill, New York, 1963. Unpaged. Illus. \$47.50.

This book, which weighs between 3 and 4 pounds and runs close to 1800 pages in length, is not a handbook in the sense that it is a book to be held in the hand. "Tabulated analytical chemistry" would be a more descriptive title, since the book covers, in a tabular form, practically all aspects of theoretical and practical analytical chemistry. Many of the tables are accompanied by expository material of a general nature, which is very helpful in making use of the data. With a few exceptions the tables include literature references, and most are quite up to date. The material has been compiled by the competent editor with the aid of 130 chemists, the great majority of whom are recognized experts in the field to which they have contributed.

The book is divided into 15 sections. Section 1 presents, in 23 tables, fundamental data. Among these, the tables of all types of equilibrium constants are particularly valuable. Many more tables of fundamental data are found in other sections. In general, the data have been critically selected, and several have been taken from recent compilations published by the Analytical Chemistry Section of the International Union of Pure and Applied Chemistry. Section 2, "Qualitative Analysis," pre-

sents 20 tables dealing with schemes of inorganic qualitative analysis (*embaras de choix*), a few tables of selected tests and techniques, and some 16 tables covering organic qualitative analysis. Section 3 deals with the essentials of gravimetric and visual titrimetric analysis; the important and relatively modern subject of "chelometric" titrations (a notation not universally adopted) is dealt with in some 130 pages. Again, some of the tables are too exhaustive and not selective. For example, table 35 contains a list of 55 methods for direct visual titration of calcium with EDTA, but the list is not very helpful to the analyst who is looking for guidance in selecting a method. Section 4, which deals with gas analysis, is followed by extensive sections (5 through 8) on electrometric, optical, nuclear and magnetic, and thermoanalytical techniques. Separated from these is section 10, on techniques of separation, which is preceded by section 9, on biological and chemical methods. It would seem more logical to have the section on techniques of separation follow the other sections on techniques and to place the present section 11, on measurement of pH, before the treatment of biological methods. Section 9 is organically related to sections 12 (methods for the determination of specific substances) and 13 (technical analysis). A brief section on the use of statistics in chemical analysis and one on definition of terms and symbols conclude the book.

It is difficult to find any specific information without the help of the index, which is exceptionally good. The book is remarkably free of typographical errors. For an editor to submit each table to a close critical examination is virtually impossible. Some shortcomings and even mistakes occur, but they can be corrected in future editions.

Louis Meites deserves great credit for bringing together in one volume such a wealth of critically selected information. Owing to the lack of modern "International Critical Tables," and the nonexistence of a book that provides tabulated information on the whole field of experimental analytical chemistry, the Meites handbook will serve for many years as a source of ready information for practicing analysts, theoretical analytical chemists, and colleagues in related fields.

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New Books

Mathematics, Physical Sciences, and Engineering

Astrophysique. E. Schatzman. Masson, Paris, 1963. 153 pp. Illus. Paper, F. 24; cloth, F. 29.

The Atomic Energy Deskbook. John F. Hogerton. Reinhold, New York; Chapman and Hall, London, 1963. 687 pp. Illus. \$11.

The Calculus. William L. Schaaf. Doubleday, Garden City, N.Y., 1963. 436 pp. Illus. Paper, \$1.95.

The Constitution of Glasses. vol. 1, *Fundamentals of the Structure of Inorganic Liquids and Solids.* Woldemar A. Weyl and Evelyn Chostner Marboe. Interscience (Wiley), New York, 1962. 447 pp. Illus. \$16.

Corrosion-Mechanical Strength of Metals. L. A. Glikman. Translated from the Russian (Moscow, 1955) by J. S. Shapiro. Butterworth, Washington, D.C., 1962. 182 pp. Illus. \$9.50.

Differential Amplifiers. Their analysis and their applications in transistor d-c amplifiers. R. D. Middlebrook. Wiley, New York, 1963. 129 pp. Illus. \$7.95.

Electric Furnace Steelmaking. vol. 2, *Theory and Fundamentals.* Clarence E. Sims, Ed. Interscience (Wiley), New York, 1963. 487 pp. Illus. \$11.

Electromagnetism and Relativity. Edward P. Ney. Harper and Row, New York, 1962. 159 pp. Illus. Paper, \$3.75.

Formation Evaluation. Edward J. Lynch. Harper and Row, New York, 1962. 440 pp. Illus. \$12.50.

Industrial and Marine Gearing. S. A. Gouling. Wiley, New York, 1962. 254 pp. Illus. \$8.50.

Nuclear Reactions. vol. 2. P. M. Endt and P. B. Smith, Eds. North-Holland, Amsterdam; Interscience (Wiley), New York, 1963. 552 pp. Illus. \$18.50.

The Physical World. A course in physical science. Richard Brinckerhoff *et al.* Harcourt, Brace, New York, ed. 2, 1963. 512 pp. Illus. \$5.20.

Reliability Abstracts and Technical Reviews. Abstracts 1-275. National Aeronautics and Space Administration, Washington, D.C., 1962. Unpaged.

Representation Theory of Finite Groups and Associative Algebras. Charles W. Curtis and Irving Reiner. Interscience (Wiley), New York, 1962. 699 pp. Illus. \$20.

Stability of Motion. Applications of Lyapunov's second method to differential systems and equations with delay. N. N. Krasovskii. Translated from *Nekotorye zadachi teorii ustoychivosti dvizheniya* (Moscow, 1959) by J. L. Brenner. Stanford Univ. Press, Stanford, Calif., 1963. 196 pp. Illus. \$6.

Statistical Theory of Reliability. Proceedings of an advanced seminar conducted by the Mathematics Research Center (Madison, Wis.), 1962. Marvin Zelen, Ed. Univ. of Wisconsin Press, Madison, 1963. 184 pp. Illus. \$5.

This Is Outer Space. Lloyd Motz. New American Library, New York (© 1960), 1962. 191 pp. Illus. Paper, 60¢.

Vectors. Raymond A. Barnett and John N. Fujii. Wiley, New York, 1963. 141 pp. Illus. \$2.95.