## ADDITIONS AND CORRECTIONS

## 1957, Volume 79

Alexander Schönberg, Abd El Kader Fateen, and Abd El Maged Amine Sammour: Organic Sulfur Compounds. XXXIV. Synthesis of Ethylenes and Ethylene Sulfides by Action of Diazoalkanes on Thioketones.

Page 6022. In footnote 12 -chlorobenzophenone should be replaced by o-chlorobenzophenone hydrazone. In footnote 13 $p$-nitrobenzophenone should be replaced by $p$-nitrobenzophenone hydrazone. In footnote 15 p-phenylbenzophenone should be replaced by p-phenylbenzophenone hydrazone.-Alexander Schonberg.

## 1958, Volume 80

H. K. Hall, Jr., M. K. Brandt, and R. M. Mason: Hydrolysis Rates and Mechanisms of Cyclic Monomers.

Page 6424. In Table IV, column 2 (Preparation) entries 9, 10 , and 11, the word dimethylformamide should be replaced by the word pyridine. - H. K. Hall, Jr.

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\text { 1960, Volume } 82
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Emerson L. Wittbacker, H. K. Hall, Jr., and Tod W. Campbell: Synthesis and Polymerization of Bridged Bicyclic Ethers.

Page 1221. In paragraph 9, line 5 in the right-hand column, the words which read as $<99.9 \%$, should read as $>99.9 \%$ H. K. Hall, Jr.

| $\omega_{1}$ | $\omega_{2}$ | $\omega_{8}$ | $\omega_{4}$ |  | $\omega_{5}$ | $\theta_{1}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0.0 | -25.9 | 41.7 | -41.7 | 25.9 | 106.0 | 106.0 |
| 5.0 | -29.8 | 43.0 | -40.0 | 21.8 | 106.2 | 105.6 |
| 10.0 | -33.3 | 43.8 | -37.7 | 17.2 | 106.3 | 105.3 |
| 15.0 | -36.4 | 43.9 | -34.8 | 12.3 | 106.4 | 104.8 |
| 20.0 | -39.2 | 43.4 | -31.2 | 7.0 | 106.3 | 104.2 |
| 25.0 | -41.6 | 42.3 | -27.1 | 1.3 | 106.0 | 103.6 |
| 30.0 | -43.4 | 40.4 | -22.0 | -5.0 | 105.8 | 102.8 |
| 35.0 | -44.0 | 36.5 | -14.9 | -12.5 | 105.2 | 102.2 |
| 40.0 | -43.5 | 30.6 | -5.7 | -21.3 | 104.2 | 101.6 |
| 45.0 | -39.4 | 18.8 | 9.3 | -33.7 | 102.4 | 101.4 |
| 50.0 | -40.9 | 16.3 | 14.7 | -40.0 | 100.7 | 100.4 |
| 55.0 | -43.8 | 16.2 | 17.7 | -44.8 | 99.0 | 99.0 |
| 60.0 | -47.2 | 17.0 | 19.7 | -48.6 | 97.0 | 97.8 |
| 65.0 | -49.9 | 17.0 | 22.3 | -52.4 | 94.8 | 96.8 |

E. W. Warnhoff and W. C. Wildman: The Structure and Stereochemistry of Undulatine.

Page 1488. In the left-hand column under the heading Chromic Acid Oxidations, line 7 should read $1.42 \times 10^{-3}$ molar instead of $3.57 \times 10^{-4}$ molar: line 8 should read $1.82 \times 10^{-3}$ molar instead of $4.75 \times 10^{-4}$ molar.-Edgar W. Warnhoff.

Marc S. Silver, Paul R. Shafer, J. Eric Nordlander, C. Rüchardt, and John D. Roberts: Small-Ring Compounds. XXVIII. Isotope-Position Rearrangements of Allycarbinyl Grignard Reagents.

Page 2647 . The activities given in ref. 4 should be $\mu \mathrm{c} . /$ mmole instead of mc./mmole.-John D. Roberts.

## 1961, Volume 83

Richard A. Sneen and Arthur L. Baron: Transmission of Electrical Effects through Homoallylic Systems. IV. The Solvolysis of Some Secondary Cyclopropylcarbinyl p-Nitrobenzoates.

