Anthony W. Addison

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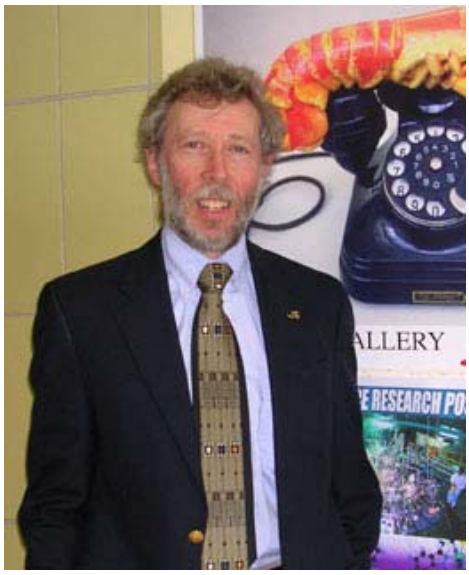
(Temporary) webpage: http://drexel.edu/chemistry/contact/facultyDirectory/Anthony Addison/
B.Sc. (Hons.), 1968, University of New South Wales; Ph.D., 1971, University of Kent at Canterbury; Postdoctoral Fellow, 1970-72, Northwestern University; Assistant Professor, 1972-78, University of British Columbia; Adjunct Associate Professor, UMDNJ-Robert Wood Johnson Memorial Hospital at Camden.



• Prof. Addison, Drexel's token Australian, is one of the Department's C. & M. Lindback Distinguished Teaching Awardees. Elected a Fellow of the Royal Society of Chemistry, he is also an officer and past Chairman of the ACS Philadelphia Section, and a member of IES & CSC. He is lead author of the 6th-most-cited article in the field of Inorganic Chemistry in the last 30 years. His >220 articles and conference presentations have earned >7,300 citations of his work in the research literature and a Hirsch Index of 36.

• Research Interests

Bioinorganic chemistry: chemistry of dioxygen- and NO-binding metalloproteins, particularly hemerythrins, myoglobins and invertebrates' hemoglobins. Design, synthesis and properties of novel chelating agents and of macrocyclic and oligonuclear metal complexes. Properties of Ru & Rh complexes. Models for various properties of Fe, Cu, Ni and V centres in O_2-transporting and redox proteins. Electrochemistry, CD, EPR and magnetic properties of extended and molecular systems.

• Recent Publications

A. V. Pavlishchuk, S. V. Kolotilov,* M. Zeller, L. K. Thompson, I. O. Fritsky, A. W. Addison* and A. D. Hunter, "A triple-decker heptadecanuclear $(Cu^{II})_{15}(Cr^{III})_2$ complex assembled from pentanuclear metallacrowns." *The European Journal of Inorganic Chemistry*, (2010) 4851-4858 [Oct. 2010] [DOI: 10.1002/ejic.201000367]

A.V. Yakovenko, L. Sorace, E.A. Mikhalyova, A.W. Addison & V.V. Pavlishchuk*, "Exchange Interactions in Trinuclear Multispin Complexes $[Fe^{III}_2M^{II}O(p\text{-NitPhCOO})_6]\cdot MeCN$ (M = Co, Ni, p-NitPhCOO$^-$ = p-Benzoatenitronyl-nitroxide radical", *Theoretical & Experimental Chemistry* **46(4)** (2010) 243-249 [Oct. 2010] [DOI: 10.1007/s11237-010-9147-9]

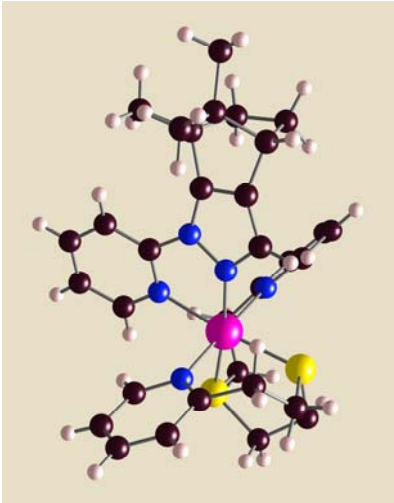
D. Dragancea*[a], A. W. Addison*[b], M. Zeller[c], M. E. Foster[b], M. J. Prushan[d], L. K. Thompson[e], M. D. Revenco[a] and A. D. Hunter[c], "A tetranuclear copper(II) bis-thiocarbohydrazone complex derived from *o*-aminobenzaldehyde." *Inorganica Chimica Acta*, **363** (2010) 2065-2070; A *Science Direct* 2010 "Hot Paper".doi:10.1016/j.ica.2010.02.002

I.V. Vasylenko, K.S. Gavrilenko, V.G. Il'yin, V. Golub, G. Goloverda, V. Kolesnichenko, A.W. Addison* and V.V. Pavlishchuk* "The metamorphosis of heterometallic trinuclear antiferromagnetic complexes into nano-sized superparamagnetic spinels" *Materials Chemistry and Physics* **121**(1/2), 47-52 (May 2010) [DOI: 10.1016/j.matchemphys.2009.12.040]

V. Mathrubootham*, A.W. Addison*, K. T. Holman, E. Sinn & L.K. Thompson "A novel copper(II) complex of a tripodal ligand with phenolate-phenol interligand, intramolecular hydrogen bonding." *Dalton Transactions* (2009) 8111-8116.

D. Dragancea, A. W. Addison*, M. Zeller, L. K. Thompson, D. Hoole, M. D. Revenco & A. D. Hunter, "Dinuclear copper(II) complexes with bis-thiocarbohydrazone ligands", *European Journal of Inorganic Chemistry* (2008) 2530-2536.

S.V. Kolotilov, D. Schollmeyer, L.K. Thompson, V. Golub, A.W. Addison & V.V. Pavlishchuk*, "Synthesis, structure and magnetic properties of oligometallic systems derived from di- and trinuclear copper(II) amido-oximate complexes", *Dalton Transactions* (2008) 3007-3014.



Optically active $[Ru(Pdto)(Camppy)]^{2+}$