# ADDITIONS AND CORRECTIONS

1950, VOL. 72

**J. C. Cavagnol and Gordon Wilson, Jr.** 1,2-Diamines. II. Thermodynamic Acidity Constants of 1,2,3,4-Tetrahydroquinoxaline and its 6-Methyl and 6-Methoxy Derivatives.

Page 3753. Equation 14 should read

$$(Q) = \frac{a}{\frac{[H_3O^+]^2}{k_1k_2} + 1 + \frac{[H_3O^+]}{k_2}}$$

Page 3754. The abscissa values of Fig. 3 should read 0.0, 0.02, 0.04, 0.06, 0.08.

Page 3756. In col. 1, line 19 below Table III, for "groups" read "group."—J. C. CAVAGNOL.

1951, VOL. 73

**Alice D. Awtrey and Robert E. Connick.** The Absorption Spectra of $I_2$, $I_3^-$, $I^-$, $IO_3^-$, $S_4O_6^=$ and $S_2O_3^=$. Heat of the Reaction $I_3^- = I_2 + I^-$.

Page 1842. In col. 2, the line above Experimental, for "5100" read "+5100."

Page 1843. In col. 1, last paragraph, line 4 for "−5100" read "+5100," and in line 6, for "−4300" read "+4300."—ROBERT E. CONNICK.

**William A. Bonner.** The Acid-catalyzed Anomerization of the D-Glucose Pentaacetates. A Kinetic, Thermodynamic and Mechanistic Study.

Page 2663, Table VIII, and Page 2664, Table IX, in the heading of each, after "0.1 *M* in" insert "Glucose Pentaacetate and 0.5 *M* in".—WILLIAM A. BONNER.

1952, VOL. 74

**Forrest A. Trumbore, W. E. Wallace and R. S. Craig.** Magnesium–Cadmium Alloys. II. The Use of the Electrochemical Cell to Determine the Heats, Free Energies and Entropies of Formation of the Solid Alloys in the Temperature Range above the Order–Disorder Curie Points.

Page 134. Dr. G. M. Willis has raised some questions regarding the shape of the experimental entropy of formation curve in Figure 1. On looking into the matter the authors discovered an error in the graphical integration of the Gibbs–Duhem equation which materially alters the data given in Table II. Columns 2, 4 and 6 require no correction. The remainder of the table when corrected should appear as follows:

| $N_{Mg}$ | $a_{Cd}$ | $\bar{L}_{Cd}$, cal./g. atom | $(\bar{S} - S°)_{Cd}$, E.U./g. atom | $\Delta F_f$, cal./g. atom | $\Delta H_f$, cal./g. atom | $\Delta S_f$, E.U./g. atom |
|---|---|---|---|---|---|---|
| 0.100 | 0.8857 | +37 | 0.31 | −702 | −316 | 0.71 |
| 0.200 | 0.7420 | +20 | 0.63 | −1181 | −653 | 0.98 |
| 0.300 | 0.5511 | −149 | 0.91 | −1565 | −979 | 1.08 |
| 0.400 | 0.3394 | −541 | 1.15 | −1810 | −1209 | 1.11 |
| 0.500 | 0.1748 | −1198 | 1.26 | −1878 | −1287 | 1.09 |
| 0.600 | 0.0782 | −2017 | 1.35 | −1815 | −1252 | 1.04 |
| 0.700 | 0.0328 | −2801 | 1.63 | −1565 | −1036 | 0.97 |
| 0.800 | 0.0119 | −3530 | 2.30 | −1227 | −771 | 0.84 |
| 0.900 | 0.0046 | −3558 | 4.13 | −701 | −385 | 0.58 |

FORREST A. TRUMBORE.

**H. H. Jaffé and Leon D. Freedman.** The Ultraviolet Absorption Spectra of Arylphosphonic and Diarylphosphinic Acids.

Page 1069. In Table I, line 9, last entry, for "2420" read "1962."

