## Metals and their Compounds Lecture 6.1

Transition metals (23.7 and Ch 24 BLB)

General formula of coordination compound

[ (metal ion) (ligand)<sub>n</sub> ]<sup>X</sup>

n is *number* of ligands and it could be 2, 3, 4,5 or 6. Could be more than one *type* of ligand.

x is *charge* on the compound. The charge could vary in different examples from -4,  $-3 \rightarrow +2$ , +3. Can also be zero (i.e. no charge)

What is a ligand?

Word means "to bind to" and it indicates a chemical species which is bonded to the metal ion. Usually a negatively charged ion (*anion*) or a neutral (uncharged) molecule.