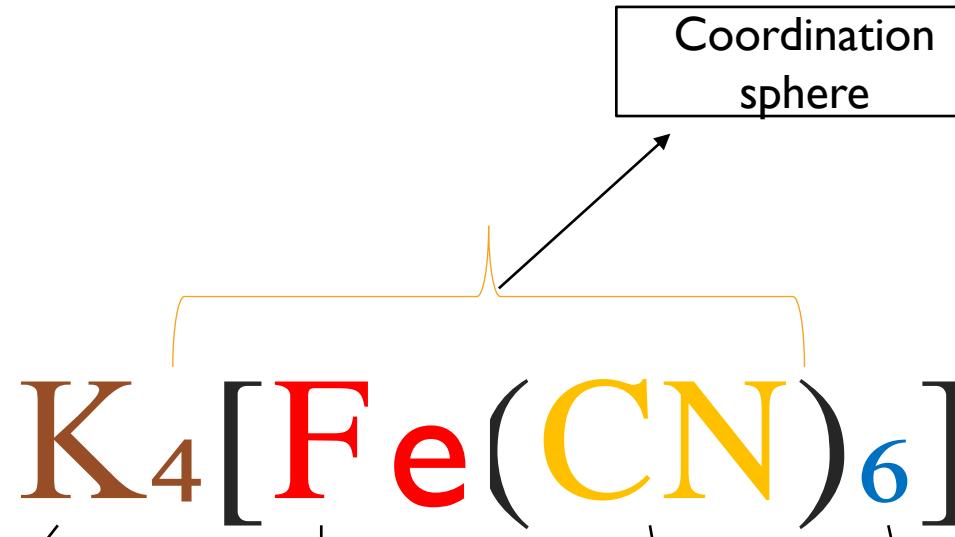


COORDINATION CHEMISTRY

By Vidya Kamath



Coordination
sphere

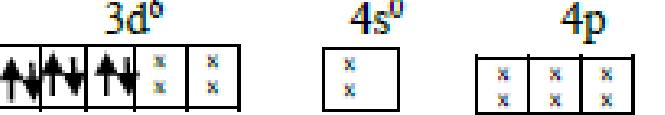
Ionisable ion

Central metal
ion

Ligands

Coordination
number

VALENCE BOND THEORY

	$[\text{Co}(\text{C}_2\text{O}_4)_3]^{3-}$
Central metal /atom	Co(III)
Electronic configuration	Co: $3d^7$ $4s^2$ 4p 
	$\text{C}_2\text{O}_4^{2-}$ is a strong field ligand.
$[\text{Co}(\text{C}_2\text{O}_4)_3]^{3-}$	$3d^6$ $4s^0$ 4p 
Geometry	Inner orbital (low spin) complex
Hybridization	Octahedral
Number of unpaired electron	d^2sp^3
	$n = 0$; DIAMAGNETIC