

เอกสารอ้างอิง

1. Hathaway, B. J., and Billing, D.E. 1970. Electronic Properties and Stereochemistry of Mononuclear Complexes of the Copper (II) Ions. Coord. Chem. Rev. 5: 143.
2. Hathaway, B. J. 1972. Essays in Chemistry 3 : 61.
3. Hathaway, B.J. 1987. "Comprehensive Coordination Chemistry", Wilkinson, G., Gillard, R.D. and McCleverty, J.A. Ed. (a) vol. 5, Sec. 53, (b) Vol.2, Sec. 15. 5.
4. Aduldech, S., and Hathaway, B.J. 1991. Crystal Structure and Electronic Properties of Tetrakis (μ_3 -bis)(2-pyridyl) amido) dichloro trinickel(II). J.Chem.Soc.,Dalton Trans : 993-998.
5. Devillanova, F.A. 1980. Trans. Met. Chem. 5: 362.
6. Hathaway, B. J. 1973. A New Look at the Stereochemistry and Electronic Properties of Complexes of Copper(II) Ion. Structure and Bonding (Berlin) 14 : 49.
7. "Kaiser, J., Brauer, G., Schroder, F.A., Tayler, F., and Rasmussen, S.E. 1974. J. Chem. Soc., Dalton Trans. : 1490. ^bHarrison, W.D., Hathaway, B.J., and Kennedy, D. 1979. Acta Cryst. B35 : 2301.
8. Harrison, W.D., and Hathaway, B. J. 1979. Acta Cryst. B35 : 2910.
9. Cullen, D.L., and Lingafelter, E.C. 1970. Crystal Structure of Bis (2,2'-iminobis (acetamidoxime)copper(II) Chloride. Inorg. Chem. 9 : 1858.
10. Cullen, D.L., and Lingafelter, E. C. 1971. Redetermination of the Crystal Structure of Potassium Lead hexanitocuprate(II) . Inorg. Chem. 10 : 1264.
11. Hathaway, B. J. 1984. Structure and Bonding (Berlin) 57 : 55.
12. Cullen, D. L., and Lingafelter, E.C. 1970. Crystal and Molecular Structure of Bisnitrito(2,2'-bipyridyl copper(II) Complex. J.Chem. Soc.: 883.
13. Bukovska, M., and Porai-Koshits, M.A. 1961. Zh. Struk. Khim. 7 : 712.
14. Anderson, O.P. 1973. J. Chem. Soc., Dalton Trans. : 1237.

15. ^aClifford, F., Counihan, E., Fitzgerald, K., Seff, C., Simmons., Tyagi, S., and Hathaway, B.J. 1982. J.Chem. Soc., Chem. Commun. : 196.
^bSimmons, K., Seff, K., Clifford, F., and Hathaway, B.J. 1983. Acta Cryst. C39 : 1360.
16. Hathaway, B.J., Ray, N.J., Kennedy, D., O'Brien, N., and Murphy, B. 1980. The Structure of Acetatobis (2,2'-bipyridyl)copper(II) Perchlorate Monohydrate and Tetrafluoroborate Cation Distortion Isomer. Acta Cryst. B36 : 1371-1377.
17. Stephens, F.S. 1969. J. Chem. Soc. (A) : 2081.
18. Takahashi, K., Nishida, Y., and Kida, S. 1984. Polyheron 3 : 113.
19. Hathaway, B.J. 1972. J.Chem Soc., Dalton Trans. : 1196.
20. ^aNakamoto, K. "Infrared Spectra of Inorganic and Coordination Compounds", Wiley, New York, 1963., ^bNakamoto, K. "Infrared and Raman Spectra of Inorganic and Coordination Compounds". 3rd Ed., Wiley, New York. 1987.
21. Jacobson, R.R., Tyeklar, Z., Forroog, A., Karlin, K.D., Liu, S., and Zubietta, J. 1988. Crystal Structure of Tris (di-2-pyridyl) amine dioxo-copper(II). J. Am. Chem. Soc. 110 : 3690.
22. Cai, G.Z., Davies, G, El-toukhy, T., and Henary, M. 1985. Crystal Structure of Tris(n-methly-2-pyrrolidinone) Aquaioxohexachlorotetracopper(II) Inorg.Chem. 24 : 1701.
23. Garland, M.T., Spodine, E., and Zamudio, W. 1981. Crystal Structure of Bis (di-2-pyridyl) Nitritocopper(II) Perchlorate. J. App. Cryst. 14 : 475.
24. Hathaway, B.J., Procter, J.M., Slade, R.C., and Tomlinson, A.A.G. 1969. Structure of Bis (di-2-pyridyl) Nitrito-copper(II)Nitrate. J. Chem. Soc. (A) : 2219.
25. Salazar, J., Boraona, R., and Zamudio, W. 1981. The Crystal Structure of Bis (1, 10-phenantholine) Fomatocopper(II) Perchlorate. J. Inorg. Nucl. Chem. 43 : 2881.
26. Wilputte-Steinert, L. 1981. J. Mol. Cata. 10:151.
27. Marsich, N., and Camus, A. 1977. J. Inorg. Nucl. Chem. 39 : 275.

