Elihu Goldish, Kenneth Hedberg and Verner Schomaker. The Molecular Structure of Cyclobutene, C4H6.

Page 2714. In the abstract, line 3, for "94.0  $\pm$  0.8°" read "94.0  $\pm$  1.2°."

Page 2715. In col. 2, line 2, same correction.—Verner SCHOMAKER.

F. A. H. Rice. Decarboxylation via the Acid Chloride of Penta-O-acetyl-D-gluconic Acid.

Page 3174. In col. 1, line 13, for "-2.6" read "+2.6010." In col. 2, line 18 of the Experimental, same correction.
To ref. (11) add; "58, 2477 (1936)."—Frederick A. H.

James H. Brewster. The Configuration of Atrolactic Acid. Retention of Configuration in the Acid-catalyzed Ring Opening of Stilbene Oxide.

Page 4061 et seq. A preliminary analysis of the problem taken up in this paper unfortunately was attributed to Mc-Kenzie and Ritchie (Ber., 70B, 23 (1937)); to correct this error, the author wishes to point out that these workers made no statements on the stereochemistry of epoxide ring-opening reactions and they assigned a configuration to atrolactic acid in agreement with Freudenberg. Their assignment of a three configuration to "a"-1,2-diphenyl-1,2-propanediol was confirmed by the work reported in this paper.—James H. BREWSTER.

Philip S. Skell and Robert C. Woodworth. Structure of

Carbene, CH<sub>2</sub>.
Page 4496. Reference (6) as now printed is incomplete rage 4490. Reference (0) as now printed is incomplete and misleading; subsequent publications have led to the reassignment of the \$4050 group of emission bands to the C<sub>8</sub> molecule: A. Monfils and B. Rosen, Nature, 164, 712 (1949); A. E. Douglas, Astrophys. J., 114, 466 (1950); B. Rosen, Mém. soc. roy. sci. Liège, 13, 187 (1955); K. Clusius and A. E. Douglas, Can. J. Phys., 32, 319 (1954). To date no confirmed spectral data have been reported for CH2.-PHILIP S. SKELL.

C. B. Pollard and G. C. Mattson. The Addition of Saturated Heterocyclic Amines to Cinnamate Esters. Page 4089.

## MELTING POINTS OF THE ESTERS

## TABLE II

M.p., °C.

1-Piperidyl 4-Morpholinyl	175.5–176 195 –195.5 201 215 –216
Table III	
Ethyl n-Propyl n-Butyl n-Amyl n-Hexyl 2-Methylpropyl 1-Methylpropyl	M.p., °C. 190.5-191.5 195 -195.5 200.5 169-170 171.5-172.5 131-132 160-161 189.5-190 167-168 C. B. Pollard

G. D. Laubach, E. C. Schreiber, E. J. Agnello and K. J. Brunings. Corticosteroid Intermediates. IV. Synthesis of 11-Oxygenated Steroids from Ergosterol.

Page 4750. Col. 2: Compound XIX should be assigned the  $8\alpha,9\alpha$ -configuration on the basis of conformational analysis and rotation data which appear in a communication by Drs. P. Bladon (Manchester University) and J. Elks (Glaxo Laboratories) and their co-workers (J. Chem. Soc., 2921 (1953)).—E. J. AGNELLO.

T. Lloyd Fletcher and Hsi-lung Pan. N-Monoalkylation and Aryl Bromination of Certain Amines with Ethyl Bromide in Dimethyl Sulfoxide.

Page 4812. In col. 2, line 15, for "9-01" read "9-01"-T. LLOYD FLETCHER.

Book Review. By I. G. Aston.

Page 5455. Nuclear Magnetic Resonance. By Edward Raymond Andrew (printed erroneously as Ernest Robert Andrew).

John C. Sheehan and Gerald F. Holland. The Isomerism of Dithiolphthalates.

Page 5631. In col. 1, line 6, for "I" read "II."-JOHN C. SHEEHAN.

William G. Dauben and Pierre H. Payot. Radiation Induced Oxidation of Cholesterol.

Page 5659. In col. 2, the table, line 9 from the end, for "B,  $7\alpha$ -Hydroxycholesterol" read "B,  $7\beta$ -Hydroxycholesterol."—WILLIAM G. DAUBEN.

J. G. Pritchard and F. A. Long. Hydrolysis of Ethylene Oxide Derivatives in Deuterium Oxide-Water Mixtures.

Page 6010. In Fig. 2, the ordinate legend should read " $10^4k_{OH}$ -  $1.mole^{-1}sec.^{-1}$ ."—J. G. PRITCHARD.

Peter A. Tavormina and Margaret H. Gibbs. The Metabolism of  $\beta$ ,  $\delta$ -Dihydroxy- $\beta$ -methylvaleric Acid by Liver Homogenates.

Page 6210. The title line has erroneously " $\beta$ , $\gamma$ -Dihydroxy- $\beta$ -methylvaleric Acid," but the name is printed correctly in the text and in the 1956 Indexes.

