## Additions and Corrections.

## Vol. 28, 1963

Robert L. Augustine: Catalytic Hydrogenation of  $\alpha,\beta$ -Unsaturated Ketones. III. The Effect of Quantity and Type of Catalysts.

Page 153. Column 1, last paragraph, third line. "... adsorption is very slight with the trans adsorption..." should read "... adsorption is very slight with the cis adsorption...

Jack Tadanier: Preparation and Solvolysis of 6\$,19-Oxido-17-ethylenedioxy- $3\alpha$ ,  $5\alpha$ -cycloandrostane.

Page 1746. In Table I, part A,  $C_{19}$ -Oxygenated  $3\alpha,5\alpha$ -cyclosteroids. II should be replaced by Is in column 1.

This misprint, which erroneously indicated a large solvent dependency of the geminal coupling constant of the C12-methylene protons of 38,19-dihydroxyandrost-5-en-17-one (II) was brought to our attention by the article entitled "Geminal Coupling Constants in Methylene Groups," by R. C. Cookson, T. A. Crabb, J. J. Frankel, and J. Hudec which appeared in Tetrahedron, Suppl. No. 7, 335 (1966).

## Vol. 31, 1966

A. G. Pinkus and L. Y. C. Meng: Reaction of 5-Chloro-2hydroxybenzophenone and Phosphorus Pentachloride. Struc-

Page 1038. The first paragraph following the abstract beginning "VI reacts with..." and ending "... under various conditions attempted." should be included as part of the abstract.

Page 1040. Second paragraph, last line. Xb should replace XB.

Peter Kovacic and Michael E. Kurz: Reactions of t-Butylperoxy Isopropyl Carbonate with Aromatic Compounds under Friedel-Crafts Conditions.

Page 2465. First column, B-4. 5-Chlororesorcinol Dimethyl Ether should refer to the following footnote: We are grateful to Professor Lester Friedman and Mr. Paul P. Caruso for this procedure.

Peter Kovacic, Vincent J. Marchionna, Fred W. Koch, and James Oziomek: Synthesis and Properties of p-Polyphenyl

Table I. Replace the "Source" column with the following: The derivative was prepared according to the first procedure in the corresponding portion of the Experimental Section, except for the third entry (see procedure 2 for chlorina-

R. Garrett and D. G. Kubler: Acetal Formation for Cyclic

Page 2666. Table I. The heading in the table as "Absorbance,  $\lambda$  (m $\mu$ )" should read "Absorbance, A." In the "25°" column under absorbance, the 11th, 12th, and 13th items in this column were inadvertently given as molarities instead of ab-The given values are, in order, 0.497, 0.204, 0.071. sorbances. These should read, in order, 0.251, 0.103, and 0.036.

Kaoru Harada and Kazuo Matsumoto: Stereoselective Synthesis of Optically Active Aspartic Acid from Derivatives of Fumaric Acid and Maleic Acid.

Page 2990. Scheme V. Fumarate (C) is incorrectly shown to be in equilibrium with the maleimide derivative. The equilibrium arrows should be between the fumarate (C) and maleate (B).

D. C. Berndt and R. L. Fuller: The Kinetics and Mechanism of the Hydrolysis of Benzohydroxamic Acid.

Page 3314. Equation 6, top of page, should read

$$k_{\text{obsd}} = k_1 K_1 [\text{H}_3\text{O}^+]$$

The hydronium ion concentration factor was omitted from the

Erach R. Talaty and Glen A. Russell: Application of Electron Spin Resonance Spectroscopy to Problems of Structure and Conformation. VIII. Semidiones Derived from 9-Methyldecalones and 10-Methyl Steroidal Ketones. Assignment of Structure to A-Ring Steroidal Ketones.

Page 3455. Last word of the abstract should be dihydrolanosterone

John L. Kice and Giancarlo Guaraldi: Mechanisms of Substitution Reactions at Sulfinyl Sulfur Solvolysis of Aryl Sulfinyl Sulfones in Acetic Acid-Water.

Page 3568. In eq 1, the second formula should be



Page 3569. In Table I, the last two footnotes should read as follows: b Measured by following the solvolysis of compound II <sup>c</sup> Too fast to measure.

