

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

**Lecture number: 25**

**Date: May 10th, 2004**

- Battery types: Primary, secondary and reserve batteries
- World battery production
- Major considerations in battery selection
- Fuel cell and battery voltages
- Voltage profiles of common battery systems
- Specific capacity of electrode materials
- Alkaline Zn/MnO<sub>2</sub> and lithium primary batteries
- Battery design
- Energy and power density of batteries
- Secondary batteries (Lead acid, Ni-Cd, NiMH and Lithium batteries):
  - Advantages and disadvantages
  - Applications
- Material degradation