

## ADDITIONS AND CORRECTIONS

1949, Vol. 71

**Roger Adams and Anthony W. Schrecker.** Condensation Reactions of N-Substituted Pyridones.

Page 1191. In col. 1, line 34, for " $C_9H_{13}O_3N$ " read " $C_{10}H_{13}O_3N$ ." The calculated values are correct as printed.—ANTHONY W. SCHRECKER.

1950, Vol. 72

**Martin G. Ettlinger.** Hydroxynaphthoquinones. I. Color and Acidity.

Page 3088. The abscissa "600" in Fig. 3 should be at the right-hand margin.

Page 3089. In Formula VIII, for the right-hand "CH" read " $CH_3$ ."

**Martin G. Ettlinger.** Hydroxynaphthoquinones. II. Cyclization and the Basicity and Interconversion of *Ortho* and *Para* Quinones.

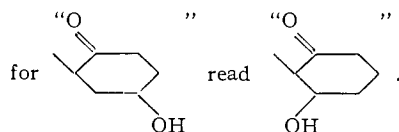
Page 3091. In col. 1, lines 18–19, for "is one eight hundredth" read "is only one eight-hundredth."

Page 3094. In Table I, the uppermost three entries in the second column, of  $H_0$ -values, should be in order downwards  $-7.15$ ,  $-6.6$ ,  $-6.15$ .

Page 3095. In col. 1, the second expression for  $r$ , for " $\frac{h_0}{K\beta}$ " read " $\frac{K\beta}{h_0}$ ".

**Martin G. Ettlinger.** Hydroxynaphthoquinones. IV. Photochemical  $\beta$ -Oxidation of Side Chains.

Page 3667. In the third formula of reaction scheme (3),



**Martin G. Ettlinger.** Infrared Spectra and Tautomerism of 2-Thiooxazolidone and Congeners.

Pages 4700–4701. Raman spectra of the methylthio-ureas and tetramethylisothiourea treated in the text were reported and interpreted to establish the thione structure of thiourea in the valuable work of K. W. F. Kohlraush and J. Wagner (*Z. physik. Chem.*, **B45**, 229 (1940)).—M. G. ETLINGER.

**Martin G. Ettlinger.** Synthesis of the Natural Anti-thyroid Factor *l*-5-Vinyl-2-thiooxazolidone.

Page 4792. In footnote (5), for "11" read "9."

Page 4793. In Formulas V and VI, for " $C_8H_5$ " read " $C_6H_5$ ."

Page 4794. In footnote (28), instead of "25° higher than previously reported" read "near the value (193°) reported by H. J. Lucas and W. Baumgarten (*ibid.*, **63**, 1653 (1941))."

Page 4796. In col. 2, lines 4–5, for "(51.6 mg./2.51 cc., 1 dm.,  $-1.45^\circ$ )" read "(52.1 mg./2.51 cc., 1 dm.,  $-1.51^\circ$ )."—M. G. ETLINGER.

1951, Vol. 73

**D. W. Scott, H. L. Finke, J. P. McCullough, M. E. Gross, K. D. Williamson, Guy Waddington and H. M. Huffman.** Thermodynamic Properties and Rotational Isomerism of 2-Thiabutane.

Page 262. In col. 2, fifth line from bottom read

$$"B = -61 - 68.13 e^{900/T} \text{ cc./mole} \quad (4)"$$

and third line from bottom, *et seq.*, read "The values of the

second virial coefficient obtained from the experimental data for 301.66, 319.76 and 339.81°K.,  $-1386$ ,  $-1180$  and  $-1047$  cc./mole, may be compared with the values calculated by means of eq. (4),  $-1404$ ,  $-1197$  and  $-1034$  cc./mole, respectively."—GUY WADDINGTON.

1952, Vol. 74

**John D. Roberts, A. J. Streitwieser, Jr., and C. M. Regan.** Small-Ring Compounds. X. Molecular Orbital Calculations of Properties of Some Small-Ring Hydrocarbons and Free Radicals.

Page 4581. At the suggestion of Prof. W. Moffitt, the delocalization energy of compound XI (Fig. 1) has been recalculated to give the correct value  $3.80\beta$ .—JOHN D. ROBERTS.

1953, Vol. 75

**Stanley J. Cristol and Delbert D. Fix.** Mechanisms of Elimination Reactions. X. Deuterium Exchange in Base-Promoted Dehydrochlorination of  $\beta$ -Benzene Hexachloride.

Page 2648. In col. 1, line 27, for "ethanol-*d*" read "ethanol-*h*."—STANLEY J. CRISTOL.

