

Department of Civil Engineering
2012 Summer Semester
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Aquatic Environmental Science

7. Particle and colloid

1. Dissolution and deposition
 - Solubility curve
 - Solubility product
 - Solubility and pH
 - Solubility of metals
 - The rate of dissolution
 2. Size continuum of particles
 - Dissolved and particulate
 - Inorganic and organic
 3. Sediment
 - Particle sedimentation
 - Wash load, bed material load, suspended load
 - Sediment dynamics in rivers
 - Erosion and sedimentation
 - Dynamics of river channels
 4. Organic particles
 - DOM, FPOM, CPOM
 - Colloids
 - Humic substances
 - Size distribution of organic particles
 5. Solid - water interface
 - Chemical bonding
 - Adsorption
 - Adsorption isotherm
 6. Exercise
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