Page 617. In column 1, last line, for 3.950 read 2.480. In column 2 note the following changes: in line 1 for 30 ml . read 10 ml .; in line 3 for 3.58 g . read 3.00 g .; in line 6 for 1 hour read $1 / 2$ hour; in lines 8 and 9 delete $c a .60 \%$; in lines 10 and 11 for $73.5 \%$ yield ( 2.91 g ., m. p. $159-162^{\circ}$ ) read $36.0 \%$ yield ( 1.78 g., m.p. $87-88^{\circ}$ )- Richard A. Sneen.

Ronald D. Archer and John C. Bailar, Jr.: Stereochemistry of Inorganic Complexes. XXVI. The Ammonation of Two Optically Active Cobalt(III) Complexes.

Page 814. The following values originally reported by Mathieu for $\mathrm{D}^{*}-\left[\mathrm{Co}(\mathrm{en})_{2}\left(\mathrm{NH}_{3}\right)_{2}\right] \mathrm{Cl}_{3}$ were misquoted in Table I:
$[M]{ }^{30} \mathrm{D}, 145 ; \quad[M]^{30} 554 \mathrm{~m} \mu, 340 ; \quad[M]^{30} 546 \mathrm{~m} \mu, 360$.—John
C. Bailar, JR.
E. L. Eliel, J. D. McCollum, S. Meyerson, and P. N. Rylander: Organic Ions in the Gas Phase. IX. Dissociation of Benzyl Alcohol by Electron Impact.

Page 2483. Column 1, lines 4 and 5 from the bottom, the two equations should be deleted from the text and added to footnote 11.-Seymour Meyerson
H. M. Walborsky, L. Barash, A. E. Young, and F. J. Impastato: Cyclopropanes. IX. The Relative and Absolute Configurations of 1-Substituted 2,2-Diphenylcyclopropanecarboxylic Acids.

Page 2525. Column 2, line 14 , should read m.p. $179-181^{\circ}$ instead of $96-98^{\circ} .-\mathrm{H}$. M. Walborsky.
James B. Hendrickson: Molecular Geonetry. I. Machine Computation of the Common Rings.

Page 4540. After independent calculation Professor K. Conrow of Kansas State University has informed me that several of the cyclopentanes listed in the table of computed angles and energies were not in fact closed rings. This error resulted largely from incorrect assignment of dihedral angle signs in an early computer program and has now been corrected in a new program which includes $1,5-\mathrm{H}-\mathrm{H}$ interactions as well as $E_{\theta}$ and $E_{\mathrm{t}}$ in the minimizing process and which checks ring closure. The corrections are given below. The other rings in the original paper are correct.-James B. Hendrickson

| $\theta_{\mathrm{s}}$ | $\theta_{\mathrm{i}}$ | $\theta_{\mathrm{s}}$ | $E_{\mathrm{t}}$ | $E_{\theta}$ | $\left(E_{\mathrm{R}}-E_{\mathrm{A}}\right)_{\mathrm{HH}}$ | $\Sigma_{E_{\mathrm{HH}}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| 103.6 | 101.7 | 103.6 | 7.43 | 2.89 | -0.74 | 9.58 |
| 103.2 | 101.6 | 104.2 | 7.36 | 2.96 | -0.73 | 9.59 |
| 102.6 | 101.9 | 104.7 | 7.36 | 2.97 | -0.72 | 9.60 |
| 102.2 | 102.4 | 105.1 | 7.37 | 2.95 | -0.71 | 9.61 |
| 102.0 | 102.7 | 105.6 | 7.38 | 2.95 | -0.70 | 9.62 |
| 101.8 | 103.2 | 106.0 | 7.33 | 3.00 | -0.70 | 9.63 |
| 101.8 | 104.0 | 106.1 | 7.30 | 3.04 | -0.69 | 9.64 |
| 102.2 | 104.8 | 106.3 | 7.34 | 2.99 | -0.67 | 9.66 |
| 103.0 | 105.6 | 106.2 | 7.30 | 3.03 | -0.64 | 9.69 |
| 104.4 | 106.1 | 105.2 | 7.09 | 3.27 | -0.61 | 9.75 |
| 103.7 | 106.2 | 103.8 | 6.25 | 4.53 | -0.64 | 10.14 |
| 102.6 | 106.1 | 102.3 | 5.50 | 6.31 | -0.66 | 11.16 |
| 100.8 | 106.4 | 100.8 | 4.94 | 8.66 | -0.61 | 13.00 |
| 98.6 | 107.1 | 98.8 | 4.58 | 11.76 | -0.45 | 15.88 |
|  |  |  |  |  |  |  |