**M. L. Wolfrom and W. Brock Neely.** The Uronic Acid Component of Chondroitinsulfuric Acid.

Page 2778. In line 2 above "Experimental," for "hexuronic" read "hexaric."—M. L. WOLFROM.

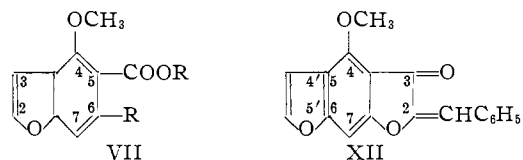
**Louis F. Fieser and Wei-Yuan Huang.** Configuration of Steroid Bromoketones: a Correction.

Page 4837. In col. 2, line 22 from the end, for " $\alpha_D - 82^\circ$ " read " $\alpha_D - 8.2^\circ$ ."—LOUIS F. FIESER.

1953, Vol. 75

**Alexander Schönberg, Nasry Badran and Nicolas A. Starkowsky.** Furo-chromones and -coumarins. VII. Degradation of Visnagin, Khellin and Related Substances; Experiments with Chromic Acid and Hydrogen Peroxide; and a Synthesis of Eugenitin.

Page 4993. Formulas VII and XII should be:



Page 4994. In col. 1, line 35, for "hydrochloric acid and 12.5 cc. of water," read "hydrochloric acid (10 cc.) and 12.5 cc. of water." Line 12 from the bottom, for "6-Formyl-7-hydroxy-5-methoxy-8-nitrochromone (Vd)," read "6-Formyl-7-hydroxy-5-methoxy-2-methyl-8-nitrochromone (Vb)."

Page 4995. In col. 1, line 1, for "VIIa" read "VIIa." In col. 2, line 14, for "hydrogen solution" read "hydrogen peroxide solution."—NICOLAS A. STARKOWSKY.

**John G. Burr, Jr.** The Rates and Migration Ratios Observed in the Unimolecular Reactions of 2-Phenyl-2-(*p*-tolyl)-ethyl Tosylate and Related Compounds.

Page 5009. In calculating the monomolecular rate constant for 2-phenyl-2-(*p*-tolyl)-ethyl tosylate, a factor of 2.303 was inadvertently omitted. The correct value for this rate constant has already been included in a subsequent publication (J. G. Burr, Jr., *Chemistry and Industry*, 850 (1954)) but several changes are required in this paper. In addition to this incorrect calculation, it has been brought to my attention that Table II does not contain sufficient information



to enable independent calculation of the rate constants. The following corrections are required.

TABLE I

	$k_1$ sec. <sup>-1</sup>
2-Phenyl-2-( <i>p</i> -tolyl)-ethyl tosylate	13.1 (instead of 5.68) × 10 <sup>-5</sup>

TABLE II

Solvolysis of 0.0513 *M* 2-phenyl-2-(*p*-tolyl)-ethyl tosylate at 99.50°

Time, sec.	Ml. of 0.0510 <i>M</i> KOAc in HOAc	Net ml.	$k \times 10^5$
0	0.345	...	..
1800	1.239	0.894	13.1
3600	1.900	1.555	12.6
5400	2.462	2.117	12.7
7200	2.910	2.565	12.8
10920	3.600	3.255	13.2
15250	4.060	3.715	13.4
Inf.	4.615	4.270	..

Av. 13.0

Solvolysis of 0.0526 *M* 2,2-di-(*p*-tolyl)-ethyl tosylate at 99.22°

Time, sec.	Ml. of 0.0510 KOAc in HOAc	Net ml.	$k \times 10^5$
0	1.541	...	..
960	2.410	0.869	30.7
1920	3.050	1.509	30.5
2940	3.520	1.979	29.5
5460	4.300	2.759	30.4
Inf.	4.950	3.409	..

Av. 30.2

Page 5010:

TABLE IV

Apparent relative acetolysis rate	1.00	3.75	8.32
% <i>p</i> -Tolyl migration		71.2	
Relative acetolysis rate per aryl group	1.00	5.34	2.16 8.32

B. P. Block and G. H. McIntyre. The Calculation of Formation Constants for Systems Involving Polydentate Ligands.

Page 5667. In Table II, text line 3 should read:

$$k = (\bar{n}'J_1 - \bar{n}J_1')/(\bar{n}'J_2' - \bar{n}J_2)$$

In line 6, omit the ' after the final *M*. After line 8, insert

$$k = (L_3^*M_{13}^* - L_3^*M_{13}^*)/(L_3^*M_{23}^* - L_3^*M_{23}^*)$$

In line 11 insert a ' after the first *L*<sub>1</sub>, that is, read "=(*L*<sub>1</sub>'*L*<sub>3</sub><sup>\*</sup> - ..."—B. P. BLOCK.

