Additions and Corrections

1966, Volume 5

Peter Moore, Fred Basolo, and Ralph G. Pearson: Mechanism of the Acid Hydrolysis of the Iodopentaaquochromium(III) Ion. Evidence for a *trans* Effect of Iodide in a Chromium(III) Complex.

Page 227. The sentence beginning in column 1, line 5, should read: "This is the rate at which one coordinated water molecule exchanges." Delete the following sentence. The next sentence after should read: "The rate constant for release of one water molecule in $Cr(H_2O)_6^{3+}$ is 2.65×10^{-6} sec^{-1} at 25°." In the fourth paragraph, the last two lines should read "rate constant for the exchange of one water molecule of *ca.* 2.9×10^{-4} sec^{-1}."—RALPH G. PEARSON

Theodore C. F. Munday and John D. Corbett: An Electromotive Force Study of Lower Oxidation States of Lead, Cadmium, and Tin in Molten $NaAlCl_4$.

Page 1264. The data given in ref 15 for $Pb(AlCl_4)_2$ are incorrect.

Page 1268. The correct powder pattern of $Pb(AlCl_4)_2$ agrees with that given in ref 22 save for evidence of excess $AlCl_3$ in the latter.—J. D. CORBETT

1967, Volume 6

E. König and K. Madeja: $^5T_2$–$^1A_1$ Equilibria in Some Iron(II)–Bis(1,10-phenanthroline) Complexes.

Page 51. In Figure 2, the last terms in the energy expressions should read, for the three different groups of Zeeman levels, from the top to the bottom, respectively, $+9\beta^2H^2/4\lambda$, $-5\beta^2H^2/12\lambda$, $-2\beta^2H^2/3\lambda$. In eq 4, the brace in the denominator has been placed incorrectly. The denominator should read $x\{1 + 7 \exp[-(\Delta E/\lambda - 2)x] +$ etc.—E. KÖNIG

Stephen P. Tanner, Fred Basolo, and Ralph G. Pearson: Anchimeric Assistance in the Reactions of Dichloro(ethylenediamine-N,N′-diacetic acid)platinum(II) and Its Conjugate Base.

Page 1091. Change the second display equation to

$$k_{\text{obsd}} = \frac{k_1[H^+]^2}{K_A + [H^+]^2} + \frac{k_2K_A}{K_A + [H^+]^2}$$

R. Graham Hughes and Clifford S. Garner: The Use of Chromium(IV) Diperoxo Amines in the Synthesis of Chromium(III) Amine Complexes. III. Some Bromo, Phosphato, and Sulfato Ethylenediamine Complexes.

Page 1521. In Table I, the absorption maxima and minima for two of the complexes listed were inadvertently taken from spectra of other substances. The correct values are:

Complex	$[HClO_4]$, F	λ, mμ	a_M, M^{-1} cm^{-1}[a]
Green-blue $Cr(en)(OH_2)_2Br_2^{+}$[b–d]	0.3	363 (min)	10.5
		412 (max)	25.4
		440 (min)	24.2
		470 (max)	24.7
		490 (min)	24.3
		543 (max)	31.4
		565 (min)	30.8
		630 (max)	48.0
Magenta $Cr(en)(OH_2)_3Br^{2+}$[b,c]	1	410 (max)	30.3
		460 (min)	17.8
		475 (plat)	19.6
		537 (max)	36.4
		~600 (sh)	~28

This correction is in addition to those noted earlier in *Inorg. Chem.*, 6, 2273 (1967).—C. S. GARNER

W. A. Spofford, III, P. D. Carfagna, and E. L. Amma: The Crystal Structure of *trans*-Bis(phenylethynyl)bis(triethylphosphine)nickel(II), $[P(C_2H_5)_3]_2Ni(C{\equiv}CC_6H_5)_2$.

Page 1553. The *a* lattice dimension should be 14.75 Å as opposed to 15.31 Å. This introduces a systematic error into the calculated structure factors, atomic parameters, bond distances, and rms displacements. However, the changes in the calculated structure factors and atomic parameters are negligible. The changes in interatomic distances and angles are generally small, and only Ni–P and Ni–C distances are changed more than 2 standard deviations. The revised entire Table III is given below. The rms displacements of Table IV do not change significantly (within 1 standard deviation) except for Ni and P, which are revised below.

