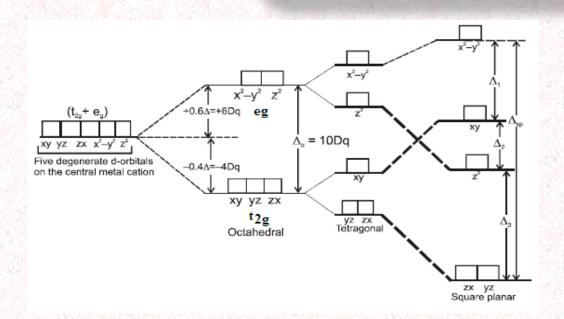
# Metal-Ligand Bonding in Transition Metal Complexes (Lecture-2)

**B.Sc.** 5<sup>th</sup> Semester (Pass Course)

INORGANIC CHEMISTRY

(As per MDU, Rohtak Syllabus)



**Presented by:** 

Dr. Anju Siwach

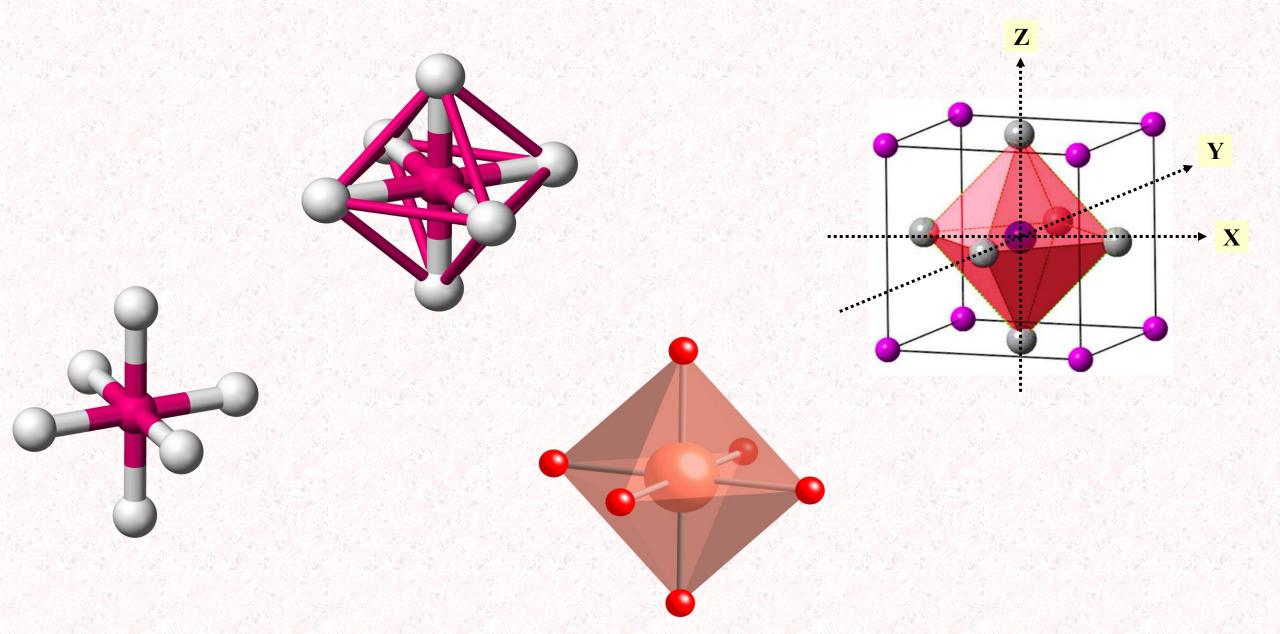
**Assistant Professor Chemistry** 

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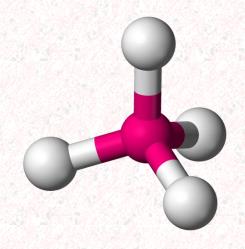
## CONTENT