J. G. Aston, J. L. Wood and T. P. Zolki. The Thermodynamic Properties and Configuration of Unsymmetrical Dimethylhydrazine.

Pages 6203-6204. Corrected entries are given for Tables VI and VII:

TABLE VI

	Cal. deg. <sup>-1</sup> mole <sup>-1</sup>
0-15°K. Debye function (six degrees of freedom)	0.23
15-215.951°K.	23.75
Entropy of liquid at 298.16°K.	47.32
Entropy real gas at 298.16°K., 156.75 mm.	75.38
Entropy of ideal gas 298.16°K., 156.75 mm.	75.41
Entropy ideal gas at 298.16°K., and 760 mm.	72.28

TABLE VII

	<i>trans</i> form, cal. deg. <sup>-1</sup> mole <sup>-1</sup>	<i>gauche</i> form, cal. deg. <sup>-1</sup> mole <sup>-1</sup>
S int. rot. Me ( <i>V</i> = 3700)	3.64	3.64
S int. rot. NH <sub>2</sub> ( <i>V</i> = 3000)	1.61	1.61
Sum	70.97	72.57
S int. rot. NH <sub>2</sub> ( <i>V</i> = 3700)	1.34	1.34
Sum	70.70	72.30
Observed	72.28	72.28

Norman H. Cromwell and Richard J. Mohrbacher. Ethylenimine Ketones. X. The Stereoisomerism of 1-Cyclohexyl-2-methyl-3-(*p*-phenylbenzoyl)-ethylenimine.

Page 6254. In Table I, line 2, in col. 1 the formula should read CH<sub>3</sub>CH=CHCO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>-C<sub>6</sub>H<sub>5</sub> = *p*, and col. 3, for "277" read "287." This correction necessitates the deletion of the last sentence of the first paragraph beginning with "A comparison of the ultraviolet . . . ." and closing with, ". . . . carbon to carbon double bond (11 lines)."—NORMAN H. CROMWELL.

1954, Vol. 76

Martin G. Ettliger. The Enolization of 9-Phenyl-2,3-benzofluorene-1,4-quinone.

Page 2773. In col. 1, sixth line below the formulas, delete "only."

Page 2774. In col. 1, line 11, for "larger" read "less." In col. 1, line 41, for "one-fifth" read "a factor of five."

Roger Adams and Seiji Miyano. Condensation Reactions of Picoline 1-Oxides.

Page 3168. Omit fourth sentence in abstract starting "Peracetic acid reacts, etc." Fifth sentence should start "The ester of 6-benzyloxy-2-pyridylacetic acid 1-oxide and the 6-benzyloxy-2-methylpyridine 1-oxide, etc."

Page 3170. In col. 1, under preparation of "2-Pyridyl-acetonitrile 1-Oxide (III)."—Change "1.5 g. of ethyl 2-pyridylpyruvate 1-oxide" to "1.5 g. of ethyl 2-pyridyl-( $\alpha$ -oximino)-propionate 1-oxide" and "Calcd. for C<sub>7</sub>H<sub>6</sub>N<sub>2</sub>O" to "Calcd. for C<sub>7</sub>H<sub>6</sub>N<sub>2</sub>O."

In col. 2, line 3 from end, the title should be "Ethyl 6-Benzyloxy-2-pyridyl-( $\alpha$ -oximino)-propionate 1-Oxide."

Page 3171. In col. 2, line 5 from end, read "calcd. for C<sub>16</sub>H<sub>17</sub>NO<sub>3</sub>: C, 70.83; H, 6.32."—ROGER ADAMS.

N. J. Leonard and M. Ōki. Cyclic Aminoacyloins. II. F-Strain Limitation of Transannular Interaction between N and C=O.

Page 3464. Between lines 14 and 15 in col. 2 add "bonding takes place across the eleven-membered."—N. J. LEONARD.

George K. Estok and Charles H. Stembridge. Electric Moments from Extrapolated Mixed Solvent Data.

Page 4317. In col. 1, line 19, for " $\Delta d\epsilon/w_2$ " read " $\Delta\epsilon/w_2$ "; line 22, for " $\Delta/w_{2\alpha}$ " read " $\Delta d/w_{2\alpha}$ ."—GEORGE K. ESTOK.

David Gould, Elliot L. Shapiro and E. B. Hershberg. Synthetic Steroidal Cardioactive Amines.

