Pollutants in combustion

1) CO formation: partial equilibrium approximation
2) NO formation: Zeldovich, thermal mechanism
3) Dependence of CO consumption and NO formation on temperature.

Heterogeneous Kinetics

Adsorption, surface reaction and desorption

Catalytic chain

Example: Catalytic converter

Introduction to Electrochemistry

Current, reaction rate, electrochemical equilibrium

Butler-Volmer equation