

## **2.996 Fundamentals of Advanced Energy Conversion Lecture Memo**

**Lecture number: 12**

**Date: March 15<sup>th</sup>, 2004**

- **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**