## Additions and Corrections

Mechanism of Electron Transfer Oxidation of Alkyl Radicals by Copper(II) Complexes [J. Am. Chem. Soc., 90, 4616 (1968)]. By J. K. Kochi, A. Bemis, and C. L. Jenkins, Department of Chemistry, Case Western Reserve University, Cleveland, Ohio 44106.

In Table V, the yields of carbon dioxide are expressed as mole %; the yields of ethylbenzene, styrene, and  $\beta$ -phenethyl acetate are expressed as mmoles obtained from 1 mmol of peroxide.

Dissymmetrically Perturbed Aromatic Chromophore in Stereoregular Copolymers of (R)-3,7-Dimethyl-1-octene with Styrene [J. Am. Chem. Soc., 90, 5025 (1968)]. By PIERO PINO, CARLO CARLINI, EMO CHIELLINI, FRANCESCO CIARDELLI, and PIERO SALVADORI, Istituto di Chimica Organica Industriale dell'Università, Sezione IV del Centro Nazionale di Chimica delle Macromolecole del C.N.R., Pisa, Italy.

In the reaction scheme on page 5026, the roman number V should be removed.

Kinetics and Mechanism of Oxidative Coupling of p-Phenylenediamines [J. Am. Chem. Soc., 90, 5164 (1968)]. By L. K. J. Tong and M. Carolyn Glesmann, Research Laboratories, Eastman Kodak Company, Rochester, New York 14650.

On page 5168, ref 4 should read J. F. Bunnett and R. E. Zahler, *Chem. Rev.*, **49**, 273 (1951).

The Reaction of Vitamin  $B_{12a}$  and Cobaloximes with Carbon Monoxide. Evidence for Self-Reduction of Vitamin  $B_{12a}$  in Neutral Solution [J. Am. Chem. Soc., 90, 5274 (1968)]. By Lian-Pin Lee and G. N. Schrauzer, Department of Chemistry, University of California, San Diego, Revelle College, La Jolla, California 92037.

On page 5275, column 2, in the eighth line under eq 5, the g value of the superimposed free radical should read 2.0029 rather than 2.029.

Mechanism of the Intramolecular Reorientation Process in  $\sigma$ -Cyclopentadienylmetal Complexes [J. Am. Chem. Soc., 90, 5293 (1968)]. By Benzion Fuchs, Muhammad Ishaq, and Myron Rosenblum, Department of Chemistry, Brandeis University, Waltham, Massachusetts 02154.

On page 5294, paragraph 2, line 15, silver trifluoro-acetate should read silver tetrafluoroborate.

The Total Synthesis of Prostaglandins [J. Am. Chem. Soc., 90, 5895 (1968)]. By W. P. Schneider, U. Axen,

F. H. LINCOLN, J. E. PIKE, and J. L. THOMPSON, Chemistry Department, The Upjohn Company, Kalamazoo, Michigan 49001.

In footnote 9, (15R)-PGF<sub>1</sub> $\beta$  should read (15R)-PGF<sub>1</sub> $\alpha$ .

Evidence for a "Proton Chelate" in Aqueous Salts of dl-Propylenediaminetetraacetic Acid [J. Am. Chem. Soc., 90, 6860 (1968)]. By James L. Sudmeier and Alan J. Senzel, Department of Chemistry, University of California, Los Angeles, California 90024.

Reference 13 should be changed to read as follows: (13) An improved version of the program described by S. Castellano and A. A. Bothner-By, *J. Chem. Phys.*, **41**, 3863 (1964). In addition, in line 4 of paragraph 3, the word conformations should be changed to conformation.

A Cogwheel Effect in the Internal Rotations of Highly Hindered Systems [J. Am. Chem. Soc., 90, 4482 (1968)]. By Harold Kwart and Stanley Alekman, Department of Chemistry, University of Delaware, Newark, Delaware 19711.

Table I has two mistaken entries. For (Hz) read  $(\tau)$  in the title of the table. For the structure 3 in the table read MesC<sup>+</sup>=O instead of MesC<sup>+</sup>.

