

Microsymposium

MS73.O05

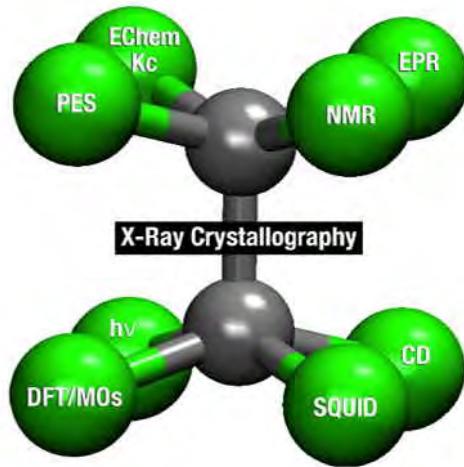
Fitting the Pieces of the Puzzle: The Delta Bond

C. Murillo¹

¹Dept of Chemistry, Texas A&M University, College Station, Texas, United States

The first compound with a quadruple bond was described by Al Cotton et al on August of 1964 (Cotton, F. A.; Curtis, N. F.; Harris, C. B.; Johnson, B. F. G.; Lippard, S. J.; Mague, J. T.; Robinson, W. R.; Wood, J. S. *Science* 1964, 145, 1305.). Since that time X-ray crystallography along other techniques such as EPR, electrochemistry, NMR, PES, electronic spectra, circular dichroism, magnetism, theoretical calculation have played an important role understanding of the delta bond. Here we will discuss some of the latest advances in the field.

[1] F. A. Cotton, N. F. Curtis, C. B. Harris, et al., *Science*, 1964, 145, 1305-1307, [2] G. M. Chiarella, F. A. Cotton, J. C. Durivage, et al., *Am. Chem. Soc.* 2013, 135, 17889-17896., [3] L. R. Falvello, B. M. Foxman, C. A. Murillo, *Inorg. Chem. Submitted*.



Keywords: metal-metal bonds, delta bond, chemical structure