

## Department of Civil and Environmental Engineering Yoshimura Chihiro

## Aquatic Environmental Science

## 5. Dissolution and Kinetics

- 1. Dissolution & Precipitation
  - Solubility
  - Dissociation constant
  - Solubility product
  - pH and solubility
- 2. Importance of Rate of Reaction
  - Rate and Ratio
  - Half life
  - Time scale for different reaction
  - Streeter Phelps's equation
  - Equilibrium Constant
  - Equilibrium versus steady-state
- 3. Kinetics
  - Order of reactions
  - Factor influencing rate constant
  - Kinetics in environmental processes
- 4. Exercise