Additions and Corrections

1984, Volume 23

Chung-Shin Lee and Chung-Sun Chung*: Kinetics of Coordinated-Base-Catalyzed and Free-Base-Catalyzed Configurational Conversions of a Tetraamine Macrocyclic Ligand Complex of Copper(II).

Pages 639–644. In the abstract and text, the values of k_1 and K_{OH} should be 5.98 s^{-1} and 38.6 M^{-1} rather than 5.51 s^{-1} and 51.6 M^{-1}, respectively. The value of K_{OH} is smaller than that obtained by spectrophotometric measurements. The conclusions of the paper are unaffected by these errors.

1985, Volume 24

Si-Han Liu and Chung-Sun Chung*: Kinetics of the Formation and Dissociation of Nickel(II) Complexes of Diamino Diamides.

Pages 2368–2373. We have reexamined the experiments of this paper. The rate constants reported in this paper are incorrect. The observed rate constants for the reactions as a function of pH obtained recently are deposited as supplementary material. The resolved rate constant values for the formation and dissociation of nickel(II) complexes of diamino diamides are given in the revision of Table X. In the Discussion, the sentence in lines 3–6 of column 1 on page 2372 should be revised as follows: "The observed sequence for $k_{Ni}{}^{L}$, BCTN > BCEN > BCMEN > BCHTN, indicates this mechanism could be a significant reaction path for the reaction of nickel(II) with BCEN, BCMEN, and BCHTN but not for the reaction of nickel(II) with BCTN." The sentences in lines 2–6 of column 2 on page 2372 should be revised as follows: "However, the results listed in the revised Table X indicate that the rate constants for monoprotonated BCHTN are larger than those for monoprotonated BCTN. Therefore, the most significant path for the reaction of nickel(II) with HBCHTN$^+$ might be path III." The sentence in lines 16–18 in column 2 on page 2372 should be revised as follows: "The relative rates of these reactions are in the order [Ni(BCHTN)]$^{2+}$, [Ni(BCTN)]$^{2+}$ > [Ni(BCEN)]$^{2+}$, [Ni(BCMEN)]$^{2+}$." The last paragraph and Figures 5 and 6 should be eliminated.

Supplementary Material Available: Tables of rate constants for reactions of BCEN, BCTN, BCMEN, and BCHTN with Ni(II) and plots for the resolution of the formation constants (9 pages). Ordering information is given on any current masthead page.

Table X. Resolved Rate Constant Values for the Formation and Dissociation of Nickel(II) Complexes of Diamino Diamides in Aqueous Solution at 25.0 ± 0.1 °C and μ = 0.10 M (NaClO$_4$)

ligand	$k_{Ni}{}^{L}$, M^{-1} s^{-1}	$k_{Ni}{}^{HL}$, M^{-1} s^{-1}	k^{NiL}, s^{-1}	$k_H{}^{NiL}$, M^{-1} s^{-1}
BCEN	1.12×10^3	16.2	1.41×10^{-5}	1.23×10^2
BCTN	5.13×10^3	3.07	7.20×10^{-4}	7.36×10^2
BCMEN	1.09×10^3	11.1	1.22×10^{-5}	0.86×10^2
BCHTN	8.98×10^2	11.2	3.34×10^{-5}	1.41×10^3

1986, Volume 25

Si-Han Liu and Chung-Sun Chung*: Complexation Kinetics of Diamino Diamides with Copper(II) in Aqueous Solution.

Pages 3890–3896. We have recently repeated the experiments of this paper. The observed rate constants for the reactions as a function of pH are deposited as supplementary material. The resolved rate constant values for the formation and dissociation of copper(II) complexes of diamino diamides are given in revised Table VII. The reactivity sequence of HL$^+$ is HBCHTN$^+$ > HBCEN$^+$ > HBCTN$^+$ > HBCMEN$^+$, not HBCHTN$^+$ > HBCTN$^+$ > HBCEN$^+$ > HBCMEN$^+$. The other conclusions of the paper are unaffected by these reevaluated results.