28. Wu, L. P., Lemoru, M. E., and Hathaway, B.J. 1992. Copper(I) Reoxygenation Products the Structure of Di- μ -hydroxybis(di-2-pyridylamine) bis (bis (tetrafluoroborate) dicopper(II) and μ - Aqua - di - μ - hydroxybis(di - 2 - pyridylamine)dicopper(II) Dihydrate. *Acta Cryst.* C48 : 35.
29. Aduldecha, S. 1989. Ph.D. Thesis, University Colleg Cork. IRELAND.
30. Sletten, J. 1984. *Acta Chem. Scand.* A38 : 491-496.
31. Akhter, P., Fitzsimmons, P., and Hathaway, B. J. 1991. Structure of Aquacarbonato(di-2-pyridylamine)copper(II) Dihydrate. *Acta Cryst.* C47 : 308.
32. Johnson, J.E., Beineke, T.A., and Jacobson, R.A. 1971. Crystal and Molecular Structure of Bis(2,2 bipyridylamine)copper(II) Perchlorate. *J.Chem. Soc. (A)* : 1317-1374.
33. Garland, M.T., Le Marouille, J. Y., and Spodine, E. 1985. Structure of (di-2-pyridylamine) Salicylaldehydatocopper(II) Perchlorate. *Acta Cryst.* C41 : 855.
34. Aduldecha, S., and Hathaway, B. J. 1991. Structure of Catena (Acetato) (di-2-pyridylamine- μ -nitrate-copper(II)). *Acta Cryst.* C47 : 84.
35. Aduldecha, S., Keniry, M.E., Akhter, P., Tyagi, S., and Hathaway, B. J. 1991. Crystal Structures of Bis (di - 2 - pyridylamine)(acetato)copper(II) Nitrate and Bis(di - 2 - pyridylamine)formatocopper(II) Tetrafluoroborate. *Acta Cryst.* C47 : 1378.
36. Koonsaeng, V., and Hathaway, B. J. 1991. Crystal Structure and Electronic Properties of Nitritobis(2,2'-bipyridylamine)copper(II) Bromide and Nitritobis(2,2'-bipyridylamine)copper(II) Iodide. *J. Sci. Res. Chul. Univ.* 1 : 35.
37. Ray, N., Tyagi, S., and Hathaway, B.J. 1982. Catena Acetato(di-2-pyridylamine)- μ -perchloratocopper(II). *Acta Cryst.* B34 : 3324-3329.

38. Munoz, C.C. 1993. Structure of Bis(di-2-pyridylamine)di-nitrato copper(II) and Bis(acetato) bis (di-2-pyridylamine)copper(II) Monohydrate. *Acta Cryst.* C49 : 1759-1761.
39. Wu, L. P., Field, P., Morrissey, T., Murphy, C., Nagle, P., Hathaway, B. J., Simmons, C., and Thornton, P. 1990. Crystal Structure and Electronic Properties of Dibromo and Dichloro-tetrakis(μ_3 -bis(2-pyridyl)amido)tricopper(II) Hydrate. *J. Chem. Soc., Dalton Trans.* : 3835.
40. Stephen, F.S. 1969. Crystal and Molecular Structure of Bisnitrito-2,2'-bipyridylcopper(II). *Inorg. Phys. Theor.* : 2081-2087.
41. Youngme, S., Pakawatchai, C., Fun, H.K., and Chinnakali, K. 1997. *Acta Cryst.* Submitted.
42. Youngme, S., Pakawatchai, C., and Fun, H.K. 1998. Structure of Catena (propionato)(di-2-pyridylamine) μ -nitrato-copper(II). *Acta Cryst.* C54, to be published.
43. Procter, I.M., Hathaway, B.J., and Nicholl, P. 1968. *J. Chem. Soc. (A)* : 1678.
44. Hathaway, B. J., and Hodgson, P.G. 1972. *J. Inorg. Nucl. Chem.* 35 : 4017.
45. Addison, A. W., Angewara Rao, T., Reedijk, J., Ban Run, J., and Verhoor, G.C. 1984. *J. Chem. Soc., Dalton Trans.* : 1340-1356.
46. Bery, S. 1960. *J. Chem. Phys.* 32 : 933.
47. ^aRay, N.J., and Hathaway, B. J. 1978. *Acta Cryst.* B38 : 3224. ^bRay, N.J., Hulett, L., Sheahan, R., and Hathaway, B.J. 1979. *Acta Cryst.* B35 : 344.
48. ^aBarclay, G.A., Hoskins, B.F., and Kennard, C.H.L. 1963. *J. Chem. Soc.* : 5691. ^bStephens, F. S., and Tucker, P.A. 1973. *J. Chem. Soc., Dalton Trans.* : 2293.
49. Walsh, A., Walsh, B., Murphy, B., and Hathway, B.J. 1981. The Structure of Bis(2, 2'-bipyridyl)mononitritocopper(II) Tetrafluoroborate and Bis (2, 2'-bipyridyl)mononitritoZinc(II) Nitrate. *Acta Cryst.* B 37 : 1512-1520.

