

LECTURE 33
LIGAND SUBSTITUTION REACTIONS: KINETICS

I. Rates for Water Exchange

- A. Labile
- B. Inert
- C. Henry Taube

II. Substitution in Metal Carbonyls

- A. Jahn-Teller effect

III. Reaction mechanism for dissociative substitution

- A. Limiting case for the dissociative path
 - 1. Exponential decay
 - 2. When $k_2[Y]$ is not $\gg k_{-1}[X]$

IV. Rate Law

- A. Integrated rate law