



RENEWABLE ENERGY PROJECT

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OVERVIEW

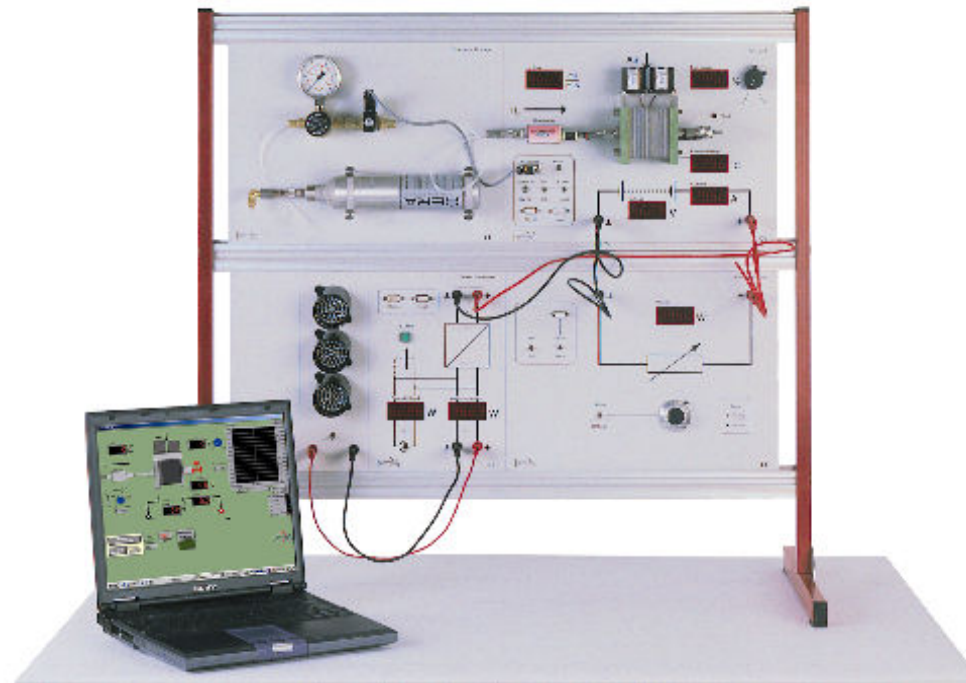
- CRITICAL ISSUE: Environmental friendly energy alternative which enables energy independence



PROCEDURE

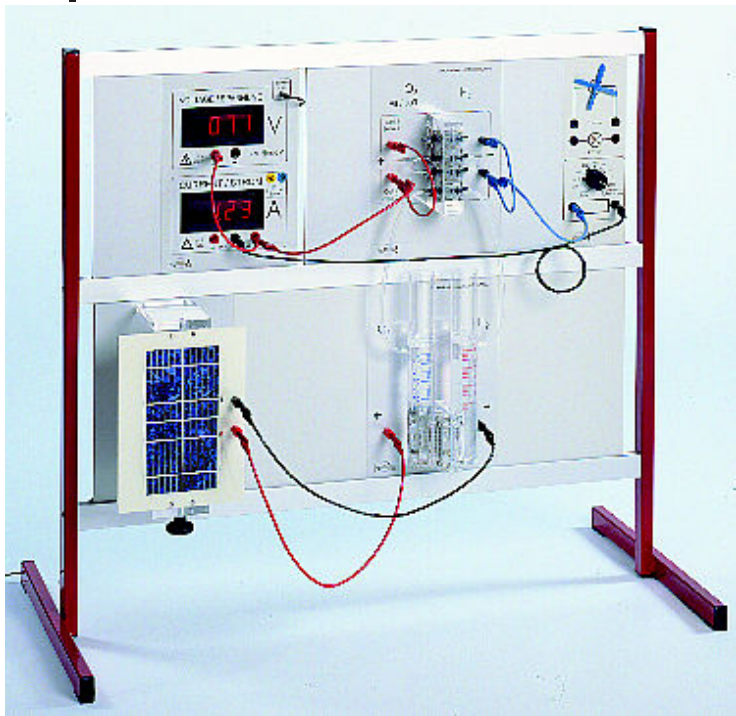
- Renewable energy technology related lectures
- Experiments following up.
- Relevant information on nanotechnology related to energy

