

LECTURE 31
COLOR AND MAGNETISM OF COORDINATION COMPLEXES

I. d-Orbital Splitting Diagrams for O_h and T_d Cases

II. Magnetism of coordination complexes

- A. Paramagnetic
- B. Diamagnetic
- C. Units
- D. Total spin quantum number, S
- E. Spin-only magnetic moment, μ
- F. High spin vs. low spin
- G. Spin selection rule
- H. State diagrams
- I. Pairing energy
- J. Effect of charge on Δ_o
- K. Effect of ligands on Δ_o