

**The Reaction of Chloropentaaquoruthenium(III) with Chromium(II). Binuclear Intermediates, Reduction of Perchlorate, and the Effect of Vanadium(II)** [*J. Amer. Chem. Soc.*, **91**, 7307 (1969)]. By DAVID SEEWALD, NORMAN SUTIN, and KAY O. WATKINS, Chemistry Department, Brookhaven National Laboratory, Upton, New York 11973.

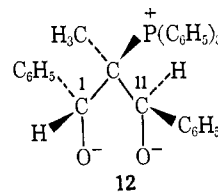
There is a typographical error in the heading of the last column of Table I. This heading should be  $\Delta \text{Abs}^a \times 10^{-3}/l(\text{RuCl}^{2+})_0$ . Thus the effective extinction coefficient of the binuclear intermediate is about  $1.2 \times 10^3$  at 410 nm.

**Isolation of Iminium Bromides as Intermediates in the von Braun Reaction** [*J. Amer. Chem. Soc.*, **91**, 7768 (1969)]. By G. FODOR, J. J. RYAN, and F. LETOURNEAU, Department of Chemistry, Laval University, Quebec 10, Canada.

On page 7768, column 1, lines 11–13 of the second paragraph should read as follows: 15.80; F, 21.62; N, 2.63; ir (KBr) 1600 (C=N), 760  $\text{cm}^{-1}$  (C—Br); nmr (acetonitrile- $d_3$ )  $\delta$  5.5 (m, 1, H-2), 4.4 (m, 2, H-6), 1.7 (m, 10, methylenes), 1.0 (t, 3, C-methyl, . . . . .

**Modification of the Wittig Reaction to Permit the Stereospecific Synthesis of Certain Trisubstituted Olefins. Stereospecific Synthesis of  $\alpha$ -Santalol** [*J. Amer. Chem. Soc.*, **92**, 226 (1970)]. By E. J. COREY and HISASHI YAMAMOTO, Department of Chemistry, Harvard University, Cambridge, Massachusetts 02138.

Formula 12 contains an error. Numerals I and II which label two carbon atoms in 12 should be interchanged. Thus, 12 should read as shown below.



**On the Probable Intermediacy of Tetrahedrane** [*J. Amer. Chem. Soc.*, **92**, 406 (1970)]. By PHILIP B. SHEVLIN and ALFRED P. WOLF, Chemistry Department, Brookhaven National Laboratory, Upton, New York 11973.

The received date for this paper should read October 1, 1969.

**Geometric Factors in Multiplicity-Dependent Photochemistry. Intramolecular Triplet-State Rearrangement of 5,5-Diphenyl-1,3-cyclohexadiene** [*J. Amer. Chem. Soc.*, **92**, 1406 (1970)]. By JOHN S. SWENTON, ANN R. CRUMRINE, and TIMOTHY J. WALKER, Department of Chemistry, The Ohio State University, Columbus, Ohio 43210.

The second sentence of footnote 15 should read "While II is stable under 2-acetonaphthone sensitization. . . . .

**Reevaluation of the Formation Constants of the Hydrated Proton in Acetonitrile** [*J. Amer. Chem. Soc.*, **92**, 2236 (1970)]. By M. K. CHANTOONI, JR., and I. M. KOLTHOFF, School of Chemistry, University of Minnesota, Minneapolis, Minnesota 55455.

Equation 1 should read

$$\sum[\text{IH}^+]/[\text{I}] = k_{\text{IH}^+}^f \times v_{\text{H}_2\text{O}}/f$$

## Book Reviews

**Cyclopentanoid Terpene Derivatives.** Edited by W. I. TAYLOR, International Flavors and Fragrances, Inc., Union Beach, N. J., and A. R. BATTERSBY, University Chemical Laboratory, University of Cambridge, Cambridge, England. Marcel Dekker, Inc., 95 Madison Ave., New York, N. Y. 1969. x + 432 pp. 16 × 23.5 cm. \$26.50.

The structures of most of the compounds discussed in this second volume of the publisher's series of monographs on natural products were unknown twelve years ago. This fact attests to the tremendous vitality and importance of the field, which has become of fundamental significance in several areas of research in organic and biological chemistry. Since most of the topics covered in this book have never been fully reviewed before, its publication is most timely and useful. The editors and contributors are all noted for personal research in the areas discussed, and a highly comprehensive, authoritative, and interesting series of reviews has been achieved. The writing is clear, elegant, and concise throughout.

