

knowledge of the basic analytical techniques of biochemistry. For those who need it, it will be invaluable. It is a highly practical book, and it will serve the endocrinologist well as a combined handbook, guidebook, and vade mecum in a difficult field. The knowing reader will find it extremely helpful in finding his way through a maze of methods for the separation of the steroid hormones from a multiplicity of other compounds.

It is repeatedly emphasized throughout the book that the choice of methods depends on what you want to find and where you intend to look for it. This and other equally pertinent advice will serve the neophyte well. It will also warn him of the pitfalls and hazards that beset this area.

The volume is divided into seven sections: "Introductory remarks," "Progesterone and metabolites," "Estrogens," "Neutral ketosteroids," "Non-ketonic neutral steroids," "Corticosteroids," and "Steroids as tracers." From this the reader should have no difficulty in comprehending the breadth and scope of the book. Each section contains from one to seven papers, all by distinguished investigators in their respective fields. A summarizing discussion of some 30 pages concludes the volume and adds to its usefulness. The problem of acid versus enzymatic hydrolysis of steroids is thoroughly discussed and explored as are other procedures for the fractionation and identification of these compounds. The techniques of measurements and the special advantages and disadvantages of the colorimetric, chromatographic, fluorometric, and spectrophotometric methods are all given adequate and thorough treatment. All in all it is about as comprehensive as anyone could wish.

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Chambers's Shorter Six-Figure Mathematical Tables.

L. J. Comrie. Chemical Publ., New York, 1954. xxvi + 387 pp. \$6.50.

For all workers acquainted with earlier versions of Chambers's mathematical tables it may be sufficient just to announce that these six-figure tables of logarithms and the trigonometric, exponential, and hyperbolic functions are now available. For others, whose use of tables has been limited to schoolbooks and various handbooks, this volume should show how much can be done to lighten the labor of hand computation. The typography is superb. The type face is old style in order to reduce reading errors.

The introduction gives explanations that will be most helpful to the nonprofessional computer, particularly the statements on accuracy and interpolation. For example, the tabulated difference between successive entries is printed in italic whenever linear interpolation is inadequate. In addition to tables of powers, roots, factorials, and prime numbers, there are tables for interpolation and numerical differentiation and integration. The volume includes brief but

handy lists of integrals, series, and physical and mathematical constants. Both compiler and publisher deserve enthusiastic thanks for this splendid volume of general-purpose tables.

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Tables of Lagrangian Coefficients for Sexagesimal Interpolation. NBS Applied Mathematics Series, No. 35. National Bureau of Standards, Washington, D.C., 1954 (Order from Supt. of Documents, GPO, Washington 25, D.C.). ix + 157 pp. \$2.

These tables contain 3-, 4-, 5-, and 6-point Lagrangian interpolation coefficients corresponding to interpolation by quadratic through quintic polynomials. Each coefficient is given to eight decimals. The coefficients are conveniently arranged and permit the direct calculation of functional values at integral multiples of 1/3600 of the basic interval of the argument. The introduction, which contains illustrations of various ways of using the coefficients, might be more helpful to some users if it were more self-contained by including definitions and a little of the theory of Lagrangian interpolation. The printing is excellent.

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Die Bedeutung des Blutchemismus. Besonders in Beziehung zu Tumorbildung und Tumorabbau. Ernst Leupold. Georg Thieme, Stuttgart, Germany; Intercontinental Medical Book, New York, 1954. 207 pp. Illus. \$11.90.

This is a sequel to and represents the second part of *Cell and Tissue Metabolism as Internal Condition for Disease*, published in 1945, which contained results of experiments on mice. Substances found in the normal physiological metabolism, if injected in the blood system of mice in very small amounts and at low concentrations, had caused the development of tumors and of other diseases. These experiments were continued on rabbits. It is shown that parenteral resorption of metabolic products induces marked changes in blood reactions with respect to the lipid and sugar content. These changes are related to one another and can be expressed as ratios or "systems," such as sugar/lipid, cholesterol/lipid phosphorus, and cholesterol/sugar/lipid phosphorus; the last, which is written in the book as Ch/Zp, appears to be the most important index. If the system Ch/Zp falls strongly during the first few hours after the injected substances have been resorbed in the blood, then tumors are formed; if the numerical value of the system increases while the sugar content falls absolutely as well as relatively, then existing tumors are destroyed. The knowledge obtained from the experience with rabbits was clinically applied to nonoperable human tumors, mostly cases in which hope of