N. L. Weinberg and E. A. Brown: The Anodic Oxidation of Organic Compounds. I. The Electrochemical Methoxylation of 2,6-Dimethoxypyridine and N-Methylpyrrole.

Page 4055. Compound XI, 2-hydroxyazaquinone, should be the dimer 4,5,4',5'-tetrahydroxy-3,3'-diazadiphenoquinone-(2,2'). Our structural assignment was based on the work of Boyer and Kruger (ref 6), but their product has been recently shown to be the dimer XI by Kuhn, Bauer, and Knackmuss (Chem. Ber., 98, 2139 (1965)). I am indebted to Dr. Knackmuss for pointing out this error to us. Hydrolysis of 4,4-dimethoxyglutaconimide (IX) in 10% aqueous hydrochloric acid at 25° gave a 90% yield of XI,  $\lambda_{\max}^{\text{DMF}}$  645 m $\mu$  (log  $\epsilon$  4.07). Anal. Calcd for C<sub>10</sub>H<sub>6</sub>N<sub>2</sub>O<sub>6</sub>: C, 48.01; H, 2.42; N, 11.20. Found: C, 47.65; H, 2.38; N,

Marvin L. Poutsma: Chlorination of Unsaturated Materials in Nonpolar Media. VII. Butadiene: a Reevaluation.

Page 4168. Figure 1. the numerical labels were omitted. The label "Mole fraction of butadiene" should go from 0 to 1.0 in units of 0.2 and the label "II/ $(I + II) \times 100$ " should go from 45 to 80 in units of 5.

Paul R. Jones, Ronald J. Panicci, Ronald M. Stimson, and

Louis Port: A Monofunctional ansa Lactone
Page 4278. Column 2, line 23. 5.50 ppm should be replaced with 4.7 ppm.

## Vol. 32, 1967

David W. Emerson, Arthur P. Craig, and Irvin W. Potts, Jr.: The Pyrolysis of Unsymmetrical Dialkyl Sulfoxides. Rates of Alkene Formation and Composition of the Gaseous Products.

Page 103. Left-hand column of Table I, lines 11, 22, and 33. The offending item in each case is the word "2-Cyclobutene" which should read "cis-2-Butene."

Kikumasa Sato, Shigeru Suzuki, and Yasuhiko Kojima: A New Synthesis of 3-Methylcyclopent-2-en-2-ol-1-one.

Page 340. Third paragraph, second line. (III) should be

Robert T. Parfitt, Mikio Takeda, and Hiroshi Kugita: A New Rearrangement Product in the 6,7-Benzomorphan Series.

Page 421. Column 2, bottom diagram. The curved arrows should have single hooks, implying single-electron shifts, rather than the double hooks as printed.

W. S. Johnson and K. E. Harding: Olefinic Cyclizations. IX. Further Observations on the Butenylcyclohexenol System.

Page 479. At the end of the paper, add "Acknowledgment.-We thank the U.S. Public Health Service, the National Science Foundation, and the donors of the Petroleum Research Fund, administered by the American Chemical Society, for support of this research.'

P. Laur, H. Häuser, J. E. Gurst, and K. Mislow: Rotatory Dispersion of Some Cyclic Sulfides.

Pages 498-499. The configurational designation of (-)trans-2-thiahydrindan, corresponding to stereoformula 1, should be (8S,9S) not (8R,9R). This change in no way affects the discussion and conclusions presented in our paper.

D. J. Pasto, K. Garves, and M. P. Serve: The Mechanism of Solvolysis of Phenacyl Halides in Various Solvents.

Page 775. Table III. Heading of last column should be -ΔS<sup>‡</sup>

D. J. Pasto and K. Garves: The Silver Ion Assisted Solvolysis of Phenacyl Halides in Aqueous Ethanol.

Page 778. Table III. Heading of last column should be

Robert E. Buckles, James L. Miller, and Roland J. Thurmaier: The Kinetics of the Addition of Bromine to cis- and trans-Stilbene.