Page 1070. In Fig. 2, the ordinate should be $\epsilon \times 10^{-4}$. In Fig. 3, the left ordinate numbers should be 10 and 20.—H. H. JAFFÉ.

**Tod W. Campbell and Galvin M. Coppinger.** The Reaction of *t*-Butyl Hydroperoxide with some Phenols.

Page 1471. In col. 1, line 13, for "74°" read "86.5–88°."—TOD W. CAMPBELL.

**D. L. MacDonald and Hermann O. L. Fischer.** The Degradation of Sugars by Means of their Disulfones.

Page 2089. In col. 2, line 30 from the end, for[12] read[11].—D. L. MACDONALD.

**Sidney I. Miller and Richard M. Noyes.** Iodide-ion Catalysis of the Elimination of Iodine from *trans*-Diiodoethylene and of the Addition of Iodine to Acetylene.

Page 3404. In formula (3), in the bracketed denominator of the log term, for "$K(a + b + m)$" read "$K(a + b - m)$".—RICHARD M. NOYES.

**A. R. H. Cole, R. Norman Jones and Konrad Dobriner.** A Relationship between the Stereochemical Configuration of 3-Hydroxysteroids and their Infrared Absorption Spectra.

Page 5573. In Table II, Section V, for "$\Delta^{5,17:20}$-Pregnadienol-3$\beta$-one-20 6 1050" read "$\Delta^{5,17:20}$-Pregnadienol-3$\beta$ 20 1050."—R. N. JONES.

1953, VOL. 75

**Robert E. Buckles and Jack F. Mills.** Solutions of Halogens in Highly Acidic, Polar Solvents.

Page 554. In Fig. 2 the numbers of the wave length scale should all be shifted one division to the right. Equation (5) should read:

$$A_s = C_t a_c b + (C_t a_x b - A_s)/N_B K$$

—ROBERT E. BUCKLES.

**Donald J. Sibbett and Richard M. Noyes.** Kinetics of the Thermal Exchange between Iodine and Allyl Iodide.

Page 762. In col. 1, equation (1) should read

$$R = -\frac{2ab}{(2a + b)t} \ln\left[x - \frac{2a}{b}(1 - x)\right]$$

—RICHARD M. NOYES.

**Paul Delahay.** Unified Theory of Polarographic Waves.

Page 1431. In Col. 1, add "Equation (8) holds for $x = 0$ only, if the $D$'s are not the same."

Page 1432. In equation (12) the term "erfc$(Qt)^{1/2}$" should read "erfc$(Qt^{1/2})$."

Page 1433. Equation (16) is misleading and should be revised to

$$i = [708nm^{2/3}t^{1/6}C_0D_0^{1/2}]\left[\frac{1 - \frac{1}{2Q^2t} + \frac{1.3}{(2Q^2t)^2}\cdots}{\left(1 + \frac{k_b}{k_f}\left(\frac{D_0}{Dr}\right)\right)^{1/2}}\right]$$

—PAUL DELAHAY.

**David T. Mowry.** Mucochloric Acid. II. Reactions of the Aldehyde Group.

Page 1909. In the heading of Table I, in the heading of col. 1, and in the text of col. 2 under Experimental, lines 1 and 2, for "2,3-Dichloro-" read "3,4-Dichloro-."—D. T. MOWRY.

**Charles C. Price and Hirokazu Morita.** The Reaction of Methyl Radicals with Isobutyryl and $\alpha$-Deuteroisobutyryl Chlorides.

Page 3687. In col. 1, the equation should read

$$d_D = d_H\left[1 + \frac{N_D(1.006)}{M}\right]$$

—CHARLES C. PRICE.

**Eugene Sawicki and F. E. Ray.** N-Fluoroacetyl Derivatives of Carcinogenic Amines.

Page 4346. The page number in Ref. 2 should be "2266" instead of "2519."—EUGENE SAWICKI.