L. A. Woolf, Donald G. Miller, and Louis J. Gosting: Isothermal Diffusion Measurements on the System $\mathrm{H}_{2} \mathrm{O}$-GlycineKCl at $25^{\circ}$; Tests of the Onsager Reciprocal Relation.

Page 323. The value of $Q_{\exp } \times 10^{4}$ for Exp. No. 34 (in line 16) should be 42.14 .

Page 324. In column 2, line 33 , the v after $\left(D_{\mathrm{ij}}\right)$ should be a subscript.

Page 329. In eq. 58 the subscript after the last parenthesis should be $\mathrm{mr}_{2}$.-Lovis J. Gosting.

John P. Schaefer: Selenium Dioxide Oxidations. I. Studies on the Mechanism of Oxidation of 1,2-Dibenzoylethane.

Page 716. Column 1, line 25, the number 4.2 should be substituted for 5.6. In column 2, line 12, 9.06 should read 9.98 and in line $15,9.98$ should read 9.06 . Again in line $16,5.4$ should be changed to 4.2 . -John P. Schaefer.
E. J. Behrman and Pamela P. Walker: The Elbs Peroxydisulfate Oxidation: Kinetics.

Page 3456. In Table III the entry in the $\mu$ column for $1 M$ $\mathrm{Na}_{2} \mathrm{SO}_{4}$ should read 5 instead of 6 .

Page 3457 . In Table VII $0.0241 M 2-\mathrm{OH}$ pyridine should read $0.241 M 2$-OH pyridine.-E. J. Behrman.

Nelson J. Leonard and Carl R. Johnson: Transannular Sulfoxide-Ketone Reactions and Oxygen Transfer.

Page 3701. In line 8 of the Abstract the figures in brackets should be [3.3.1] as in the lines above and below.

Page 3705. HX on the right-hand side of each equation should read HY.-Nelson J. Leonard

Thomas V. Van Auken and Kenneth L. Rinehart, Jr.: Stereochemistry of the Formation and Decomposition of 1-Pyrazolines.

Page 3741. The structure 19a should have the eclipsed form shown below.


Thomas V. Van Auken
Stanley J. Cristol, Wolfgang K. Seifert, Donald W. Johnson, and J. Byrne Jurale: Bridged Polycyclic Compounds. XIX. Some Addition and Solvolysis Reactions in Norbornane Systems.

Page 3923. In column 2, the next to the last line, III should be replaced by VI.

Page 3924. In column 1, line 17, the III should be replaced by VI and the VI replaced by III.-Stanley J. Cristol.

Philip L. Southwick, Allan K. Colter, Richard J. Owellen, and Yoon-Chai Lee: Stereospecific and Stereoconvergent Rearrangement, Solvolysis, and Elimination Reactions Involving Ethylenimonium Ketone Intermediates.

Page 4304. The numbers IIIa and IIIb applied to the dl-threo- and dl-erythro- $\beta$-methoxyl- $\alpha$-morpholinobenzylacetophenones, respectively, in the last two headings of column 2 should read IVa and IVb.-Philip L. Southwick
Lila Gatlin and Jeff C. Davis, Jr.: Comparison of Ribose and Deoxyribose Nucleosides by N.m.r. and Deductions Regarding Ribose and Deoxyribose Nucleic Acids. I. Tautomeric Form.

Page 4465. In column 2, the 13 th line from the bottom, change lists to list.

Page 4466. The numbering of the structural formulas should be:

| I | IV |
| :--- | :--- |
| II | V |
| III | VI |

Page 4467. In column 1, 5th paragraph, line 1 , change $\mathrm{H}_{4}^{\prime}$ to $\mathrm{H}_{5}^{\prime}$.