Five-Coordinate Complexes of Platinum(II) and Palladium(II) [J. Am. Chem. Soc., 90, 2707 (1968)]. By J. P. FACKLER, JR., W. C. SEIDEL, and JOHN A. FETCHIN, Department of Chemistry, Case Western Reserve University, Cleveland, Ohio 44106.

On page 2708, paragraph 4, line 4 should read "to contain dithiocarbonate coordinated to the metal,<sup>5</sup> e.g., (Ph<sub>2</sub>PCH<sub>3</sub>)<sub>2</sub>Pt(S<sub>2</sub>CO) or (Ph<sub>3</sub>P)<sub>2</sub>Pt(S<sub>2</sub>CO) · CHCl<sub>2</sub>."

 $\alpha$ -Fluoro and  $\alpha$ -Alkoxy Substituents as Deactivators in Carbanion Formation [*J. Am. Chem. Soc.*, **89**, 5911 (1967)]. By JACK HINE, LOUIS G. MAHONE, and CHARLES L. LIOTTA, School of Chemistry, Georgia Institute of Technology, Atlanta, Georgia.

D. Daloze, of the University of Brussels, has kindly pointed out to us that two factors we took as canceling will actually reinforce each other. Therefore, on page 5917, column 1, line 4, "smaller" should be "larger"; in line 6, "However," should be deleted; in line 20, "90,000-fold and 33,000-" should be "220,000-fold and 78,000-"; and the sentence beginning on line 11 should read: "Therefore the rate constants for the

formation of carbanions by the reaction of sodium methoxide with dibromofluoromethane and diiodofluoromethane in methanol-d should be 0.67 and 1.4  $M^{-1}$  sec<sup>-1</sup>."

Sulfur Chelates. III. Metal Complexes of the 1,1-Dithiolato Anions  $S_2CS^{2-}$ ,  $S_2CNCN^{2-}$ , and  $S_2CC(CN)_2^{2-}$  [*J. Am. Chem. Soc.*, **88**, 3913 (1966)]. By John P. Fackler, Jr., and D. Coucouvanis, Department of Chemistry, Case Institute of Technology, Cleveland, Ohio 44106.

On page 3916, the complex in footnote 17a should be  $[(CH_3)_8NC_6H_5]_4Cu_8(i\text{-mnt})_6$ .

On page 3920, the second transition in Table VI should be labeled  ${}^4A_g \rightarrow {}^4T_{1g}$ .

Sulfur Chelates. VIII. Oxidative Addition of Sulfur to Dithioaryl Acid Complexes of Nickel(II) and Zinc(II) [J. Am. Chem. Soc., 90, 2784 (1968)]. By J. P. FACKLER, JR., D. COUCOUVANIS, J. A. FETCHIN, and W. C. SEIDEL, Department of Chemistry, Case Western Reserve University, Cleveland, Ohio 44106.

In the abstract, the second sentence should be corrected to "addition of one sulfur atom per complex." In the last sentence of the abstract, remove the words "and abstraction" and change the word "reactions" to "reaction."

On page 277, the caption to Figure 3 should list complexes as derivatives of dithiotoluic acid, not dithiobenzoic acid.

Aranotin and Related Metabolites from Arachniotus aureus. I. Determination of Structure [J. Am. Chem. Soc., 90, 2980 (1968)]. By R. NAGARAJAN, L. L. HUCKSTEP, D. H. LIVELY, D. C. DELONG, M. M. MARSH, and N. NEUSS, Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, Indiana 46206.

Figure 1 should have the following caption: The nmr spectrum of acetylaranotin, 3, in CDCl<sub>3</sub> at 60 and 100 MHz. The chemical shifts and coupling constants of all the ring protons of 3, established by double irradiation, are shown on the right-hand side of the spectrum.

Chemistry of Cyclopropanols. V. Stereochemistry of Acid- and Base-Catalyzed Ring Opening [J. Am. Chem. Soc., 88, 3347 (1966)]. By C. H. DEPUY, F. W. BREITBEIL, and K. R. DEBRUIN, Department of Chemistry, Iowa State University, Ames, Iowa 50010.

