# Cassandra Eagle

# Scientific Publications

## Publications in Refereed Journals

1. F.A. Carroll, K.R. Pressley and C.T. Eagle, "Application of Heavy Atom Techniques to Study the Photolysis of But-2-enyl *p*-Methoxyphenyl Ether," *J. Chem. Res. (S)*, **1984**, 300.

2. J.A. Davies, C.T. Eagle, D.E. Otis and V. Uma, "Electrochemical Generation and Reactivity of Bis(triphenylphosphine)platinum(0): An Electrosynthesis of Platinum-Acetylene Complexes," *Organometallics*, **1986**, *5*, 1264.

3. J.A. Davies and C.T. Eagle, "Electrochemical Generation and Reactivity of Bis(triethylphosphine)platinum(0): Formation of a Platinum Hydride via a Hofmann Elimination Reaction with the Tetra(n-butyl)ammonium Cation," *Organometallics*, **1986**, *5*, 2149.

4. J.A. Davies, C.T. Eagle, A.A. Pinkerton and R. Syed, "Carbonatobis(triethylphosphine)platinum(II)," *Acta Cryst.*, **1987**, *C43*, 1547.

5. F.A. Cotton, K.R. Dunbar and C.T. Eagle, "Reactions of Rh2(O2CCH3)2(C6H4PPh2)2**.**2CH3COOH with Chlorotrimethylsilane in the Presence of Monodentate Phosphines to Give [Rh2Cl2(C6H4PPh2)2(PPh3)2] and [Rh2Cl2(C6H4PPh2)2(PMe3)2]," *Inorg. Chem*., **1987**, *26*, 4127.

6. F.A. Cotton, C.T. Eagle and A.C. Price, "Chemistry of Rh2(CO)2Cl2(dppm)2 and Compounds Derived Therefrom: Structural Characterization of Rh2(CO)Cl4(dppm)2 and [Rh2(CO)Cl3(dppm)2MeOH][PF6]," *Inorg. Chem*., **1988**, *27*, 4362.

7. J.A. Davies, C.T. Eagle, D.E. Otis, R.J. Staples and V. Uma, "Electrochemical Generation and Reactivity of Bis(tertiaryphosphine)platinum(0) Complexes: A Comparison of Reactivity of [Pt(PPh3)2] and [Pt(PEt3)2] Equivalents," *Organometallics*, **1989**, *8*, 1080.

8. F.A. Cotton, K.R. Dunbar, C.T. Eagle, L.R. Falvello, and A.C. Price, "Edge-Sharing Bioctahedral Molecules Without Metal-Metal Bonds: The d6-d6 Complexes Rh2X4(-X)2(-dppm)2 (X = Cl, Br)," *Inorg. Chem*., **1989**, *28*, 1754.

9. F.A. Cotton, R. Llusar, and C.T. Eagle, "Triangular Trinuclear Cluster Compounds: Molybdenum and Tungsten Complexes of the Type [M3S4(diphos)3X3]+ with X = Cl and H," *J. Am. Chem. Soc*., **1989**, *111*, 4332.

10. M.P. Doyle, V. Bagheri, T.J. Wandless, N.K. Harn, D.A. Brinker, C.T. Eagle and K.-L. Loh, "Exceptionally High Trans(anti) Stereoselectivity in Catalytic Cyclopropanation Reactions," *J. Am*. *Chem. Soc.*, **1990**, *112*, 1906.

11. M.P. Doyle, B.D. Brandes, A.P. Kazala, R.J. Pieters, M.B. Jarstfer, L.M. Watkins and C.T. Eagle, "Chiral Rhodium(II) Carboxamides. A New Class of Catalysts for Enantioselective Cyclopropanation Reactions," *Tetrahedron Lett.,* **1990**, *31*, 6613.

12. C.T. Eagle; F. Walmsley, "Preparation and Characterization of Two Nickel (II) Complexes: An Inorganic Chemistry Experiment," *J. Chem Educ.,* **1991**, *68*, 336.