**Daniel Berg and Andrew Patterson, Jr.** The High Field Conductance of Aqueous Solutions of Carbon Dioxide at 25°. The True Ionization Constant of Carbonic Acid.

Page 5199. In col. 1, line 14 from the end, insert before the words "We have"

$$(1 - 2Q)^2/(Q - Q^2) = \rho_0 = K(O)/C \qquad (22)$$

—ANDREW PATTERSON, JR.

**Kôzô Sone.** Absorption Spectra of Some Metallic Chelate Compounds.

Page 5207. In col. 1, line 18, for "amine" read "ammine." —K. SONE.

**Edward Gelles and Kenneth S. Pitzer.** Thermodynamic Functions of the Halogenated Methanes.

Page 5259. The résumé of previous calculations of thermodynamic functions of halogenated methanes included reference to only one of a series of papers by F. F. Cleveland and co-workers, some of which appeared after submission of our paper. These papers are *J. Chem. Phys.*, **19**, 119, 784, 1561 (1951); **20**, 454, 1949 (1952); **21**, 242, 930, 1778, 1781 (1953), and *J. Opt. Soc. America*, **43**, 1061 (1953), and deal with the spectral assignments and thermodynamic properties of $CCl_4$, $CCl_3H$, $CCl_3Br$, $CF_3Cl$, $CF_3H$, $CF_4$, $CH_3I$, $CCl_2Br_2$, $CBr_2HCl$, $CF_3Br$, $CF_3I$, $CH_2BrCl$, $CCl_3F$, $CF_2Br_2$ and $CH_2I_2$. In the last paper of this series dealing with $CH_2I_2$ the free energy functions and entropies require revision, but some of our own calculated values for this compound are also in error. Apart from this compound and of $CCl_3Br$ the agreement between the thermodynamic functions given in the above papers, within the temperature range covered by them, is generally within 0.1 kcal./deg. mole of our calculated values. The differences can be mainly ascribed to slightly different values for fundamental frequencies and moments of inertia.

We wish to correct our calculated functions for $CCl_3Br$ and $CH_2I_2$. In the case of $CCl_3Br$ our previously published free energy functions and entropies are too low by 2.28 cal./deg. mole (except at 1400°K. for $-(F^\circ - H_0^\circ)/T$ where the present value is too low by 1.28 cal./deg.) For $CH_2I_2$ the corrected values for the thermodynamic functions for 400, 500, and 600°K., respectively, are: $C_p^\circ$ = 15.76, 17.25, 18.38 cal./deg. mole; $(H^\circ - H_0^\circ)$ = 4.688, 6.340, 8.118 (and for 700°: 10.01) kcal./mole; $-(F^\circ - H_0^\circ)/T$ = 66.49, 69.22, 71.61 cal./deg. mole; $S^\circ$ = 78.21, 81.90, 85.15 cal./deg. mole.

CORRECTED FREE ENERGY FUNCTIONS AND ENTROPIES OF $CCl_3Br$

| Temp., °K. | 100° | 150° | 200° | 250° | 298.16° | 300° |
|---|---|---|---|---|---|---|
| $-(F^\circ - H^\circ)/T$ | 52.66 | 56.69 | 59.99 | 62.35 | 65.29 | 65.38 |
| | 400° | 500° | 600° | 700° | 800° | 900° |
| | 69.79 | 73.56 | 76.85 | 79.77 | 82.41 | 84.79 |
| | 1000° | 1100° | 1200° | 1300° | 1400° | 1500° |
| | 86.99 | 89.01 | 90.89 | 92.63 | 94.27 | 95.81 |

| Temp., °K. | 100° | 150° | 200° | 250° | 298.16° | 300° |
|---|---|---|---|---|---|---|
| $S^\circ$ | 61.89 | 67.45 | 72.16 | 75.11 | 79.73 | 79.85 |
| | 400° | 500° | 600° | 700° | 800° | 900° |
| | 86.01 | 91.10 | 95.41 | 99.16 | 102.44 | 105.36 |
| | 1000° | 1100° | 1200° | 1300° | 1400° | 1500° |
| | 108.00 | 110.40 | 112.61 | 114.63 | 116.51 | 118.27 |

—K. S. PITZER

**Lamar Field and John W. McFarland.** Grignard Reagents of Sulfones. II. Reactions with Carbonyl Compounds.

Page 5583. In col. 2, first set of formulas, last line, for "$ClCHOC_2C_6H_5$" read "$ClCH_2COC_6H_5$."—LAMAR FIELD.