Page 5567. In col. 1, last line, for "contra-" read "anti-." In col. 2, line 1, insert "in steroids" between "found" and "only." In line 2, cancel "steroidal." In line 15, for "contraaccelerator" read "antiaccelerator." In line 18, for "chromotropic" read "chronotropic."—E. B. HERSHBERG.

Samuel Weiner. Solubilities of Some 2,3,5-Triphenyl-tetrazolium Salts.

Page 5814. In the table, col. 2, lines 2, 3, 4 and 5, read "0.037, 0.0273, 0.0626, 0.307" instead of "1.037, 1.0273, 1.626, 1.307."—SAMUEL WEINER.



**Ernest F. Pratt and Everett J. Frazza.** Disproportionative Condensations. II. The N-Alkylation of Anilines with Primary Alcohols.

Page 6174. In line 1 of the abstract and in col. 1, line 6, for "nickel?" read "nickel<sup>2+</sup>." Then add footnote "(2a) Universal Oil Products Company, 310 South Michigan Ave., Chicago 4, Ill."

Page 6176. In col. 2, line 13, for "benzalaniline" read "benzylaniline."

Reference to the pertinent work of J. U. Nef, *Ann.*, **318**, 137 (1901), of which the authors have only recently learned, should have been included.—ERNEST F. PRATT.

**C. G. Overberger, Warren F. Hale, M. B. Berenbaum and A. B. Finestone.** Azo-bis Nitriles. XI. Decomposition of Azo Compounds. Steric Factors.

Page 6187. In Discussion of Results, col. 2, below table, in lines 4, 6, 8 and 14, for (10<sup>4</sup> read 10<sup>-4</sup>).—C. G. OVERBERGER.

1955, Vol. 77

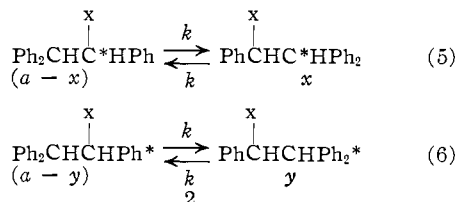
**C. S. Marvel and E. E. Ryder, Jr.** An Attempted Synthesis of 3,4-Dimethylenethiophane.

Page 66. In col. 1, line 5 of text, for "cyclohexane" read "cyclohexene."

Page 67. In col. 1, section on 3,4-Bis-(hydroxymethyl)-thiophane, in line 4 after "hydride" insert "in 1300 ml. of dry ether."—C. S. MARVEL.

**Clair J. Collins and William A. Bonner.** Molecular Rearrangements. III. The Mechanism of the Wagner-Meerwein Rearrangement in the 1,2,2-Triphenylethyl System.

Page 95. The derivation of equation (11) from equations (5) and (6) is anomalous. We wish to make the following correction, beginning with the third sentence (line 8 of column 1) and extending to, but not including, the sentence beginning on line 20: "Let us consider the implications of the possibility that the reactions of chart II proceed through classical open ions."



Given in equations 5 and 6 are two processes representing chain and ring labeled equilibration in the triphenylethyl system. The values  $x$  and  $y$  are the concentrations of rearranged chain and ring labeled isomers, respectively,  $a$  being the original concentration of each of the two reactants. We make the assumption that in these two processes, each phenyl group on the tertiary carbon atom has an equal chance for migration, as would be the case if these processes proceed through open ions."

For the word "cations" in lines 23 and 29 (column 1) substitute the word "products."

Page 96. Delete sentences 2 and 3 in Paragraph (2) (4 lines).—CLAIR J. COLLINS.

**C. David Gutsche and Herbert E. Johnson.** Ring Enlargements. III. Ring Enlargement of Cyclohexanone with Ethyl N-Nitroso-N-benzylcarbamates Carrying Methyl and Methoxyl Substituents on the Phenyl Nucleus.

Page 109. The numbers in the three columns on the right hand side of Table I are multiply juxtaposed, line for line. The correct table should read:

TABLE I  
PRODUCTS FROM ETHYL N-NITROSO-N-BENZYL-CARBAMATES,  
METHANOL AND CYCLOHEXANONE

Starting cmpd. (I)	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	N <sub>2</sub> evolved in 2nd phase	2- Aryl- cyclo- hepta- none (II)	Meth- ylaryl- methyl ether (III)
A	H	H	H	H	38	41	27
B	CH <sub>3</sub> O	H	H	H	16	20	50
C	H	CH <sub>3</sub> O	H	H	41	41	32
D	H	H	CH <sub>3</sub> O	H	9	7	64
E	CH <sub>3</sub> O	CH <sub>3</sub> O	CH <sub>3</sub> O	H	1-10	0	72
F	CH <sub>3</sub>	H	H	H	28	29	37
G	H	H	CH <sub>3</sub>	H	21	26	45
H	CH <sub>3</sub>	H	CH <sub>3</sub>	CH <sub>3</sub>	0	0	62

C. DAVID GUTSCHE.

**James D. Mold.** Creatine Ethyl Ether.

Page 178. In the title, "Ether" should read "Ester." (Correct title appears in the Annual Index.)