13. F.A. Cotton, K.R. Dunbar, C.T. Eagle, L.R. Falvello, S.-J. Kang, A.C. Price, M.G. Verbruggen, "Bis(diphenylphosphino)methane Complexes of Rhodium(III) Halides as Synthons for Dinuclear Rhodium(III) Complexes," *Inorganica Chimica Acta*, **1991**, *184*, 35.

14. G. N. Holder, T. A. Leach, C. T. Eagle, "Kinetic and Electrochemical Study of Nitrile Adducts of Tetrachloro*bis*(1,2-*bis*(diphenylphosphine)methane)dirhenium(II)," *Transition Met. Chem.*, **1995**, *20*, 409.

15. M. Powell, R.D. Bailey, C.T. Eagle, G.L. Schimek, T.W. Hanks, W.T. Pennington, "Dicarbonyl(5-cyclopentadienyl)(1-pyrrolyl)iron(II)," *Acta Cryst*., **1997**, C53, 1611-1613.

16. A.L. Sargent, M.E. Rollog, C.T. Eagle, "Electronic Structure of Axially Ligated Rhodium Carboxylates: Pi-Back-Bonding Revisited," *Theor. Chem. Acc*.; **1997**, *97*, 283.

17. C. T. Eagle, D. G. Farrar, C. U. Pfaff, J. A. Davies, C. Kluwe, L. Miller, "Pi-Back-Bonding in Bis(isonitrile) Complexes of Rhodium(II) Acetate: Structural Analogs for Rhodium Carbenoids," *Organometallics*, **1998**, *17*, 4523.

18. P.A. Iyere, L.J. Kayren, A.W. Cordes, C.T. Eagle, T.A. Nile, G.L. Schmiek, W.T. Pennington, "Molecular and Supramolecular Structure of 4,4'-Bipyridinium Diiodide," *Crystal Engineering*, **1998**, *1*, 159-167.

19. G.J. Grant, D.F. Galas, M.W. Jones, K.D. Loveday, W.T. Pennington, G.L. Schmiek, C.T. Eagle, D.G. VanDerveer, "Platinum Group Metal Complexes of Macrocyclic Oxa-thiaethers," *Inorganic Chemistry*, **1998**, *30*, 5299-5305.

20. C.T. Eagle, J. Sloan, "Marie Anne Paulze Lavoisier: The Mother of Modern Chemistry," *The Chemical Educator,*  **1998**, *3*(5), S1430-4171(98)05249-8.

21. J.D. Batchelor, E.E. Carpenter, G.N. Holder, C.T. Eagle, "Recreation of Wohlner's Synthesis of Urea: An Undergraduate Organic Laboratory Exercise,"  [*The Chemical Educator,*](http://www3.springer-ny.com/chedr/) **1998**, *3*(6), S1430-4171(98)06271-X.

22. C. T. Eagle, D. G. Farrar, G. N. Holder, D. M. Gooden, A. B. Goodman, and S. W. Wyatt, "Synthesis and Characterization of Tris(diethyldithiocarbamato)cobalt (III) as an Undergraduate Inorganic Laboratory,"  [*The Chemical Educator,*](http://www3.springer-ny.com/chedr/) **1999**, *4*(3), 105-107.

23. Eagle, C. T.; Farrar, D. G.; Holder G. N.; Pennington, W. T.; Bailey R. D. "Structural and Electronic Properties of (2,2-*trans*)-Dirhodium(II) Tetrakis(N-phenylacetamidate)," *Journal of Organometallic Chemistry,* **2000**, *596*, 90.

24. Davies, J. A. ; Eagle, C. T.; Farrar, D. G.; Burckel, P. "Electrochemical Synthesis and Spectroscopic Characterization of a Mercury-Platinum-Hydride Complex," *Inorganica Chimica Acta,* **2000**, *300-302*, 645.