On page 3349, Table II, the values reported for the acid-catalyzed ring opening should be transposed.

On page 3353, the experimental procedure for 1-deuterio-1-phenylethane (XXI) should be as follows: L-(+)-XIX,  $[\alpha]^{26}D + 2.23^{\circ}$  (5% ether, 20-cm cell), was treated with lithium aluminum hydride according to the procedure of Eliel and Prosser<sup>22</sup> to give L-(-)-1-deuterio-1-phenylethane,  $[\alpha]^{24}D - 0.236^{\circ}$  (neat).

## Book Reviews

An Introduction to the Chemistry and Biochemistry of Fatty Acids and Their Glycerides. By F. D. GUNSTONE, Reader in Chemistry, The University of St. Andrews. Barnes and Noble, Inc., 105 Fifth Ave., New York, N. Y. 1968. x + 209 pp.  $16 \times 24 \text{ cm.}$  \$10.00.

This book, according to the preface, is written for students with a sound knowledge of organic chemistry, but little prior knowledge of fatty acids and their derivatives. It is aimed primarily at undergraduate and graduate students. Opinion, it achieves its objectives reasonably well. However, it appears to the reviewer that it will be of more interest to those who are primarily chemists than it will to biochemists.

The book is divided into seven chapters: (1) The Natural Derivatives of Fatty Acids, (2) The Fatty Acids, (3) Physical Properties of Fatty Acids and Their Esters, (4) Chemical Properties of Fatty Acids and Their Esters, (5) Glyceride Synthesis, (6) The Component Acids and Glycerides of Natural Fats, and (7) Biosynthesis and Metabolism. The first chapter is a very brief (10 pp) survey of natural compounds that contain fatty acids. Chapters 2 and 4, the best in the book, are quite long. The first of these chapters is subdivided into (a) the Structures, (b) Separation and Isolation, (c) Methods of Structure Determination, and (d) Synthesis of the Fatty Acids. Chapter 4 is subdivided into (a) Reduction and Hydrogenation, (b) Oxidation, (c) Halogen Derivatives, (d) Polymerization, (e) Stereomutation, Double-Bond Migration and Cyclization, (f) Other Olefinic Reactions, and (g) Reactions of the Carboxylic Group of the Fatty Acids. Chapter 3 is short, but it contains some interesting data on the physical properties of the fatty acids. Chapters 5, 6, and 7 are of interest, but again relatively brief.

As can be seen from the contents of the book, it is written primarily for those interested in the chemistry, physical properties,

distribution, and methods of characterization of the fatty acids and their derivatives. Only a very brief chapter is devoted to the biosynthesis of fatty acids and related compounds. The latter chapter is essentially a summary of pathways of the synthesis of a variety of fatty acids, triglycerides, phosphoglycerides, and sphingolipids. Most of the information in the chapter appears to have been taken from reviews, and some of them not very current. The elongation of fatty acids by a microsomal system is omitted from this chapter.

Chapters 2 and 4 (which comprise 105 of the 195 pages of this book) are excellent. The subject matter in these chapters is treated in appreciable detail and in a way that should interest the student. Obviously the author has had much experience with the subjects of these chapters.

A pleasing aspect of the book is the inclusion of information on various methods of chromatography (column, paper, thin-layer, and gas-liquid), spectroscopy (ultraviolet, infrared, and nuclear magnetic resonance), and mass spectrometry. Numerous figures illustrating these methods of separation or structural analysis are presented in the book. Also presented are quite a large number of tables. However, frequently these tables need some study before the reader is certain of the meaning of the data in them.

No gross errors were detected in the book by the reviewer. Hence, it appears that the proof was carefully read.

The price of the book is reasonable. Those who have considerable interest in the subject matter of Chapters 2-6 will find this book a welcome addition to the literature on fatty acids. Those who are interested in enzymology and the more biochemical aspects of the subject will be disappointed.

John W. Porter

Department of Physiological Chemistry University of Wisconsin, Madison, Wisconsin