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*Research Interests:* Organotransition metal chemistry with special reference to chromium and ruthenium and sulphur-containing ligands

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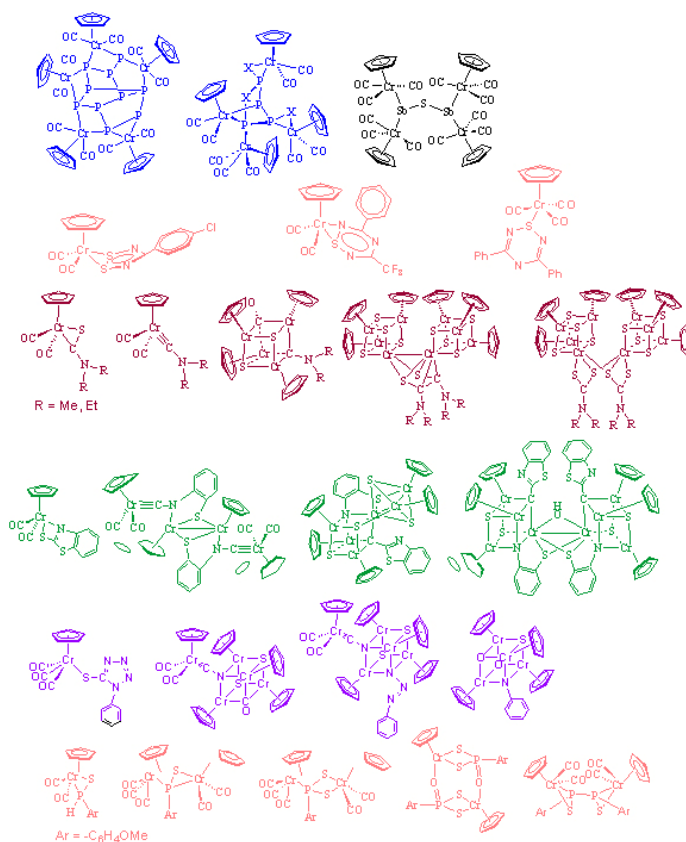
My research interest is focused on the reactivity of (A) (cyclopentadienyl)chromium carbonyl and related complexes and (B) reactive  $\mu$ -dichlorido diruthenium complexes, with a variety of sulphur-containing ligating compounds. Generally a detailed analysis of nature of the products has helped elucidate the mechanism of the various reactions.

*Under category A*, the high reactivity of  $[\text{CpCr}(\text{CO})_3]_2$  had given rise to a wide variety of new complexes, some with novel bonding modes and structures, e. g. as illustrated in Chart A.

*Under category B*, the chemistry of (L)Ru(II) (L =  $\eta^6\text{-C}_6\text{Me}_6$ ,  $\eta^5\text{-C}_9\text{H}_7$ ) and ( $\eta^5\text{-C}_5\text{Me}_5$ )Ru(III) has been investigated. An interesting reactivity aspect is given in Scheme B.

Work continues along these two fronts, with variation of metal coordination environment and variation of ligands.

Chart A



### Selected Publications

#### On chromium

1. L. Y. Goh, *Coord. Chem. Rev.*, 1999, **185-186**, 257-276.
2. Z. Weng, L. Y. Goh, *Acc. Chem. Res.* 2004, **37**, 187-199.
3. (a) H. F. Lau, V.W.L. Ng, L. L. Koh, G. K. Tan, L. Y. Goh, T. L. Roemmele, S. D. Sonja, R. T. Boere, *Angew. Chem. Int. Ed.* 2006, **45**, 4498-4501. (b) C. Y. Ang, R. T. Boeré, L. Y. Goh, L. L. Koh, S. L. Kuan, G. K. Tan and X. Yu, *Chem. Commun.* 2006, 4735-4737. (c) H. F. Lau, P. C. Y. Ang, V.W.L. Ng, S. L. Kuan, L. Y. Goh, A. S. Borisov, P. Hazendonk, T. L. Roemmele, R. T. Boeré, R. D. Webster. *Inorg. Chem.* 2008, **47**, 632-644.

#### On ruthenium

4. S. L. Kuan, W. K. Leong, L. Y. Goh, R. D. Webster. *Organometallics*. 2005, **24**, 4639-4648.
5. R. Y. C. Shin, M. E. Teo, W. K. Leong, J. J. Vittal, J. H. K. Yip, L. Y. Goh, R. W. Webster, *Organometallics*, 2005, **24**, 1483-1494.
6. Richard Y. C. Shin, G. K. Tan, L. L. Koh, J. J. Vittal, L. Y. Goh,\* R. D. Webster, *Organometallics*, 2005, **24**, 539-551.
7. R. Y. C. Shin, L. Y. Goh. *Acc. Chem. Res.* 2006, **39**, 301-313.
8. S. L. Kuan, E. P. L. Tay, W. K. Leong, L. Y. Goh, C. Y. Lin, P. M. W. Gill, R. D. Webster. *Organometallics*, 2006, **25**, 6134-6141.
9. E. P. L. Tay, S. L. Kuan, W. K. Leong, L. Y. Goh, *Inorg. Chem.*, 2007, **46**, 1440-1450.
10. S. Y. Ng, J. Tan, W. Y. Fan, W. K. Leong, L. Y. Goh, R. D. Webster. *Eur. J. Inorg. Chem.* 2007, 3827-3840.
11. R. Y. C. Shin, V. W. L. Ng, L. L. Koh, G. K. Tan, L. Y. Goh, R. D. Webster, *Organometallics*. 2007, **26**, 4555-4561.
12. S. Y. Ng, G. K. Tan, L. L. Koh, W. K. Leong, L. Y. Goh. *Organometallics*. 2007, **26**, 3352-3361.

Scheme B