**W. F. Sager and Alan Duckworth.** Oxidative Ring Enlargement of Cyclic Ketones by Peroxytrifluoroacetic Acid.

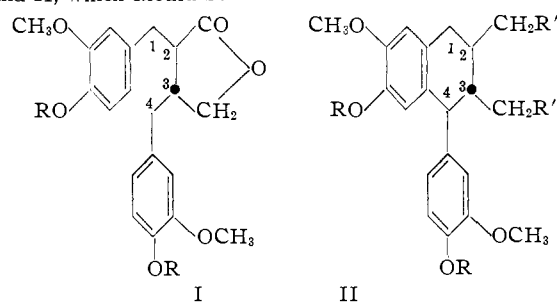
Page 189. In Table I, col. 1, "Cyclopentanone" and "Cyclohexanone" should be exchanged in position, that is, lines 1 and 2 contain data for cyclohexanone and 3 and 4 data for cyclopentanone.—ALAN DUCKWORTH.

**C. G. Overberger and D. Tanner.** Ionic Polymerization. A Convenient Synthesis of  $\alpha$ - and  $\beta$ -Alkylstyrenes. The Effect of an  $\alpha$ -Alkyl Group on the Ultraviolet Absorption Spectra.

Page 373. In col. 1, line 13, for "36.4 g." read "3.64 g."—C. G. OVERBERGER.

**Anthony W. Schrecker and Jonathan L. Hartwell.** Application of Tosylate Reductions and Molecular Rotations to the Stereochemistry of Lignans.

Page 434. There are imperfect bond lines in formulas I and II, which should be



**Nelson J. Leonard and David M. Locke.** Unsaturated Amines. II. Determination of the Proximity of Nitrogen to a Double Bond by Ultraviolet Absorption Spectra.

Page 438, Table I. Formula XV should be



**Nelson J. Leonard, Allan S. Hay, Richard W. Fulmer and Virgil W. Gash.** Unsaturated Amines. III. Introduction of  $\alpha, \beta$ -Unsaturations by Means of Mercuric Acetate:  $\Delta^{1(10)}$ -Dehydroquinolizidine.

Page 441, Table I. "10-" should be on the same line with "259.5-261.5."



Stanley J. Cristol, Werner Barasch and Charles H. Tieman. Mechanisms of Elimination Reactions. XIII. 1,4-Conjugate Eliminations. I. Some *meso*-Dihydroanthracene Derivatives.

Page 589. In col. 2, lines 36-37, should read "XII, maxima:  $\lambda$  342,  $\epsilon$  5780;  $\lambda$  255,  $\epsilon$  39900. Minimum:  $\lambda$  290,  $\epsilon$  1580.—STANLEY J. CRISTOL.

S. Morris Kupchan. Schoenocaulon Alkaloids. IV. The Isomeric Cevagenine Orthoacetate.

Page 687. In the structural formula for Cevagenine D-orthoacetate the dotted bonds from group X should lead to carbons 12, 14 and 17 instead of to 12, 14 and 16, as printed.

Bert L. Vallee and Frederic L. Hoch. Yeast Alcohol Dehydrogenase, a Zinc Metalloenzyme.

Page 822. In col. 1, lines 5 and 6, the sentence contains a misstatement which was corrected on page 1393.

J. H. Boyer and J. Hamer. The Acid-catalyzed Reaction of Alkyl Azides upon Carbonyl Compounds.

Page 952. In col. 2, line 12 of experimental, for "butyl chloride" read "butyl bromide." In line 25, for " $n^{30D}$  1.4441" read " $n^{30D}$  1.4541."—J. H. BOYER.

Sidney W. Fox, Joseph E. Johnson and Mavis Middlebrook. Pyrosynthesis of Aspartic Acid and Alanine from Citric Acid Cycle Intermediates.

Page 1049. The cut block of Fig. 2 should be inverted ( $180^\circ$ ).

F. G. Bordwell and R. J. Kern. Elimination Reactions in Cyclic Systems. I. *cis* Eliminations in the Cyclohexane and Cyclopentane Series.