**Alfred R. Bader.** Cyclopentenylphenols.

Page 5969. In col. 1, line 24, for "2.5 moles" read "5 moles."—ALFERD BADER.

**L. F. Leloir and C. E. Cardini.** The Biosynthesis of Sucrose.

Page 6084. In col. 1, Table I, first line of the heading, for "0.05 μmole" read "0.5 μmole."—L. F. LELOIR.

**Walter C. Schumb and Leland H. Towle.** The Partial Ammonolysis of Silicon Tetrachloride.

Page 6085. In col. 2, line 30, the formula should be "$Si_n(NH)_{n-1}Cl_{2n+2}$."

Page 6086. In col. 1, line 2, the formula should be "$Si_9N_5H_2Cl_{23}$."—WALTER C. SCHUMB.

1954, VOL. 76

**W. C. Wildman and W. T. Norton.** Desethyllycoramine.

Page 154. In col. 1, line 2, for "0.34 g." read "1.13 g."—W. C. WILDMAN.

**Carlos M. Samour with J. Philip Mason.** Preparation and Reactions of Bis-diazoalkanes.

Page 441. Footnote (3) should read "(3) Petersen, U. S. Department of Commerce, Office of Technical Services, PB 694, 1941.—J. P. MASON.

**Stephen B. Coan and Ernest I. Becker.** Synthesis of Unsymmetrical 1,3-Diphenyl-2-propanones.

Page 501. In Table I, col. 4, line 6, the m.p. should be "131.0–131.2°" instead of "31.0–31.2°."—ERNEST I. BECKER

**Orrie M. Friedman and Arnold M. Seligman.** Preparation of Secondary Amine Mustards with High Toxicity.

Page 661. In col. 2, line 5, for "XI" read "(XII)" and in line 13 from the end, for "(XIV)" read "(XV)."—ORRIE M. FRIEDMAN.

**Walter H. Jones.** Mechanism of the Homogeneous Alkaline Decomposition of Cyclotrimethylenetrinitramine, etc.

Page 830. In Table I, no. 7, last col., for "0.06" read "0.006." In table note *a* omit superscript ref. 9; in table note *f* omit superscript ref. 8.

Page 832. In Fig. 1, legend, for "equation 13" read "equation 11."

Page 834. In col. 2, line 10, for "from" read "for."—WALTER H. JONES.

**Orrie M. Friedman, Donald L. Klass and Arnold M. Seligman.** N-Phosphorylated Derivatives of Diethanolamine.

Page 916. In col. 2, line 2 of Experimental, for "75 cc." read "750 cc."—ORRIE M. FRIEDMAN.

**Ralph E. Weston, Jr.** The Solubility of Phosphine in Aqueous Solution.

Page 1028. In col. 1, line 5 above Fig. 1, for "−2950" read "−3570."—RALPH E. WESTON, JR.

**Wallace R. Brode, Ervin G. Pearson and George M. Wyman.** The Relation between the Absorption Spectra and the Chemical Constitution of Dyes. XXVII.

PAGE 1035. In Table I, last line, col. 2, for "599" read "563."—ERVIN G. PEARSON.

**H. Z. Lecher, T. H. Chao, K. C. Whitehouse and R. A. Greenwood.** The Phosphonation of Aromatic Compounds with Phosphoric Anhydride.

Page 1050. In col. 2, line 52, for "$n_\beta$ 1.11" read "$n_\alpha$ 1.51."—HANS Z. LECHER.