50. Sutton, L.E. 1958. "Tables of Interatomic Distances and Configurations in Molecules and Ion", Spec. Publ. The chemical Society, London No. 11 P M 174, M177, M 219.
51. Ferrari, M.B., Fava, G.G., and Pelizzi, C. 1977. Crystal Structure of Bis(di-2-pyridyl)- trithionato-copper(II). *J. Chem. Soc., Chem. Comm.* : 8.
52. Harrison, W.D., and Hathaway, B.J. 1978. Crystal Structure of Bis(di-2-pyridyl)-tetrathionato-copper(II) . *Acta Cryst. B34* : 2843.
53. ^aNakai, H. 1971. *Bull. Chem. Soc. Jpn.* 44 : 2412. ^bFoley, J., Kennedy, D., Phelan, D., Tyagi, S., and hathaway, B.J. 1983. *J. Chem. Soc., Dalton Trans.* : 2333.
54. Fitzgerald, W., and Hathaway, B. J. 1985. *J. Chem. Soc., Dalton Trans.* : 141.
55. Clifford, F., Counihan., Fitzgerald, W., Tyagi, S., and Hathaway, B. J. unpublished Results.
56. Hathaway, B. J. unpublished Results.
57. Gazo, J., Bersuker, I.B., Garaj, J., Kabesoua, M., Lohout, J., Langfelderova, M., Melnik, M., Seraton, M., and Valach, F. 1976. *Coord. Chem. Rev.* 11 : 25.
58. ^aFitzgerald, W., Murphy, B., tyagi, S., Walsh, A., Walsh, B., and Hathaway , B. J. 1981. *J. Chem. Soc., Dalton, Trans.* : 2271., ^bWalsh, A., Waslsh, B., Murphy, B., and Hathaway, B.J. 1987. *Acta Cryst. B37* : 1512.
59. ^aHarrison, W.D., Hathaway, B.J., and Kennedy, D. 1979. *Acta Cryst. B35* : 2301. ^bProcter, I.M., Hathaway, B.J., Billing, D.E., Dudley, R., and Nicholl, P. 1969. Electronic Energy Level and Stereochemistry of the cis-distorted Octahedral Complex Nitritobis(2,2'-bipyridyl)copper(II) Nitrate. *J. Chem. Soc. (A)* : 1192-1197.

