An Introduction to Clean Energy Technology

Class Hour: Fri. 14:00-17:00
Room: E2-305

1. Introduction 1 week (2/24) (Chien-Yuh, Yang)
   Energy situation, Energy technology, Renewable energy

2. Solar Thermal Energy 1 weeks (3/3) (Chien-Yuh, Yang)
   Solar hot water system, Cooling system, Power plant

3. Hydrogen Economy 2 weeks (3/10, 3/17) (Steven Shy)

4. Photovoltaic 1 week (3/24) (Fu-Chu Chou)
   Crystalline solar cell, Thin film solar cell

5. Fuel Cell 2 weeks (3/31, 4/7) (Chung-Jen, Tseng)
   PEMFC, DMFC, SOFC


Midterm Examination (4/21) (Chou, Tseng, Shy and Yang)

7. Wind Power 2 weeks (4/28, 5/5) (Jiunn-Chi, Wu)
   Wind Energy and its Origins, Characteristics and Resources

8. Wind Power Site Visiting (5/12) (Yang and Wu)

9. Biomass Energy 2 weeks (5/19, 5/26) (Shu-San, Hsiau)
   Concepts for Biomass as an energy resource
   Energy conversion: combustion, pyrolysis, liquefaction and gasification
   Moving granular bed filter for hot gas cleanup

10. Hydrogen Production 2 weeks (6/2, 6/9) (Lih-Wu Hourng)
    Method of photo electrical chemical hydrogen production (PEC)

11. Geothermal and Ocean 1 week (6/16) (Chien-Yuh, Yang)
    Classification and Application
Final Examination (6/23) (Wu, Hsiau, Hourng and Yang)