**William E. Parham and John D. Jones.** Heterocyclic Vinyl Ethers. IV. Benzo-1,4-oxathiadiene and Benzo-1,4-dithiadiene.

Page 1071. In col. 1, eq. B, for "X and/or XI" read "XIII and/or XIV," and the same change in col. 2, line 13.—WILLIAM E. PARHAM.

**Alfred J. Kolka, Harold D. Orloff and Margaret E. Griffing.** The Partial Additive Chlorination of the Benzene Ring. III.

Page 1244. In col. 2, line 15, for "β-benzene" read "δ-benzene."—HAROLD D. ORLOFF.

**David Garvin.** The Heterogeneous Carbon Monoxide-Ozone Reaction on Silver.

Page 1581. In col. 1, add to footnote (1) "Report Control No. OSR-TN-54-61 has been assigned to this work."—DAVID GARVIN.

**G. Wilkinson, P. L. Pauson, and F. A. Cotton.** Bis-cyclopentadienyl Compounds of Nickel and Cobalt.

Page 1970. In col. 2, reference 13 should read: THIS JOURNAL, **75**, 5531 (1952).

Page 1971. In Fig. 1, the dotted curve is the infrared spectrum of ferrocene and the full line that of bis-cyclopentadienylnickel.—G. WILKINSON.

**Norman O. Smith and Patrick N. Walsh.** Dissociation Pressures and Related Measurements in the System Aluminum Sulfate–Water.

Page 2055. In Fig. 2 all abscissa numbers should be moved to the right by one division.—NORMAN O. SMITH.

**Wilkins Reeve, Edward L. McCaffery and T. Earl Kaiser.** Relative Importance of Steric and Inductive Effects in SN2 Displacement Reactions.

Page 2281. In Table I, cols. 2 and 3, first three compounds, for "111 days 0.00375" read "4.6 years 0.00024," for "5 years <0.0026" read "25 years <0.00005," and for "6 years <0.0002" read "35 years <0.00003." These changes do not affect the argument or the conclusions presented.—WILKINS REEVE.

**Charles H. Tilford and M. G. Van Campen, Jr.** Diuretics. α,α-Disubstituted 2-Piperidine-ethanols and 3,3-Disubstituted Octahydropyrid(1,2-*c*)oxazines.

Page 2435. In Table I, col. 5, the $R^4$ groups for Nos. 42C, 44C, 45C, 46C and 47C should be "$CH_3$."

Page 2436. In col. 1, lines 4 and 5, for "ammonium chloride" read "an excess of 20% hydrochloric acid."—CHARLES H. TILFORD.

**Wendell M. Graven and F. John Long.** Kinetics and Mechanisms of the Two Opposing Reactions of the Equilibrium $CO + H_2O = CO_2 + H_2$.

Pages 2602. The authors write: We wish to thank Drs. R. Bernstein and R. Friedman for kindly informing us of some arithmetical errors in our recent publication. The average value of $k_1$ at 900° should be 0.107 $l.^{1/2}$ $mole^{-1/2}$ $sec.^{-1}$. Equation (3) should read

$$k_1 = 2.90 \times 10^9 \exp(-56000/RT)\ l.^{1/2}\ mole^{-1/2}\ sec.^{-1}$$

Corrected values of the parameters $A$ and $B$ are $6.93 \times 10^2$ l. $mole^{-1}$ and $2.18 \times 10^3$ l. $mole^{-1}$, respectively. The average value of $k_2$ at 900° should be 0.158 $l.^{1/2}$ $mole^{-1/2}$ $sec.^{-1}$. Equation (5) should read

$$k_2 = 2.52 \times 10^{11} \exp(-65500/RT)\ l.^{1/2}\ mole^{-1/2}\ sec.^{-1}$$

Numerical values of the ordinates in Fig. 5 are inexact and should be disregarded. In each case the correction is relatively small and does not affect the conclusions that have been drawn from the data.—WENDELL M. GRAVEN.

