(2) Kapadia, G. J., and Shah, N. J., Lloydia, 30, 287(1967).
 (3) Kapadia, G. J., and Highet, R. J., J. Pharm. Sci., 57, 191(1968).
 (4) Spaeth, E., and Gangl, C., Monatsh., 44, 103(1923).
 (5) Spaeth, E., and Kesztler, F., Ber., 68, 1963(1935).
 (6) Djerassi, C., Brewer, H. W., Clarke, C., and Durham, L. J., J. Am. Chem. Soc., 84, 3210(1962).
 (7) Small, L., in "Organic Chemistry," vol. II, 2nd Ed., Gilman, H., Ed., Wiley, New York, N. Y., 1943, p. 1171, except see footnote.
 (8) Stern, E. S., in "The Alkaloids," vol. VII, Manske, R. H. F., Ed., Academic Press, Inc., New York, N. Y., 1960, pp. 473-503.

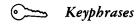
(9) Battersby, A. R., Binks, R., and Huxtable, R., Tetrahedron Letters, 1967, 563.
(10) Spaeth, E., and Bruck, J., Ber., 71, 1275(1938).
(11) Kapadia, G. J., Shah, N. J., and Zalucky, T. B., J. Pharm. Sci., 57, 258(1968).

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Peyote alkaloids Peyophorine—identity confirmation TLC-separation GLC-identity IR spectrophotometry—identity Mass spectroscopy—identity

-Books-

REVIEW

Dictionary of Pharmaceutical Sciences and Techniques. Vol. 1. By A. SLIOSBERG. American Elsevier Publishing Co., Inc., 52 Vanderbilt Avenue, New York, NY 10017, 1968. approx. $1000 \text{ pp.} \quad 16.5 \times 23 \text{ cm.} \quad \text{Price $30}$

This dictionary is the first attempt to give the equivalents in English, French, Italian, Spanish, and German, of technical terms which are used in pharmaceutical technology. Approximately 7500 major entries with cross-referencing of English synonyms are included. The book is made up of a basic table of the English terms, with the synonyms arranged alphabetically, and then followed by the translations in the other languages. The terms in the languages other than English are included in an index with a reference back to the numbered item in the basic table where the several translations are found.

This is the first of two volumes; the second volume will be "Materia Medica" and publication is expected in about two years. Dr. Sliosberg has also authored a similar work in five languages on medicine entitled "The Medical Dictionary."

Staff review

Actinomycin: Nature, Formation, and Activities. Edited by S. A. WAKSMAN. Interscience Publishers, Inc., 605 Third Avenue, New York, NY 10016, 1968. ix + 231 pp. 16×23.5 cm. Price \$8.95.

The isolation in 1940 of actinomycin by Waksman and Woodruff was the result of a comprehensive screening program on the production of antimicrobial substances by soil-inhabiting microorganisms especially the Actinomycetes. Although many hun-

dreds of antibiotics have been described in the 28 years since the initial actinomycin report, more research is now probably underway concerning the biological properties, clinical uses, chemistry, and biogenesis of this antibiotic than any other single antibiotic presently being examined. The contributors to this monograph have summarized current research progress on actinomycin chemistry (A. W. Johnson), actinomycin biogenesis (E. Katz), effects of actinomycin on virus replication (A. J. Shatkin), actinomycin action on experimental tumors (Ch. Hackmann), and clinical use of actinomycin (S. Farber, A. T. Mitus, and D. A. Karnofsky). Other chapters include an evaluation of actinomycin in developmental biology (P. R. Gross), the history of actinomycin (S. A. Waksman), and modification of the immune response by actinomycin (W. J. K. Tannenberg and R. S. Schwartz). Some aspects of large-scale production are also included in a chapter by H. B. Woodruff and S. A. Waksman.

Each chapter contains previously unpublished facts, hypotheses, and conclusions which should stimulate discussion by those readers previously unacquainted with the present knowledge of this interesting antibiotic. Although the monograph does not contain all the available information on this antibiotic, those who carefully read the clearly written chapters and consult the bibliography will quickly grasp the essential features and properties of this important antibiotic.

The monograph contains few typographical errors and is reasonably free of other errors. The adequate subject index and bibliography (more than 700 references) are of use to both the newcomer and the antibiotic expert. This monograph should be included in any library on antibiotics.

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