Supplementary Material Available: Tables of rate constants for reactions of Cu(II) with BCEN, BCTN, BCMEN, and BCHTN (5 pages). Ordering information is given on any current masthead page.

Table VII. Resolved Rate Constant Values for the Formation and Dissociation Copper(II) Complexes of Diamino Diamides in Aqueous Solution at 25.0 ± 0.1 °C and μ = 0.10 M (NaClO$_4$)

ligand	$k_{Cu}{}^{L}$, M^{-1} s^{-1}	$k_{Cu}{}^{HL}$, M^{-1} s^{-1}	k^{CuL}, s^{-1}	$k_H{}^{CuL}$, M^{-1} s^{-1}
BCEN	3.25×10^8	8.03×10^4	8.50×10^{-5}	1.27×10
BCTN	3.00×10^8	4.58×10^4	1.89×10^{-2}	4.79×10^3
BCMEN	1.20×10^8	1.17×10^4	2.80×10^{-5}	1.94
BCHTN	4.35×10^8	2.95×10^5	3.70×10^{-2}	8.51×10^3

1989, Volume 28

Min-Shiun Chao and Chung-Sun Chung*: Steric, Inductive, and Ring-Strain Effects in Chelation Thermodynamics and Kinetics. Reactions of Copper(II) Ion with *N*-Alkyl-Substituted Diamino Diamides.

Page 690. The values of k_d and equilibrium constants in Table V were reported incorrectly. The correct values of equilibrium constants and rate constants are given here in revised Table V. From these results, we can resolve the individual rate constants by plotting the expressions

$$k_f[\textstyle\sum \mathrm{L}]/[\mathrm{L}] = k_{Cu}{}^{L} + k_{Cu}{}^{HL}K_1{}^{H}[\mathrm{H}^+]$$

$$k_d = k^{CuL} + k_H{}^{CuL}[\mathrm{H}^+]$$

The values obtained for these rate constants are as follows: $k_{Cu}{}^{L} = 4.85 \times 10^7$ M^{-1} s^{-1}; $k_{Cu}{}^{HL} = 4.59 \times 10^4$ M^{-1} s^{-1}; $k^{CuL} = 3.31 \times 10^{-1}$ s^{-1}; $k_H{}^{CuL} = 3.25 \times 10^5$ M^{-1} s^{-1}; $k_H{}^{CuL}/k^{CuL} = 9.85 \times 10^5$ M^{-1}. The resolved rate constants for the formation and dissociation of [Cu(4-Me-L-2,3,2)]$^{2+}$ in Table IV should be replaced by these values. The discussion and conclusions of the paper are unaffected by these errors.

Table V. Rate Constants for Formation (k_f) and Dissociation (k_d) of [Cu(4-Me-L-2,3,2)]$^{2+}$ and Equilibrium Constants (K_{eq}) for the Complexation Reaction of the Copper(II) Ion with 4-Me-L-2,3,2 at 25 ± 0.1 °C and μ = 0.10 M (NaClO$_4$)

pH	k_f, M^{-1} s^{-1}	K_{eq}, M^{-1} [a]	k_d, s^{-1} [b]
5.78	5.19×10^3	4.76×10^3	1.09
5.67	3.21×10^3	2.91×10^3	1.10
5.57	2.87×10^3	1.86×10^3	1.54
5.46	2.41×10^3	1.13×10^3	2.13
5.35	1.52×10^3	6.88×10^2	2.21
5.25	1.05×10^3	4.37×10^2	2.40
5.13	8.20×10^2	2.53×10^2	3.25
5.02	6.65×10^2	1.53×10^2	4.35
4.91	4.91×10^2	9.24×10	5.32
4.82	4.17×10^2	6.11×10	6.82
4.74	3.39×10^2	4.24×10	8.00

[a] $K_{eq} = K_f/(1 + K_1{}^{H}[\mathrm{H}^+] + K_1{}^{H}K_2{}^{H}[\mathrm{H}^+]^2)$. [b] $k_d = k_f/K_{eq}$.

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