## 1957, Vol. 79

Fausto Ramirez and Stephen Levy. Phosphinemethylenes. Triphenylphosphoniumcyclopentadienylide.

Page 67. In col. 2, footnote (6)(b) should read "1221 1955)."—F. RAMIREZ.

Louis A. Carpino. Oxidative Reactions of Hydrazines. II. Isophthalimides. New Protective Groups on Nitrogen.

Page 101. In col. 2, line 17, after the word "above" insert "using HBr instead of HCl."—Louis A. Carpino.

Robert L. Mann and D. O. Woolf. Hygromycin. III. Structure Studies.

Page 123. In formula XIX the 5-keto-6-deoxy-arabohexose should be linked to the phenolic hydroxyl in the 4 position (instead of 3).—R. L. MANN.

W. G. Frankenburg and A. A. Vaitekunas. The Chemistry of Tobacco Fermentation. I. Conversion of the Alkaloids. D. Identification of Cotinine in Fermented Leaves.

Page 151. In ref. (9), for "p. 901" read "p. 911."-W. G. FRANKENBURG.

Alfred Hassner, Norman H. Cromwell and Stanley J. Davis. The Chemistry of Derivatives of 2-Benzaltetralone. I. A Novel Rearrangement Leading to 2-Substituted-1naphthols.

Page 232. In col. 2, lines 32 and 33, the spectrum values should read, " $\lambda_{\rm max}$  261 and 299(sh)m $\mu$  ( $\epsilon$  12,500 and 2,400)."—Norman H. Cromwell.

Richard J. Mohrbacher and Norman H. Cromwell. Cyclopropyl Ketones. I. Synthesis and Spectra of 1-Aroyl-2-aryleyelopropanes.

Page 402. In column 1, line 2, for "4-biphenyllithium" read "biphenylyllithium." For the first formula, for " $C_0H_4CH-CH-COCl$ " read " $C_0H_4CH-CH-COCl$ ." read

Page 403. In Table I, for footnote, "• See Footnote h," ad, "• See footnote a."

Page 404. In Column 1, line 22, for "derivative" read "derivatives." Table II, column 4, entry line 2, for "14.4" read "14.1." In column 2, line 13 from bottom, for "phenylcyclopropane-carbonylcarboxylic," read "phenylcyclopropanecarboxylic."

Page 406. In column 2, line 30 for  $(I)^{26}$  read  $(I)^{26}$ .—Norman H. Cromwell.

E. Spinner. Intramolecular van der Waals-London Cohesions in Butadiene and Benzene.

Page 504. Formulas (I) and (II) should appear as

(II) 
$$CH_2 = CH - CH = CH_2$$
  
 $46,080 \text{ cm.}^{-1}$ 

Robert W. Holley. An Alanine-dependent, Ribonuclease-inhibited Conversion of AMP to ATP, and its Possible Relationship to Protein Synthesis.

Page 660. In Table I, footnote a, line 3, read "10  $\mu$ moles" for "5  $\mu$ moles" of magnesium chloride.

In col. 2, line 11, substitute "0.10 M MgCl<sub>2</sub>" for "0.05 M MgCl<sub>2</sub>."—ROBERT W. HOLLEY.

Philip L. Southwick and Jack R. Kirchner. A New Synthesis of Flavone Involving Cyclization via Displacement of Aromatic Chlorine.

Page 690. Formula IIa, Chart I, should show a positive  $\oplus$  rather than a negative charge on nitrogen.

Page 691. In col. 2, line 35, sentence 2 should read "The mixture was heated at 100° for ca. 1 hour, then extracted three times with 10-ml. portions of ether."—Philip L. Southwick.

William J. Chambers, Wallace R. Brasen and Charles R. Hauser. Stereochemical Course in the Alkylation of Phenylacetonitrile and Phenylacetic Acid with Optically Active  $\alpha$ -Phenylethyl Chloride.

Page 880. Structures I, II and III should appear as shown herewith, and thus the D and L notations in the text should be changed accordingly.

CHARLES R. HAUSER.

Philip S. Skell, Robert C. Woodworth and James H. McNamara. Configuration of Free-Radicals. Non-stereospecificity of *cis*- and *trans*-2-Butene-Sulfur Dioxide Copolymerizations.

Page 1256. In col. 1, line 6 above the figure, for "3.5" read "-9.0."—PHILIP S. SKELL.

John E. Dickens, Fred Basolo and H. M. Neumann. Mechanism of Racemization of Complex Ions. III. Effect of Added Ions upon the Rates of Dissociation of Tris-(1,10-phenanthroline)-iron(III) and Tris-(1,10-phenanthroline)-iron(III) and upon the Rate of Racemization of Tris-(1,10-phenanthroline)-iron(III).

Page 1289. In col. 1, line 15, after the word "between" insert "8.5 and 10.0 Å. Ion pair formation is not expected between."—FRED BASOLO.