**Roger Adams and Seiji Miyano.** 2-Aminopyridine 1-Oxides.

Page 2785. Col. 1, add "Reference to a paper read before the Division of Organic Chemistry of the American Chemical Society, March, 1952, by R. W. Faessinger and E. V. Brown of the Chemistry Department of Fordham University was inadvertently omitted. These authors reported the preparation 2-aminopyridine 1-oxide as follows: 2-aminopyridine; 2-dibenzoylaminopyridine; 2-dibenzoylaminopyridine 1-oxide; 2-aminopyridine 1-oxide."

In col. 2, line 5, insert "The 2-aminopyridine 1-oxide may be isolated in yields always consistent with those reported only if the product is isolated from the hydrolysis mixture by continuous extraction."—ROGER ADAMS.

**Stephen P. Findlay.** The Three-dimensional Structure of the Cocaines. I. Cocaine and Pseudococaine.

Page 2859. In footnote (30) after "N-acetylnorecgonine" add the words "ethyl ester."—STEPHEN P. FINDLAY.

**Carl Djerassi, Pasapati Sengupta, J. Herran and F. Walls.** Terpenoids. V. The Isolation of Iresin, a New Sesquiterpene Lactone.

Page 2967. In col. 1, lines 3 and 2 from the end, exchange the prefixes "*cis*" and "*trans*."—CARL DJERASSI.

**Homer R. Williams and Harry S. Mosher.** Peroxides. I. *n*-Alkyl Hydroperoxides.

Page 2984. In footnote (9), line 2, for "hydroperoxide" read "peroxide."

Page 2986. In col. 1, line 4 from the end, for "and 50%" read "of 50%."

Page 2987. In Table V, first text line, col. 3, for "42" read "31[d]." Then add a table footnote to read: "[d] The yield was raised to 42% in a subsequent run when the second extraction was done with ether instead of benzene."—HARRY S. MOSHER.

**M. E. Reichmann, S. A. Rice, C. A. Thomas and Paul Doty.** A Further Examination of the Molecular Weight and Size of Desoxypentosenucleic Acid.

Page 3048. The Authors report regarding Table I: The values for the contour length (Column 5) were based upon 2 nucleotides per 2.2 Å. which is equivalent to the basis of the molecular weight estimation by electron microscopy. If the characteristics of the crystalline configuration were maintained in solution, the basis should be changed to 2 nucleotides per 3.4 Å. and the entries in the fifth and last columns would be increased by a factor of 1.6. The uncertainty in the contour length in solution is of this order."—PAUL DOTY.

**K. V. Wise.** Physical Properties of *cis*-1-Cyano-1,3-butadiene.

Page 3094. The writer wishes to revise some entries in Table I and supply some additional values, as indicated:

| | | |
|---|---|---|
| Refractive index, $n^{25}D \pm 0.0001$ | | 1.4832 |
| Density, $d^{25}_4$ 0.0002 g./ml. | | −0.8573 |
| $dd_4/dt$ at 25° | | 0.0009 |
| Viscosity, $n^{25} \pm 0.006$ millipoise | | 6.016 |
| Vapor pressure constants in the Antoine equation for temp. range 45–110° | A | 7.314 |
| | B | 1622 |
| Boiling point, °C. | 100 mm. | 75.2 |
| | 760 mm. | 135.8 |
| Heat of vaporization in kcal./mole | 100 mm. | 9.59 |
| | 760 mm. | 8.94 |
| Compressibility factor, $Z$ | 100 mm. | 0.993 |
| | 760 mm. | 0.967 |

—K. V. WISE.

**Martin Goldstein and Manfred E. Reichmann.** A Flow Birefringence Study of Size and Size Distribution in Desoxypentose Nucleic Acid.

Page 3335. Footnote (8) may be completed to "THIS JOURNAL, **76**, 3047 (1954)."