Page 1142. In col. 2, line 5 (equation), for " $kT/h$ " read " $\ln kT/h$ ."—F. G. BORDWELL.

Lamar Field and John R. Holsten. Preparation of 4-Chlorobutyl *p*-Toluenesulfonate from Tetrahydrofuran and *p*-Toluenesulfonyl Chloride.

Page 1287. In col. 1, line 11, for " $(n^{20D})$ " read " $(n^{20D})$  1.5164."—LAMAR FIELD.

Arthur F. Butler and Ernest Grunwald. Salt Effects on Non-electrolytes in Partially Aqueous Mixed Solvents.

Page 1706. In Table I, line 2, col. 1, insert "Phthalic acid." In col. 4, line 5, for "0.011" read "0.11," and in line 6, for "0.017" read "0.17."—ARTHUR F. BUTLER.

Martin G. Ettlinger and Joe E. Hodgkins. The Mustard Oil of Rape Seed, Allylcarbonyl Isothiocyanate, and Synthetic Isomers.

Page 1832. To footnote (31) add: "H. Schmid and P. Karrer (*Helv. Chim. Acta*, 31, 1497 (1948)) obtained N,N'-diphenylthiourea on attempted vacuum distillation of crude N-4-methylthiobutyl-N'-phenylthiourea."

Page 1835. In col. 1, line 13, for "11.53" read "10.53."—M. G. ETTLINGER.

Richard M. Noyes. Kinetics of Competitive Processes when Reactive Fragments are Produced in Pairs.

Page 2044. In col. 2, line 29, for " $1 - e^{-k_2'[S]}$ " read " $1 - e^{-2k_2'[S]}$ ."—RICHARD M. NOYES.

A. B. F. Duncan. The Electronic Structure of Hydrogen.

Page 2107-8. Dr. C. C. J. Roothaan has pointed out an error in the calculated energy of the normal  $^2P$  state of the F atom of about 0.04 atomic unit. The corrected value is -98.9304 a.u. This error was traced to small errors in six of the mononuclear two-electron integrals, and produced an almost equal error in the SCF molecular energy of HF. As a result, the

calculated value of the dissociation energy is not changed significantly (0.2398 to 0.2445 a.u.). The revised SCF molecular orbital functions are, with former values of coefficients shown in parentheses:

$$\phi_1 = 0.3873h - 0.03415f + 0.7381s + 0.1049z$$

(0.3850) (0.03503) (0.7400) (0.1048)

$$\phi_2 = 0.1728h - 0.006077f - 0.3590s + 0.8984z$$

(0.1743) (0.005702) (0.3588) (0.8983)

$$\phi_3 = -0.004021h + 1.000097f + 0.01702s + 0.002670z$$

(0.004916) (1.00012) (0.01877) (0.002946)

$$\phi_6 = -1.1320h + 0.05371f + 0.8077s + 0.5592z$$

(1.1326) (0.05271) (0.8060) (0.5598)

The "approximate" wave functions (omitting  $1s_F$ ) were not recalculated. The calculated dipole moment is changed from 2.6473 to 2.6400. None of the discussion and conclusions is changed by the small numerical corrections.—A. B. F. DUNCAN.

Richard Baltzly, Walter S. Ide and Arthur P. Phillips. The Mechanism of the Fries Reaction.

Page 2523. In col. 2, line 19, for "latter" read "former."

William C. Schneider. Phenylfumarionitrile and Phenylmaleonitrile: Assignment of Configurations.

Page 2796. Just prior to the appearance of this paper W. F. Beech and H. A. Piggott [*J. Chem. Soc.*, 523-529 (1955)] published electric moment values: phenylfumarionitrile,  $\mu = 1.9D$ ; phenylmaleonitrile,  $\mu = 6.1D$ . Our values did not agree with these. Personal communication with Dr. Piggott has uncovered the fact that an error in transcribing data had caused an arithmetical error in our results. Accordingly, Table II in our paper should read.