TABLE III

INTERATOMIC DISTANCES (Å), ANGLES (DEGREES), AND ERRORS[a]

Bonding Interatomic Distances and Angles			
Ni–P	2.179 (3)	P–Ni–C_1	87.6 (4)
Ni–C_1	1.847 (11)	Ni–P–C_9	111.5 (5)
C_1–C_2	1.195 (14)	Ni–P–C_{11}	113.9 (5)
C_2–C_3	1.434 (15)	Ni–P–C_{13}	116.5 (5)
C_3–C_4	1.413 (17)	P–C_9–C_{10}	111.2 (11)
C_3–C_5	1.399 (16)	P–C_{11}–C_{12}	112.1 (10)
C_4–C_6	1.400 (17)	P–C_{13}–C_{14}	116.7 (11)
C_5–C_7	1.390 (16)	Ni–C_1–C_2	177.3 (11)
C_6–C_8	1.391 (20)	C_1–C_2–C_3	176.9 (13)
C_7–C_8	1.407 (21)	C_2–C_3–C_4	119.8 (12)
P–C_9	1.854 (14)	C_2–C_3–C_5	118.9 (12)
C_9–C_{10}	1.549 (24)	C_3–C_5–C_7	120.2 (13)
P–C_{11}	1.830 (15)	C_3–C_4–C_6	118.9 (13)
C_{11}–C_{12}	1.525 (21)	C_4–C_3–C_5	121.3 (13)
P–C_{13}	1.835 (12)	C_5–C_7–C_8	117.8 (14)
C_{13}–C_{14}	1.522 (20)	C_4–C_6–C_8	118.6 (14)
		C_6–C_8–C_7	123.2 (13)
		C_9–P–C_{11}	102.4 (7)
		C_9–P–C_{13}	106.0 (7)
		C_{11}–P–C_{13}	105.4 (7)
Nonbonding Intramolecular Distances			
Ni–C_2	3.041 (12)	C_1–C_{13}'	3.084 (18)
Ni–C_3	4.472 (10)	C_2–C_9	3.856 (19)
P–C_1	2.797 (12)	C_2–C_{11}	3.774 (18)
P–C_1'	2.915 (12)	C_1–C_3	2.629 (15)
P–C_2	3.700 (12)	C_1–C_4	3.569 (17)
P–C_2'	3.783 (13)	C_1–C_5	3.504 (16)
P–C_{10}	2.814 (20)	C_2–C_{13}'	3.375 (18)
P–C_{12}	2.789 (18)	C_3–C_9	3.859 (19)
P–C_{14}	2.863 (15)	C_3–C_{11}	4.769 (18)
C_1–C_9	3.317 (18)	C_4–C_{11}	4.788 (19)
C_1–C_{11}	3.270 (18)	C_3–C_{13}'	4.117 (19)
C_1–C_{12}	3.907 (21)	C_5–C_{13}'	4.094 (19)
Nonbonding Intermolecular Distances			
C_4–C_{14}	3.721 (24)	All others	>3.900

[a] Primes refer to atoms related by the center of symmetry of the Ni site. The dihedral angle between normals to planes defined by Ni–P–C_1 and the benzene ring is 43.6 ± 0.5°.

TABLE IV

RMS ATOMIC DISPLACEMENTS IN THE DIRECTION OF THE PRINCIPAL AXES OF THE THERMAL ELLIPSOIDS (Å)

$\sigma' = \sigma \times 10^3$

Atom	R_1	σ'	R_2	σ'	R_3	σ'
Ni	0.199	3	0.266	4	0.276	3
P	0.226	4	0.271	4	0.288	4

With these corrections our structure determination is in essential agreement with that of Davies, Mais, and Owston, *J. Chem. Soc., A*, 1750 (1967).—E. L. AMMA

D. M. Tully-Smith, R. K. Kurimoto, D. A. House, and C. S. Garner: Hydrolysis Kinetics of the Blue Isomer of Dichlorodiaquoethylenediaminechromium(III) Cation and of the Magenta Isomer of Chlorotriaquoethylenediaminechromium(III) Cation.

Page 1527. In column 2, paragraph 3, we reported that the contribution of base hydrolysis, if any, was unknown in the hydrolysis of magenta $Cr(en)(OH_2)_3Cl^{2+}$. We now have obtained k_2 in 0.35 and 0.07 *F* $HClO_4$ ($\mu = 1.5$ *M*, $NaClO_4$) at 60°; the rates at these two acid concentrations, together with the earlier value in 1.5 *F* $HClO_4$, give a linear plot of k_2 *vs.* $1/[H^+]$. If we interpret the $[H^+]$ dependence in terms of contribution from aquation of $Cr(en)(OH_2)_2(OH)Cl^+$, which appears to be the only reasonable explanation, we obtain $k_{2a} = 3.2 \times 10^{-5}$ sec^{-1} at 60° for aquation of magenta $Cr(en)(OH_2)_3Cl^{2+}$ and (estimating the first acid dissociation constant of the chlorotriaquo ion as $K_1 \sim 10^{-4}$ at 60°) $k_{2h} \sim 0.03$ sec^{-1} at 60° for aquation of the hydroxodiaquo complex. Base hydrolysis is considered to contribute negligibly.

Page 1527. In column 2, lines 7–9 of the fourth paragraph, the sentence starting "This value . . ." should read: This value is *ca.* one-hundredth of the Cl^--release hydrolysis rate constant of *cis*-$Cr(en)_2(OH_2)Cl^{2+}$ in 0.1 *F* HNO_3,[7] and about one-tenth the constant for *trans*-$Cr(en)_2(OH_2)Cl^{2+}$ Cl^- release . . .