Page 4469. In column 1, the last line should read, "purine ring (structure VI). Also synthetic (poly-"-Jeff C. Davis, Jr.

## Author Index.

Page 5008. The following entry was omitted from the 1962 author index.

Bozak, R. E., and Rinehart, K. L., Jr. Organic Chemistry of Ferrocene. III. 6-Methyl-6-hydroxy-2-phenylazofulvene 1589 . -R. E. Bozak.

Page 5018. In column 2, Helm, van der D., should be changed to van der Helm, D.

Page 5029. In column 1, under Patterson, A. L., the third author is listed as Helm, van der D. This should be changed to van der Helm, D. Also under Patterson, A. L., the corrected title of the book review short be, "Cours de Cristallographie. Livre III. Première Partie. Radiocristallographie Théorique. Deuxième Partie. Methodes de Cristal Tournant. Determination des Structures Cristallines. Troisième Partie. Methodes de poudres." (Gay).-A. L. Patterson.

## Subject Index.

Page 5041. Cnder Absolute Configuration should be added, of isocitric acid, 309.-A. L. Patterson.

## 1963, Volume 85

Albert W. Burgstahler and M. O. Abdel-Rahman: The Synthesis of $o$-Di- $t$-butylbenzene by Classical Reaction Methods.
Page 174. In column 2, line 3, for, the same complex, read a similar type of complex.
Page 180. In column 2, line 4, replace 2.9 by 5.9 .-Albert W. Burgstahler.

Dennis F. Evans, Stanley L. Manatt, and Daniel D. Elleman: Relative Signs of Fluorine-19-Fluorine-19 and Hydrogen-1-Fluorine-19 N.m.r. Coupling Constants.

Page 239. The relative signs in the last line should be $J_{12} \mp$ $J_{84 \mp}, J_{28 \mp}, J_{13 \pm}, J_{14} \pm$, and $J_{24} \pm$.-Stanley L. Manatt
K. G. Untch: sym-cis,cis-1,4,7-Cyclononatriene, an Unusual Cyclic Six Pi Electron System.

Page 346. Due to a misplaced decimal point the values cited for the delocalization and the delocalized orbitals are incorrect. The last sentence of the next to the last paragraph should read instead: The calculations give a value of $25.0 \%$ as much $2,4-$ overlap as that of 1,2 -overlap and predict $7.8 \%$ as much delocalization energy as that of benzene with the six pi electrons occupying three delocalized orbitals (degenerate pair at $-0.889 \beta$ and one at $-1.30 \beta$ - K. G. Untch
E. T. Kaiser, Manuel Panar, and F. H. Westheimer: The Hydrolysis of Esters of Sulfuric Acid.

Page 602. The spectrum of ethylene sulfate was erroneously given in KBr , with which it reacts. The infrared bands, in Nujol mull, fall at $6.87,7.27,8.34,9.95,11.10,11.46$, and $12.7 \mu$. F. H. Westheimer

Herman L. Finkbeiner and Martin Stiles. Chelation as a Driving Force in Organic Reactions. IV. Synthesis of $\alpha$-Nitro Acids by Control of the Carboxylation-Decarboxylation Equilibrium.

Page 617. The sentence preceding eq. 2 should read, In 0.1 $M$ borate buffer at pH 8.8 the observed first-order rate constant was $0.0679 \mathrm{~min} .^{-1}$ (average of 3 runs). Since this was an error irl transcription no other rate constants are affected by this change.-Martin Stiles.

Daniel F. Veber and Walter Lwowski: 1-Aryl Isoindoles. Page 646. Column 2.

## Corrected Table I

| Tsoindole | $\lambda_{\max }(\log t)$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 1-Phenyl- <br> 1-p-Methoxy- <br> phenyl- | $357(4.10)$ | $325(3.99)$ | $282(3.92)$ | $272(3.86)$ |
| 1,3-Diphenyl- <br> N-methyl- | $376(4.30)$ | $334(4.03)$ | $277(4.13)$ | $270(4.10)$ |
| Maleic anhy- <br> dride adduct <br> of 1-phenyl- | $357(4.06)$ | $324(3.95)$ | $282(3.88)$ | $272(3.84)$ |
| WALTER LWOWSKI |  |  |  |  |

K. L. Wierzchowski, D. Shugar, and A. R. Katritzky: Primary Photoproduct of 2,6-Dimethyl-4-aminopyrimidine.

Page 828. The correct spelling of the third author's name is Katritzky.-A. R. Katritzky.