The first chapter, on iridoid glycosides and related substances, by J. M. Bobbitt and K.-P. Segebarth, occupies nearly one-third of the book, beginning with the classic investigations of Schmid on

plumieride, then describing the other plant iridoids in detail, and concluding with useful tabulations of spectroscopic, botanical, and pharmacological data. Although iridoid aglycones have ten or fewer carbon atoms, their lability and the abundance of contiguous functional groups make their chemistry challenging. Several of them have been known for at least eighty years, but fruitful chemical investigation has generally awaited the spectroscopic methods available since 1955. The key role of loganin in the biosynthesis of major groups of indole alkaloids has further stimulated interest in iridoid chemistry, and the iridoids also present a notable synthetic challenge—only genipin, verbenalol, and loganin have been totally synthesized so far.

The second chapter, by Carmine J. Coscia, is an excellent review of the chemistry of picrotoxin and related compounds. Although picrotoxin was isolated as early as 1811, its structure also was not clarified until the late 1950's, but the chemistry discovered during this work offers a wealth of spectroscopic and mechanistic problems. The related Dendrobium alkaloids are also reviewed. Chapter 3, by G. W. K. Cavill, reviews insect terpenoids and nepetalactone, and in Chapter 4, by W. C. Wildman, J. Le Men, and K. Wiesner, the chemistry of monoterpene alkaloids is

discussed. Most of the compounds considered in these two chapters have the iridoid carbon skeleton, but interesting derivatives of other monoterpene skeletons are also thoroughly discussed.

Chapter 5, by T. Kubota, reviews the large body of recent work on furano-mono- and -sesqui-terpenes and, like the other chapters, contains much information of general as well as specialist interest. These compounds also offer considerable synthetic challenges. The final chapter, by O. E. Edwards, is a timely review of the rapidly expanding field of sesquiterpene alkaloids.

This book will be of interest to all natural products chemists, and will be valuable to specialists in several other fields than terpene chemistry. None of the defects of some multi-author books are to be seen here. The literature covered includes some 1969 references, and the paper, printing, and binding are of high quality. It is a pity that the price of the book will tend to prevent its purchase by many who would wish to own it.

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## BOOKS RECEIVED *April 1970*

- R. P. BELL. "Acids and Bases. Their Quantitative Behavior." Second Edition. Barnes and Noble, Inc., 105 Fifth Ave., New York, N. Y. 1969. 111 pp. \$4.00.
- ENRICA GROSSI-PAOLETTI, Editor. "Progress in Biochemical Pharmacology." Volume 5. "Synthesis and Use of Labelled Lipids and Sterols." S. Karger AG, Albert J. Phiebig, P. O. Box 352, White Plains, N. Y. 1969. 176 pp. \$9.35.
- L. O. KRAMPITZ. "Thiamin Diphosphate and its Catalytic Functions." Marcel Dekker, Inc., 95 Madison Ave., New York, N. Y. 1970. 65 pp. \$5.75.
- ROBERT E. MARSHAK, RIAZUDDIN, and CIARAN P. RYAN. "Theory of Weak Interactions in Particle Physics." Interscience Division, John Wiley and Sons, Inc., 605 Third Ave., New York, N. Y. 1969. 761 pp. \$29.95.
- ROBERT E. OLSON, Editor. "Perspectives in Biological Chemistry." Marcel Dekker, Inc., 95 Madison Ave., New York, N. Y. 1970. 284 pp. \$12.50.
- SAUL PATAL, Editor. "The Chemistry of Carboxylic Acids and Esters." Interscience Division, John Wiley and Sons, Inc., 605 Third Ave., New York, N. Y. 1969. 1155 pp. \$41.50.
- D. PERLMAN, Editor. "Fermentation Advances." Academic Press Inc., 111 Fifth Ave., New York, N. Y. 1969. 909 pp. \$16.50.
- T. J. W. VAN THOOR, General Editor. "Chemical Technology: An Encyclopedic Treatment. The Economic Application of Modern Technological Developments Based upon Work Originally Devised by the Late Dr. J. F. van Oss." Volume III. "Metals and Ores." Barnes and Nobel, Inc., 105 Fifth Ave., New York, N. Y. 1970. 918 pp. \$40.00.
- G. J. WOMACK. "MHD Power Generation: Engineering Aspects." Barnes and Nobel, Inc., 105 Fifth Ave., New York, N. Y. 1969. 160 pp. \$9.50.
- F. VAN ZEGGEREN and S. H. STOREY. "The Computation of Chemical Equilibria. Cambridge University Press, 32 East 57th St., New York, N. Y. 1970. 176 pp. \$8.50.