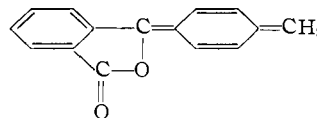
TABLE II

Compd.	$\alpha$	$\beta$	$\infty p_T$	Mol. wt.	$\infty p_T$	$P_D$	$P_0$	$\mu \times 10^{18}$
I	24.90	0.2077	5.052	154.2	779.0	39.2	739.8	6.07
II	2.622	.1917	0.7635	154.2	117.7	39.2	68.5	1.85

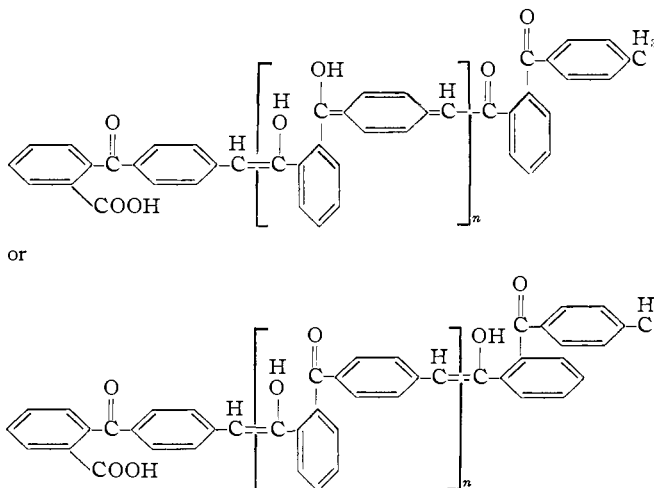
The agreement is now satisfactory. Also, in equation (1), the denominator of the first term should read  $(\epsilon_0 + 2)d_0$ .—W. C. SCHNEIDER.

Sidney D. Ross and Meyer Schwarz. The Polymerization of *o*-*p*-Toluybenzoic Acid.

Page 3020. In col. 2, formula VIII should read:



Page 3022. Structure XVII should read:



SIDNEY D. ROSS.






Walter J. Gensler and A. P. Mahadevan. Preparation and Structure of Tridecadiyne-5,8.

Page 3078. In the legend of Fig. 1, the second sentence should read: "The curve from 6-10  $\mu$  refers to a solution of 100 mg. of tridecadiyne-5,8 plus 1 ml. of carbon tetrachloride vs. carbon tetrachloride; the other parts of the curve were obtained with neat tridecadiyne-5,8 vs. empty cell."—WALTER J. GENSLER.

Koji Nakanishi, Hiroshi Kakisawa and Yoshimasa Hirata. Structure of Pristimerin and Celastrol.

Page 3169. In col. 1, the formula I should show ring D

as a six-membered ring  rather than a 5-membered ring



J. G. Aston and F. L. Gittler. The Free Energy and Entropy of Dissociation of Methyl Ammonium Chloride from 276 to 313°K. The Barrier Hindering Internal Rotation.

Page 3175. In col. 1, line 16 from the end should read

" $H_2(g)$ ,  $CH_3NH_2(g)$ ,  $CH_3NH_2Cl(s)$ ,  $AgCl(s)Ag(s)$ ."

Page 3176. In Table I column 5 heading should read " $(1/K) \times 10^{-15} (P_{HCl} P_{CH_3NH_2})^{-1}$ ." Note  $a$  should read " $E^0 - E = RTF^{-1} \ln (P_{HCl}/P_{H_2}^{1/2})$ ."

Page 3177. In col. 1, line before equation (2), delete "I." Equation 2 should read

$$"v = (n/2\pi) \sqrt{(V_0/2I_{red})}."—J. G. ASTON.$$

John C. Godfrey, D. S. Tarbell and V. Boekelheide. The Structure of  $\alpha$ -Erythroidine.

Page 3343. In Chart I, formula V should have to the left of the large brace "1—C=C—" instead of "2—C=C—"—V. BOEKELHEIDE.

Allan P. Gray, Ernest E. Spinner, Dorothy C. Schlieper and Chester J. Cavallito. Bis-ammonium Salts. Unsymmetrical Derivatives of Some  $\beta$ -Carbolines.

Page 3534. Footnote (4) should have page "3648" instead of "3536."

Allan P. Gray, Wesley L. Archer, Dorothy C. Schlieper, Ernest E. Spinner and Chester J. Cavallito. Bis-ammonium Salts. Unsymmetrical Derivatives of Some Isoquinolines and Related Heterocyclic Bases.

Page 3537. Footnote (4) should have page "3648" instead of "3533."

Ernest L. Eliel and Conrad Pillar. The Conformation of a Six-membered Ring *cis*-1,2 Fused to a Five-membered Ring.

Page 3601. In col. 1, last line, for "VIII and IX" read "III and IV."

Page 3603. In col. 2, Table IV, 2nd column, 7th row for "0.0135" read "0.0125."—ERNEST L. ELIEL.

M. Hellmann, A. J. Bilbo and W. J. Pummer. Synthesis and Properties of Fluorinated Polyphenyls.

Page 3651. In col. 1, at the end of the text, add National Bureau of Standards, Washington 25, D. C.—MAX HELLMANN.

