“Understanding the Inorganic-Organometallic Literature”

2 Hours, closed-book

You will be given a 2 to 3-page communication from JACS, Organometallics, Chemical Communications, Inorganic Chemistry, etc and will be expected to read and understand the material presented in it. You will then be asked questions about the work discussed to test your basic understanding of the transition metal (including lanthanides) inorganic and/or organometallic chemistry presented in the paper. The level of questions will be equivalent to what I expect a student successfully completing Chemistry 4570 -- Inorganic Chemistry and/or Chemistry 4571 – Organometallic Chemistry class to know of the key concepts taught in those courses. Questions may involve electron counting, transition metal structure, metal-ligand bonding, orbitals, fundamental mechanistic steps, electronic effects of metals and ligands and how they affect the structure and reactivity of a metal center, catalysis, catalytic mechanisms, etc.