Gardner W. Stacy, James Wm. Cleary and Melvin J. Gortatowski. Stobbe-type Condensation of Ketones (Cyclohexanone and Acetone) with Diethyl Oxalacetate.

Page 1451. In formula II the lower substituent should attach to the second carbon atom.

Page 1452. In formula X the right-hand end group should be  $C_{\delta}H_{\delta}.$ 

Page 1453. In col. 2, line 44, for "18.2 g." read "25.1 g."

Page 1454. In col. 2, line 2, for "(0.50 mole)" read

Page 1454. In col. 2, line 2, for "(0.50 mole)" read "(0.05 mole)."—Gardner W. Stacy.

Harold H. Zeiss and Frances R. Zwanzig. Chromate Esters. III. Mechanism of Oxidation of 2-Methylfenchol and 1-Methyl- $\alpha$ -fenchene.

Page 1735. In col. 1, line 2, after "II." insert "However, in contrast with these latter reactions, the rate of oxidation of III-IV,  $k_2^{25} = 1.03 \times 10^{-4}$  l./mole-sec., is second order, and the only hexavalent chromium species observable spectroscopically is chromic anhydride (347 m $\mu$ )."—HAROLD H.

Frederic Holtzberg, Arnold Reisman, Margaret Berry and Melvin Berkenblit. Chemistry of the Group VB Pentoxides. The Polymorphism of Nb<sub>2</sub>O<sub>5</sub>.

Page 2039. In the Abstract, line 6, for " $b=2.816 \text{\AA}$ ." read "b=3.816 Å." In footnote (12) for "high purity of Nb<sub>2</sub>O<sub>6</sub>" read "high purity Nb<sub>2</sub>O<sub>6</sub>."

Page 2040. In Fig. 2, in the abscissa legend, for "10-2" read "10-3."—F. HOLTZBERG.

R. L. Ward and S. I. Weissman. Electron Spin Resonance Study of the Electron Exchange between Naphthalene Negative Ion and Naphthalene.

Page 2090. In col. 2, beginning at line 33, the rest of the paragraph should read "achieve in 36 different ways. Thus 255 of the 256 electron jumps originating in one of the extreme lines terminate in a frequency different from the original one, while 220 of 256 jumps originating in the central line terminate in a different frequency. Use of the central line may underestimate the exchange rate by 14%."—S. I. Weissman

Robert C. Woodworth and Philip S. Skell. The Reactions of Bivalent Carbon Species.

Page 2543. Footnote (15) should read at the end "C.A., 49, 883 (1955).—PHILIP S. SKELL.

Henry Gilman and Richard D. Gorsich. Some Reactions of o-Halophenyllithium Compounds.

Page 2625. In col. 1, footnote (2), for (1950) read (1956).

Page 2627. In col. 1, in the reaction diagram, the  $(C_6H_8)_3$ -Si-group should be attached at the *ortho* instead of the *meta* position.—Henry Gilman.

Donald Rosenthal and T. Ivan Taylor. A Study of the Mechanism and Kinetics of the Thioacetamide Hydrolysis Reaction.

Page 2685. Under Fig. 2 read "A, intermediate extracted with ether from a 0.001 M thioacetamide solution 1.3 M in HCl, re-extracted with 0.2 M NaOH and diluted to 0.01 M NaOH; B, 0.001 M thioacetic acid in 1.3 M HCl extracted with ether, re-extracted with 0.2 M NaOH and diluted to 0.04 M NaOH; I, etc."

Page 2687. In col. 2, line 12, for "-1.76" read "+1.76."

Page 2688. In lines 6–7, read "log  $f_{\rm T}f_{\rm H_2O}$ +/ $f_{\rm M}$ \* = BC. In Tables I, III and page 2689, Table V, the heading of columns 2 to 5, read " $k \times 10^5$ " rather than " $k \times 10^{-5}$ ."—Donald Rosenthal.

W. W. Bromer, A. Staub, E. R. Diller, H. L. Bird, L. G. Sinn and Otto K. Behrens. The Amino Acid Sequence of Glucagon. I. Amino Acid Composition and Terminal Amino Acid Analyses.

Page 2797. Add to the legend of Fig. 2: "The chromatographic lanes, in order from top to bottom, contain DNP-arginine, ether extract of DNP-glucagon hydrolysate, aqueous phase of DNP-glucagon hydrolysate, ε-DNP-lysine, and di-DNP-histidine.—William W. Bromer.

Charles C. Price and Robert J. Convery. The Free Radical Phenylation of 2,4-Dinitrotritiobenzene.

Page 2941 ff. The conclusion that there is no isotope effect in the free radical phenylation of 4-tritio-m-dinitrobenzene regrettably is in error. Because of the low conversion, no conclusions concerning an isotope effect can be made (see L. Melander, Arkiv for Kemi, 2, 248 (1950)).—CHARLES C. PRICE

Britton Chance and Gunnar Hollunger. Sites of Energy Conservation in Oxidative Phosphorylation.