These corrections are in addition to those noted earlier in *Inorg. Chem.*, **6**, 2273 (1967).—C. S. GARNER

1968, Volume 7

R. Graham Hughes and Clifford S. Garner: The Use of Chromium(IV) Diperoxo Amines in the Synthesis of Chromium(III) Amine Complexes. IV. Some Chloro and Bromo Ammineethylenediamine Complexes.

Page 76. In column 1, line 17, isomers I and II were accidentally interchanged; isomer I presumably has all three H_2O ligands *cis* to one another.—C. S. GARNER

John M. Malin and James H. Swinehart: The Kinetic and Equilibrium Properties of the Vanadium(II) Thiocyanate Complex in Aqueous Solution.

Page 250. In line 5 of the abstract and subsequent places in the text where it appears (page 253; column 1, line 3 and column 2, line 17) the entropy of activation for the bimolecular rate constant for complex formation should be -7 ± 4 eu and not -2 ± 4 eu—J. H. SWINEHART.

Colin F. Bell and David R. Rose: Complexes between Pyridine-2-aldehyde-2′-pyridylhydrazone and the Platinum Metals. I. Rhodium.

Page 325. In the above paper, we used the nomenclature of R. Kuhn and W. Münzing for the geometrical isomers of hydrazones. We also referred to the work of Karabatsos, who uses the opposite nomenclature. Nomenclature is consistent throughout our paper if the following changes are made in column 2 of page 328: line 19, for *syn* read *anti;* line 20, for *anti* read *syn;* line 22, for *syn* read *anti*. Definitions are according to R. Kuhn and W. Münzing, *Chem. Ber.*, **85**, 29 (1952).—C. F. BELL.

Ruth A. Goodrich and P. M. Treichel: Synthesis and Characterization of the Alkylhydridotrifluorophosphoranes CH_3PF_3H and $C_2H_5PF_3H$.

Page 696. In Table II, the proton chemical shift values should be negative; *i.e.*, for CH_3PF_3H, $H_{P-H} = -7.1$, $H_{CH_3} = -1.7$; for $C_2H_5PF_3H$, $H_{P-H} = -7.4$, $H_{CH_3} = -1.5$, $H_{CH_2} = -0.5$. Footnote *a* should read "Relative to $CFCl_3$."—P. M. TREICHEL

R. F. Childers, Jr., K. G. Vander Zyl, Jr., D. A. House, R. G. Hughes, and C. S. Garner: Synthesis of a Monodentate Ethylenediamine Complex of Chromium(III) and Kinetics of Hydrolysis of Tetraaquoethylenediaminechromium(III) Cation and of Pentaaquo(2-aminoethylammonium)chromium(III) Cation.

Page 749. In line 2 of abstract, and in column 2, paragraph 2, we reported that so far as we knew, we were reporting the first isolation of a complex of chromium(III) with a monodentate ethylenediamine ligand. Professor Gerold Schwarzenbach has kindly informed us that isolation of the red chloride salt of μ-hydroxo-enneaammine(2-aminoethylammonium)dichromium(III) cation, $[(H_3N)_5Cr(OH)Cr(enH)(NH_3)_4]Cl_6$, which is a chromium(III) complex with a monodentate ethylenediamine ligand, was reported earlier [G. Schwarzenbach and B. Magyar, *Helv. Chim. Acta*, **45**, 1454 (1962)]. Synthesis was achieved by treatment of $(H_3N)_5Cr(OH)Cr(NH_3)^{5+}$ with anhydrous ethylenediamine, giving the blue "basic rhodo" cation, $(H_3N)_5CrOCr(en)(NH_3)_4^{5+}$, which was converted in solution by hydrochloric acid to the μ-hydroxo compound.

Page 753. In column 2, paragraph 2, line 3, the first chemical formula should read: $Cr(en)(OH_2)_4^{3+}$.—C. S. GARNER

R. Graham Hughes and Clifford S. Garner: Aquation Kinetics of the Green-Blue Isomer of Dibromodiaquoethylenediaminechromium(III) Cation and the Magenta Isomer of Bromotriaquoethylendiaminechromium(III) Cation.

Page 1989. In column 1, the chemical formula in the heading under Results and in eq 1 should be $Cr(en)(OH_2)_2Br_2^+$. In column 2, footnote *d* of Table I, "deviations" should be in the singular.

Page 1991. In Table III, the units of ΔS^* should be cal deg^{-1} mol^{-1} and the sixth complex in the first column should be *cis*-$Cr(en)_2Br_2^{+\ c}$.

Page 1992. In column 1, line 2, the chemical formula should be $Cr(en)(OH_2)_3Br^{2+}$.—C. S. GARNER