Darl H. McDaniel and Herbert C. Brown. A Quantitative Approach to the Ortho Effects of Halogen Substituents in Aromatic Systems.

Page 3761. In Table VIII, line 2, for "3.32" read "3.38" as the  $pK_a$  of 3-Fluoropyridine.

Page 3762. In Table IX, line 2 from the end, for "−0.87" read "−1.11" and for "1.19" read "1.51."—DARL H. MCDANIEL.

Gordon N. Walker. Synthesis of 5,6-Dimethoxyindoles and 5,6-Dimethoxyoxindoles. A New Synthesis of Indoles.

Page 3845. Chart 1. In place of Va, b, c, insert: Va,  $R_1 = H$ ,  $R_2 = COCH_3$ ; b,  $R_1 = R_2 = H$ ; c,  $R_1 = 3,4$ -dimethoxyphenyl,  $R_2 = H$ .—GORDON N. WALKER.

Samuel W. Tinsley. The Preparation of 3-Bromoquinoline Derivatives.

Page 4176. In Table I, cancel ref.  $d$  (line 5 of table), and also footnote  $d$  in its entirety (6 lines).—S. W. TINSLEY.

William D. Emmons and Jeremiah P. Freeman. Alkaline Nitration I. The Nitration of Amines with Cyanohydrin Nitrates.

Page 4389. In col. 2, line 2 of the experimental part, the solution of fuming nitric acid in acetic anhydride was prepared by adding the acid to the anhydride at 0° with stirring. The cyanohydrin was then added at 0° and the mixture was allowed to warm to room temperature. Mixing of nitric acid and acetic anhydride at temperatures much above 0° can lead to serious accidents.—JEREMIAH P. FREEMAN.

J. A. Hogg, F. H. Lincoln, A. H. Nathan, A. R. Hanze, (B. J. Magerlein), W. P. Schneider, P. F. Beal and J. Korman. The Adrenal Hormones and Related Compounds. II. Synthesis of 1-Dehydro Analogs.

Page 4439. The list of authors at the end should include B. J. MAGERLEIN, a major contributor to the work.

Leonard S. Levitt and Edmund R. Malinowski. Mechanism of Organic Oxidation in Aqueous Solution. I. Kinetics of the Persulfate Oxidation of Isopropyl Alcohol.

Page 4519. In col. 1, eqn. (9), insert " $H^+$  +" between the  $\xrightarrow{k_3}$  and (. Col. 2, line 11, for " $k_{-1}$ " read " $k_1$ ."

Page 4520. In col. 1, line 15 from the end, for " $Cr^+O_2H$ " read " $Cr^+O_2H$ ."—LEONARD S. LEVITT AND EDMUND R. MALINOWSKI.

P. R. Srinivasan, M. Katagiri and David B. Sprinson. The Enzymatic Synthesis of Shikimic Acid from D-Erythrose-4-phosphate and Phosphoenolpyruvate.

Page 4944. In col. 1, Table I, line 3 of heading, for "ultrasonic" read "sonic." In text line 9 from the end, insert<sup>6</sup> following "added."—

Melville L. Wolfrom and Edward Mack, Jr. William Lloyd Evans.

Page 4953. In col. 1, delete the lower formula.—M. L. WOLFROM.

S. J. Rhoads and R. L. Crecelius. The *para*-Claisen Rearrangement. III. Kinetics of the Rearrangement of Some  $\gamma$ -Substituted Allyl Ethers of Methyl *o*-Cresotinate.

Page 5059. In footnote (15) for page "5060" read "5183."—S. J. RHOADS.

S. J. Rhoads and R. L. Crecelius. The *para*-Claisen Rearrangement. IV. Demonstration of Intramolecularity.

Page 5062. Throughout the section entitled "Rate Measurements," and in Table I, for "IV" read "II" and for "VI" read "VIII."—S. J. RHOADS.

Leonidas Zervas and Panayotis G. Katsoyannis. N-Phosphoramino Acids and Peptides.

Page 5352. In col. 1, line 21, for "preceding" read "following."

Glenn S. Skinner and H. C. Vogt. Benzoylcyanamide from Ethyl Benzoylthioncarbamate.

Page 5441. In col. 1, line 47, for "cyanide" read "cyanamide."—GLENN S. SKINNER.

Joseph H. Schwartz and Monroe E. Wall. Isolation of the Sterols of the White Potato.

Page 5442. The first author's name is incorrectly printed as "JOSEPH J. SCHWARTZ."