Page 891. Column 1. the equilibrium of eq 14 may very well have a part in the reaction mechanism of the addition of bromine to cis- or trans-stilbene in the presence of the tetrabutylammonium tribromide, but its involvement was incorrectly interpreted in the text of the article. If the ion aggregate formed had geometry unfavorable to the formation of dibromide product the equilibrium would lead to a slower reaction, but it would not affect the rate law derived from the mechanism. On the other hand, were this equilibrium an intermediate step of the productforming reaction of eq 13 it would not appear in the rate law (eq 15) unless all of the reaction of eq 13 were treated in a stepwise fashion. In any event eq 15 should be corrected to read

$$-\mathrm{d[Br_2]}/\mathrm{d}t = \frac{k_3 k_4 k_{13} [\mathrm{E]\, [Br_2]^2 [R_4 NBr_3]}}{k_{-8} k_{-4} + k_{-3} k_{13} [R_4 NBr_3]}$$

If the formation of a higher ion aggregate involving two molecules of tribromide salt were tying up the intermediate ion in an unreactive form, it also would not affect the rate law as described in the text. If this reaction were an intermediate step in the formation of product the rate law would have the form of the corrected eq 15 except that the [R₄N Br₃] term would be squared in both numerator and denominator. Either of these corrected rate laws would explain the leveling effect at higher bromide concentrations but not the maximum value of the rate constant. Such a maximum value of the rate constant could be explained by reversible inhibition involving two or more molecules of tribromide salt but not involving an intermediate of the productforming reaction sequence.

Johannes Meienhofer: Synthesis of Peptide Derivatives with Actinomycin D Sequence.

Page 1143. Formula IX (actinomycin D acid). The phenoxazone ring system carries a nitro group in position 2. Correctly it should be an amino group.

Howard Peters, Robert A. Archer, and Harry S. Mosher: 2,3-Dimethyl-1,2,3,4-tetrahydronaphthalenes and 4,5-Dimethylcyclohexenes. Proton Magnetic Resonance and Stereochemistry.
Page 1383. Column 2, line 6. "cis-3,4-dimethylcyclohexene"

should read "cis-4,5-dimethylcyclohexene."

Page 1383. Column 2, line 18. "... in going from the cis to trans from..." should read "... in going from the trans to cis form ..."

Page 1384. Column 2, lines 5 and 6. "2,3-dimethyl-2,3,4-tetrahydronaphthalenes" should read "2,3-dimethyl-1,2,3,4tetrahydronaphthalenes."

Page 1387. Column 1, line 20. "cis-3,4-Dimethylcyclohexene" should read "cis-4,5-Dimethylcyclohexene.'

Page 1387. Column 1, ref 40. Page 29 should read 93. Page 1387. Column 2, line 5. "trans-3,4-Dimethylcyclohexene" should read "trans-4,5-Dimethylcyclohexene."

Ernest Lustig and Edward P. Ragelis: Proton Spin Coupling in 1-Indanone.

Pages 1399-1400. The figure appearing with the caption for Figure 2 should be Figure 4; the figure appearing with the caption for Figure 3 should be Figure 2; and the figure appearing with the caption for Figure 4 should be Figure 3.

K. Darrell Berlin and Robert B. Hanson: Ring Cleavage of 2,2,4-Trimethyl-3-hydroxy-3-pentenoic Acid β-Lactone by the

Anion of Diisopropyl Ketone.

Page 1764. Scheme I. Under structure 3 is an arrow with a small 6. The 6 is incorrect, and should be 1.

Gerald A. Selter and Kirk D. McMichael: Displacement and Elimination Reactions of  $5\alpha$ ,  $6\alpha$ -Epoxy- $3\beta$ -cholestanyl p-Toluenesulfonate in Dimethylformamide.

Page 2547. Structure 3a, X = COOH should read X =HCOO.

Leo A. Paquette and William C. Farley: The Chloramine-Induced Oxidative Dimerization of Phenols.

Page 2723. Reference 35 should read "G. R. Yohe, J. E. Dunbar, R. L. Pedrotti, F. M. Scheidt, F. G. H. Lee, and E. C. Smith. . . . . . "

Lars Skattebøl, Bernice Boulette, and Stanley Solomon: Reactions of sulfides with t-Butyl Hypochlorite.

Page 3112. Scheme I should appear as shown below.