60. Simmons, C. J., Hathaway, B. J., Amornijarusiri, K., Santor Siero, B.D., and Clear field, A. 1987. The Crystal Structure of Pseudo-Jahn-teller Complex Nitritobis(2,2'-bipyridyl)copper(II) Nitrate at 20, 100, 165 and 296 K and Its Iso-structure Zinc(II) Analogue at 295 K. *J. Am. Chem. Soc.* 109 : 1947-1958.
61. Takagi, S., Joesten, M.D., and Lenhart, P. 1975. *J. Am. Chem. Soc.* 97 : 444.
62. Escobar, C., and Witke, O. 1983. The Structure of Formatotobis(1, 10 - phenanthroline)copper(II) Perchlorate. *Acta Cryst. C* 39 : 1643-1646.
63. Procter, I.M., and Stephens, F.S. 1969. An Example of a cis-distorted Octahedral Copper(II) Complex : the Crystal Structure of Nitritobis(2, 2'-bipyridyl)copper(II) Nitrate. *J. Chem. Soc. (A)* : 1248-1255.
64. Fitzgerald, W., and Hathaway, B. J. 1981. Crystal Structure and Electronic of Bis(2, 2'-bipyridyl)formatocopper(II) Tetrafluoroborate-water. *J. Chem. Soc., Dalton Trans.* : 567-574.
65. Tyagi, S., Hathaway., and Horgan, M., unpublished Results.
66. ^aFerrari, A., Braibanti, A., and Tiripicchio, A. 1966. *Acta Cryst.* B21 : 60.
^bMorosin, B., and Larsen, A.C. 1969. *Acta Cryst.* B25 : 1417.
67. Duggan, M., Ray, N., Hathaway, B. J., Tomlinson, G., Brint, P., and Pelin, K. 1980. The Crystal Structure of Potassium(pentaamine)copper(II) Hexafluorophosphate. *J. Chem. Soc., Dalton Trans.* : 1342.
68. Jin-ling, H., Jien-ming, L., and Jia-Xi, L., 1966. *Acta Chim. Sinica* 32 : 194.
69. Ellis, J., Mockler, G.M., and Sinn, E. 1981. *Inorg. Chem.* 20 : 1206.
70. Segal, B.G., and Lippard, S.J. 1974. *Inorg. Chem.* 13 : 822.
71. Marongiu, G., and Cannas, M. 1979. *J. Chem. Soc., Dalton Trans.* : 41.
72. Bailey, N.A., and McKenzie, E.D. 1972. *J. Chem. Soc., Dalton Trans.* : 566.
73. Jain, P.C., and Lingafelter, E.C. 1967. *J. Am. Chem. Soc.* 89 : 6131.
74. Tyagi, S., and Hathaway, B. J. 1981. *J. Chem. Soc., Dalton Trans.* : 2029.
75. Sedov, A., Lozisek, J., Kabesova, M., Dunaj-jurco, M., Gazo, J., and Garaj, J. 1983. *Inorg. Chem. Acta* 75:73.
76. Stephens, F.S. 1972. *J. Chem. Soc., Dalton Trans* : 1350.

77. Ballhausen, C.J. 1962. "Introduction to ligand Field Theory", McGraw Hill, New York.
78. Hathaway, B.J., Duggan, M., Murphy, A., Mullane, J., Power, C., Walsh, A., and Wab, B. 1981. *Coord. Chem. Rev.* 36 : 267.
79. McGarvey, B.R. 1966. *Transition Met. Chem.* 3: 89.
80. Stomberg, R., Svensson, B., Tomlinson, A.A.G., and Persodtter, I. 1982. *Acta Chem. Scand. A* 36 : 579.
81. Aduldech, S., and Hathaway, B. J. 1992. Syntheses and Characterisation of Complexes $[\text{Cu}(\text{dpyam})_2(\text{O}_2\text{CCH}_3)]\text{X}$, $\text{X} = [\text{NO}_3]^-$, $[\text{O}_2\text{CCH}_3]^-$, Cl^- , Br^- , I^- and $[\text{PF}_6]^-$. Crystal Structure of $[\text{Cu}(\text{dpyam})_2(\text{O}_2\text{CCH}_3)] [\text{NO}_3]$. *J. Sci. Soc., Thailand* 18 : 163.
82. Akhter, P., and Hathaway, B. J. 1991. Structure of Bis(cyanato) Bis(di-2-pyridylamine)- copper(II) Sulfate Bis(di-2-pyridylamine) Monohydrate. *Acta Cryst.* C47 : 86.
83. Fitzgerald, W., Hathaway, B. J., and Simmons, C. J. 1985. Crystal Structure and Electronic Properties of the Complexes Acetatobis (1, 10-phenanthroline)-copper(II) Perchlorate Dihydrate. Acetatobis (1, 10-phenanthroline)-copper(II) Nitrate Dihydrate. *J. Chem. Soc., Dalton Trans.* : 141.
84. Koonsaeng, V., and Hathaway, B.J. 1991. Crystal Structure of Nitritobis (2, 2' - bipyridylamine)-copper(II) Tetrafluoroborate. *J.KMIT Research and Development* 12(2)6 : 80.
85. Nagle, P., O Sullivan, E., Hathaway, B. J., and Muller, E. 1990. Crystal Structure of Bis(2, 2' -bipyridyl)monochlorocopper(II) Tetrafluoroborate. A Relook at the Structure Pathway of the Bis(2,2' -bipyridyl)monochlorocopper(II) Cation. *J. Chem. Soc., Dalton Trans.* : 3399.
86. Sheldrick, G. M. 1990. SHELXTL - PC, User Manual. Siemens x-ray Instruments. Madison, Wisconsin, USA.
87. Sheldrick, G. M. 1993. SHELX93. Program for the Refinement of Crystal Structures, University of Gottingen Germany.

88. Siemens 1994. XSCANS. Users Manual, Version 2.1. Siemens Analytical X-ray Instruments; Madison, Wisconsin, USA.
89. Winson, A. J. C. Ed. 1992. "International Table for Crystallography : Mathematical, Physical and Chemical Tables", 1st Edn. Kluwer Academic Publisher, Dordrecht, Netherlands.