Yoshiro Ogata, Yoshiaki Furuya, Junji Maekawa, and Kenji Okano: Kinetics of the Acid-Catalyzed Transformation of Peroxyacetic Acid to Acetyl Peroxide in Acetic Acid

Page 962. Figure 1 should be rotated $180^{\circ}$ - Yoshiro Ogata.
F. W. Stacey and J. F. Harris, Jr.: Radiation-Induced Addition of Hydrogen Sulfide to Substituted Acetylenes. Synthesis of Vinylthiols.

Page 964. In column 1, line 11, read smaller instead of larger in the sentence beginning "The larger resonance . . . ." On line 13, the word minor should read major.-F. W. Stacey

Jay K. Kochi: The Decomposition of Peroxides Catalyzed by Copper Compounds and the Oxidation of Alkyl Radicals by Cupric Salts.

Page 1961. In column 2, line 5 should read: salts as catalysts instead of: salts or catalysts.

Page 1968. In column 1, line 13 should read, ml. of $30 \%$ hydrogen peroxide (duPont Co. Albone 50 diluted with distilled water). In column 2 , paragraph 4 , line 3 should read, 79 g . of acetyl chloride in 50 ml .-Jay K. Kochi.

Kurt Mislow, Rolf Graeve, Arnold J. Gordon, and George H. Wah1, Jr.: A Note on Steric Isotope Effects. Conformational Kinetic Isotope Effects in the Racernization of 9,10-Dihydro-4,5dimethylphenanthrene.

Page 1200. In column 2, the value for $\Delta S_{\mathrm{H}} \neq-\Delta S_{\mathrm{D}} \neq$ should read $\sim 0.3$ e.u. -Kurt Mislow

Richard H. Boyd: The Activity Coefficients of Indicators in Sulfuric Acid Solutions.

Page 1556. The sentence following eq. 12 should read, For a $1-1$ salt, $f=f_{ \pm}=\sqrt{f_{+} f_{-}}$.

Page 1559. The ordinate for Fig. 1 should be labeled log $f^{*}+$ or .- RIChard H. Boyd.

Frank Covitz and F. H. Westheimer: The Hydrolysis of Methyl Ethylene Phosphate: Steric Hindrance in General Base Catalysis.

Page 1775. Figures 2 and 3 should be interchanged.-F. H. Westheimer
P. H. H. Fischer and C. A. McDowell: The Electron Spin Resonance Spectrum of Electrolytically Generated 7,7,8,8-Tetramethylquinodimethane Radical Anions.

Page 2695. In the right-hand column, line 17 from the bottom, 0.008 should read 0.0608 - C. A. McDowell.
S. Meyerson: Organic Ions in the Gas Phase. XIII. Cycloheptatriene-7-d; Decomposition of $\mathrm{C}_{7} \mathrm{H}_{8}{ }^{+}$and $\mathrm{C}_{7} \mathrm{H}_{8}{ }^{++}$from Cycloheptatriene and Toluene.

Page 3344. Footnote 37 a, the last line, change kcal. per mole to e.v. per mole.-Seymour Meyerson.

Vernon F. Raaen, Theodore K. Dunham, Dorothy D. Thomp-
on, and Clair J. Collins: Steric Origin of Some Secondary son, and Clair J. Collins: Steric Origin of Some Secondary Isotope Effects of Deuterium.

Page 3497. We omitted mention of the very important and pertinent communication by K. Mislow, R. Graeve, A. J. Gordon, and G. H. Wahl, Jr., J. Am. Chem. Soc., 85, 1199 (1963). We regret the omission and wish now to call attention to the fact that the secondary isotope effects reported by us are relatively small, and of approximately the same order of magnitude, as those reported by Mislow and co-workers, and also ascribed to a possible steric origin.-Clair J. Collins