Page 3338. The authors add in connection with ref. 15: "Attributing the opinion to H. Scheraga that the weight average value of $\theta$ is the one observed at infinite gradient was based on a misreading of his paper. His view is that the value of $\theta$ observed at infinite gradient is that corresponding to the mean value of the length $L$ for the gaussian distribution in volume fraction that he used in his calculations."—MARTIN GOLDSTEIN AND MANFRED E. REICHMANN.

**Nelson J. Leonard and Michinori Ōki.** Cyclic Aminoacyloins. II. F-Strain Limitation of Transannular Interaction between N and $C_{10}$.

Page 3465. In col. 2, line 1 of the last paragraph, after "salt" insert "of 1-methyl-1-azacyclononan-5-ol-6-one (IIa)."—NELSON J. LEONARD.

**H. J. Gunst, M. Tobkes and Ernest I. Becker.** The Condensation of Acyclic Aldehydes with *p*-Nitrophenylacetic Acid. III.

Page 3595. The first author's name should read "H. C. Gunst."

In line 13 below, after "crotonaldehyde" insert "52% yield of crude acid was obtained after"; in the next line, after "methacrylaldehyde" insert "38% after"; and in the next line, after "tiglaldehyde" insert "26% after."—ERNEST I. BECKER.

**J. B. Ziegler, W. E. Rosen and A. C. Shabica.** The Stereochemistry of Steroidal Sapogenins.

Page 3865. In col. 1, footnote (5) should read "THIS JOURNAL" instead of "*ibid.*" In col. 2, lines 11 and 12 from the end, for "C-18 methyl groups and C-21" read "C-18 and C-21 methyl groups."—WILLIAM E. ROSEN.

**M. L. Wolfrom, G. N. Kowkabany and W. W. Binkley.** Pectic (Poly-D-galacturonic) Hydrazide.

Page 4011. Under Formula I, the phrase beginning "See also, etc." should be added to footnote (4).

**Henry Taube and Edward L. King.** The Bridged Activated Complex for the Electron Exchange of Chromium(II) and Monochlorochromium(III) Ion.

Page 4053. In Table I in the heading of col. 3, for "$10^{-3}$" read "$10^{-2}$."—EDWARD L. KING.

**Sidney D. Ross, Morton Bassin and Irving Kuntz.** Molecular Compounds. IV. The Effect of Substituents on the Equilibrium Constant for Complex Formation.

Page 4177. In col. 1, first line below Table I, for "23.8 ± 0.1°" read "25.0 ± 0.1°" as given correctly in the heading of Table II.—SIDNEY D. ROSS.

**Marion Maclean Davis and Hannah B. Hetzer.** The Relative Basicities of Tribenzylamine and Tribenzylamine Oxide in Benzene and Water. Preparation and Properties of Tribenzylamine Oxide.

Page 4257. In col. 1, line 10 from the end, for "by about one-tenth" read "by a factor of about ten."

**S. W. Pelletier and Walter A. Jacobs.** The Aconite Alkaloids. XXVII. The Structure of Atisine.

Page 4496. In col. 2, line 5, for "III" read "II."—S. W. PELLETIER.

**Alexander Schönberg, Ahmed Mustafa and Gamil Aziz.** Diels Adler Reaction. II. Experiments with 2-Styrylchromones. On the Nature of the Dimer of 1,3-Diphenylisobenzofuran.

Page 4576. In col. 2, line 2, for "IIb" read "IIIb." In formula VII the 10-oxygen should not have a double bond.—A. SCHÖNBERG.