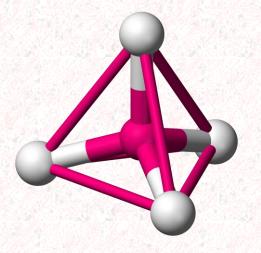
- Structure of an Octahedral complex
- Structure of a tetrahedral complex
- Structure of a Square planar complex

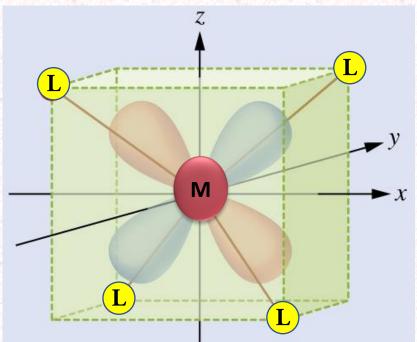
#### Structure of an Octahedral complex

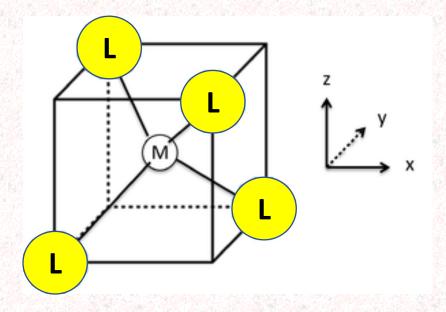


### Structure of a tetrahedral complex

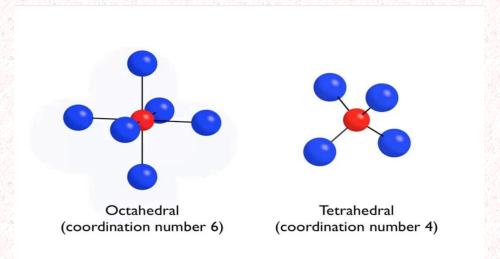


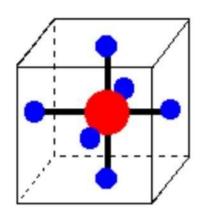




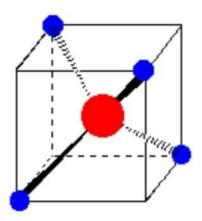


#### Combined Octahedral and Tetrahedral Structures:



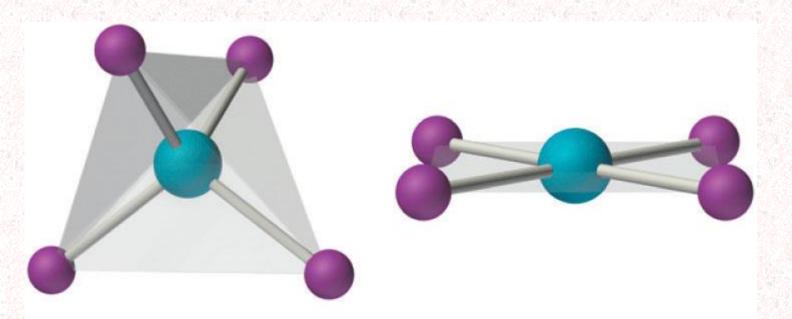


Octahedral complex in a cube. Ligands are on the centers of the cube faces.

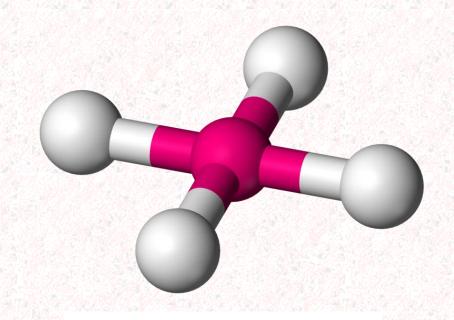


Tetrahedral complex in a cube. Ligands are on alternate corner of the cube.

#### Structure of a Square planar complex



Tetrahedral and square planar ML<sub>4</sub>



Square Planar ML<sub>4</sub>

