

## 2.996 Fundamentals of Advanced Energy Conversion Lecture Memo

**Lecture number: 21**

**Date: April 26<sup>th</sup>, 2004**

- Changes in the utilization factor with respect to turbine inlet pressure
- Irreversibility analysis for a feed pump and the primary heat exchanger
- Optimization of Supercritical CO<sub>2</sub> Power Cycle
  - Efficiencies of various cycles
  - Various cycle losses
  - Thermodynamic optimization process in
    - A simple Brayton cycle with recuperation
    - Brayton Cycles with Reheat Recompression
    - Brayton Cycle with Intercooling