**Joseph Larner and C. M. McNickle.** Action of Intestinal Extracts on "Branched" Oligosaccharides.

Page 4747. Table I was not included and is supplied:

TABLE I

OLIGO-1,6-GLUCOSIDASE ACTIVITY OF VARIOUS SPECIES, TEST SYSTEM AS DESCRIBED IN TEXT

| Source | Description | Activity, units/ml. | Protein, mg./ml. | Specific activity, units/mg. |
|---|---|---|---|---|
| Hog | 3 days storage at 4° | 246 | 9.7 | 25.4 |
| | 18 days storage at 4° | 200 | 7.4 | 26.9 |
| Rabbit | duodenum tested | 106 | 7.2 | 14.8 |
| | immediately | 104 | 10.1 | 10.3 |
| | jejunum + ileum | 20 | 7.2 | 2.8 |
| | tested immediately | 15 | 13.1 | 1.1 |
| Rat | tested | 100 | 9.2 | 10.9 |
| | immediately | 86 | 10.1 | 8.5 |
| Cow | 2 days storage at 4° | 54 | 7.6 | 7.1 |

JOSEPH LARNER.

**Jui H. Wang.** Theory of the Self-diffusion of Water in Protein Solutions. A New Method for Studying the Hydration and Shape of Protein Molecules.

Page 4756. Equation 5 should read "$c = \bar{c} + c'x$ at $\lambda = \infty$" instead of "$c = c + c'x$ at $\lambda = \infty$."

Page 4757. Col. 1, fourth paragraph, for "Differentiating (7) with respect to $x$ and putting $\lambda = 0$, we get

$$\left(\frac{\partial c}{\partial x}\right)_{\lambda=0} = \frac{2c'}{2 - abc\omega_a} \qquad (11)$$

Transforming the surface integrals in (10) back to volume integrals by means of Green's theorem and substituting the value of $(\partial c/\partial x)_{\lambda=0}$ as given by (11) we obtain" read "Putting $\lambda = 0$ in (7), we get

$$(c)_{\lambda=0} = \bar{c} + \frac{2c'x}{2 - abc\omega_a} \qquad (11)$$

Substituting (11) in (10), we obtain."

Page 4759. In the line just above equation 29, for "$l$" read "1."

Page 4762. In col. 1, fourth paragraph, for "$H = 0.13$ $(1/\rho) = 2.9$" read "$H = 0.13$, $(1/\rho) = 2.9$."—JUI H. WANG.

**F. A. Hochstein and Kotaro Murai.** Magnamycin B, a Second Antibiotic from *Streptomyces halstedii*.

Page 5081. In footnote (6) for "(1953)" read "(1945)."—F. A. HOCHSTEIN.

**Alexander Gero.** Regularities in the Basicity of Some Tertiary Ethylenediamines, Trimethylenediamines and 2-Hydroxytrimethylenediamines.

Page 5158. In col. 2, Table II, the last entry in line 3 (II) should read "5.25" instead of "6.25." Also, base ID has been described by L. Knorr and H. W. Brownsdon, *Ber.*, **35**, 4470 (1902).—A. GERO.

**Frank R. Mayo.** Free Radical Addition and Transfer Reactions of Hydrogen Chloride with Unsaturated Compounds.

Page 5392. In Col. 1, line 5 after eq. (2), for "these" read "three."

**Harold D. Orloff and Alfred J. Kolka.** The Mechanism of Dehydrohalogenation of Benzene Tetrachloride and Related Compounds.

Page 5485. In col. 2, line 13, for "$HCR_2CR_2$" read "$HCR_2CR_2^+$."

Page 5487. In col. 2, line 2, for "more" read "less."—HAROLD D. ORLOFF.

**George G. Kleinsphen and Alsoph H. Corwin.** The Synthesis of Some β,β-Dipyrrylpropionic Esters.

Page 5644. In col. 2, line 15, for "(IV)" read "(VI)." In line 20, for "10 hours" read "16 hours."

Page 5645. In col. 1, line 37, for "$C_2H_5O$, 15.00" read "$C_2H_5O$, 25.00."—GEORGE G. KLEINSPEHN.

**Leon Wright and Sol Weller.** The Catalytic Activity of Barium and Calcium Hydrides. III. Hydrogen Exchange with Some $C_4$ Hydrocarbons.

Page 5950. In Table IV, column headed "Time, hr.," run 6, for "200" read "20."—LEON W. WRIGHT.