25. G.J. Grant, M.W. Jones, K.D. Loveday, D.G. VanDerveer, W.T. Pennington, C.T. Eagle, "Transition Metal Complexes with Macrocyclic Oxa-thiaethers," *Inorganica Chimica Acta,* **2000**, *300-302*, 250.

26. C.T. Eagle, G.N. Holder, A.B. Goodman, P.E. Hicks, K.P. Shaber, “Synthesis of Bis(diethyldithiocarbamato)manganese(II) and Tris(diethyldithiocarbamato)manganese(III),” *The Chemical Educator,* **2001** 6(3), 153-156.

27. C.T. Eagle, J. Sloan,“Rachel Littler Bodley: A Charter Member of the American Chemical Society and Revolutionizer of Chemical and Medical Education for Women,” *The Chemical Educator*, **2001**, 6 (3), 192-201.

28. C. T. Eagle, K. Kavallieratos. J. C. Bryan, “Non-preorganized Neutral Acyclic Anion Receptors; Structural Investigations of N,N’-diphenyl-1,3-benzenedisulfonamide and N,N’bis(4-t-butylphenyl)-1,3-benzenedisulfonamide,” *Journal of Chemical Crystallography,* **2002, *32(7)*,** 165-170.

29. C. T. Eagle, D. Farrar, G. N. Holder, M.L. Hatley, S.L. Humphrey, E. V. Olson, M. Quintos, J. Sadighi and T. Wideman, “Cis-Enhanced Cyclopropanation Catalysts: Reaction Chemistry of Three isomers of Rh2[N(C6H5)COCH3]4” *Tetrahedron Letters*, **2003**, *44*(12), 2593 – 2595.

30. Cassandra T. Eagle, Britainy M. Dearman, Amanda B. Goodman, “Chemistry for Breakfast: Approaching Kinetics and Uncovering Everyday Chemistry by Cooking Eggs” *Chem. Educator*, **2003**, *8*(2), 122-124.

31. Jeffrey C. Bryan, Benjamin P. Hay, Richard A. Sachleben, Cassandra T. Eagle, Cungen Zhang, Peter V. Bonnesen, “Design, synthesis, and structure of novel cesium receptors” *J. Chem. Crystallogr.* **2003**, *33* (5/6), 349-355.

32. Gregory A. Becht, John T. Vaughey, Robin L. Britt, Cassandra T. Eagle, Shiou-Jyh Hwu, “Ion exchange and electrochemical evaluation of the microporous phosphate Li9Fe7(PO4)10” *Mater. Res. Bull.* (2008), doi:10.1016/j.materresbull.2008.02.05.

## Chapters and Books

1. Eagle, C.T. *The Reactivity of Electrochemically Generated Low Valent Platinum Complexes*. University of Toledo, **1986**.

2. Davies, J.A.; Eagle, C.T. "Recent advances in the chemistry of platinum group carbonyls in catalysis." *Chemistry of The Platinum Group Metals: Recent Advances*, Hartley, F.R., Ed.; Elsevier: Amsterdam, **1991**.

3. Davies, J.A.; Chen, L.; Eagle, C.T.; Staples, R.J. "Electrochemistry of Platinum Phosphine Complexes: C-H and C-X Activation by Highly Reactive Intermediates." *Molecular Electrochemistry of Inorganic, Bioinorganic and Organometallic Compounds*, Pombeiro, A.J.L.; McCleverty, J.A., Eds.; Kluwer Academic Publishers, Boston, **1993**.

4. Eagle, C. T.; Farrar, D. G. *Student Solutions Manual: Chemistry, Principles and Reactions.*  Harcourt, Brace & Co., Fort Worth, **1997**.

5. Eagle, C.T.; Farrar, D.G. *Student Solutions Manual to Accompany Chemistry: Principles and Reactions, 4rd Ed*. Saunders College Publishing, Philadelphia, **2002**.

6. Eagle, C. T. *Student Solutions Manual for Masterton and Hurley’s Chemistry Principles and Reactions 5th Ed*.; Brooks/Cole-Thomson Learning: California, 2004.