Experimental Setup-HFC

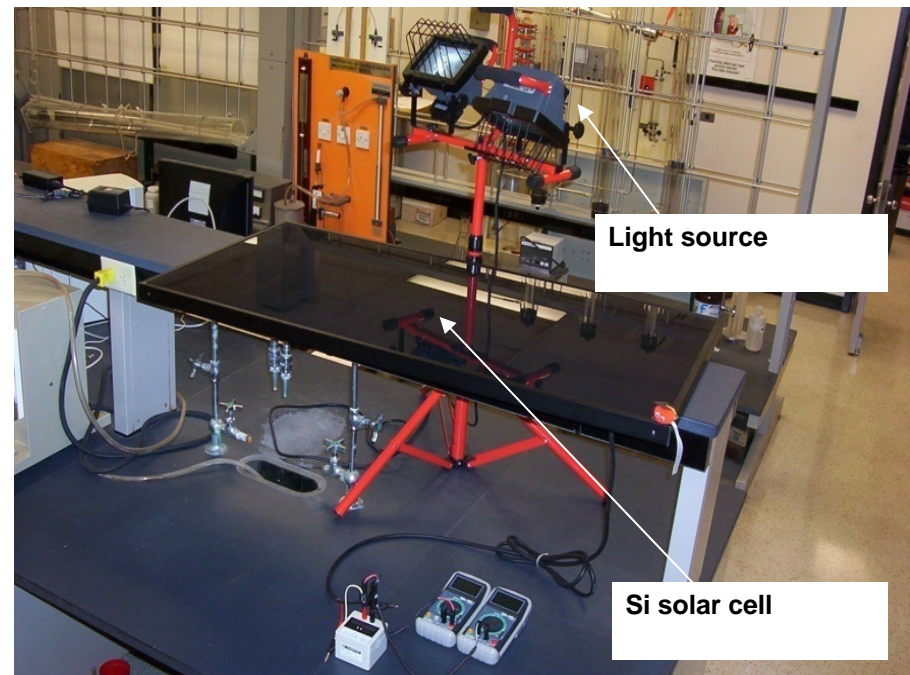


Proton Exchange Membrane
(PEM) hydrogen fuel cell

Experimental Setup-H2 Generation and Si Solar Cell



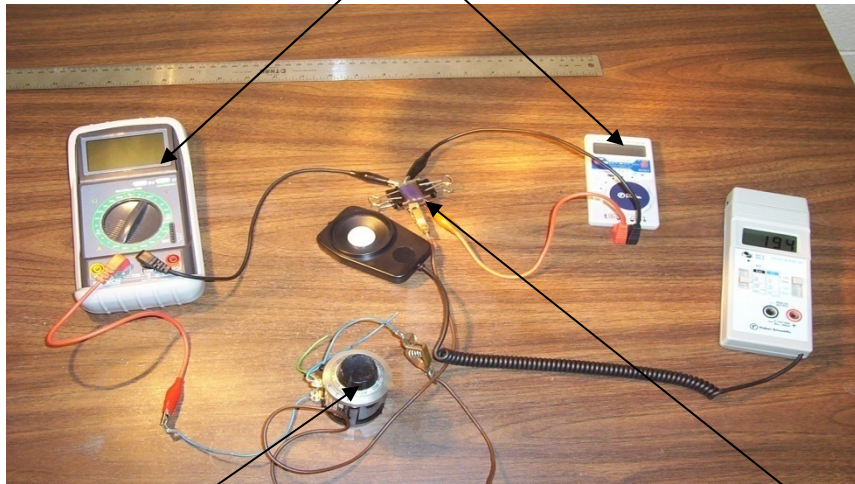
Hydro-Genius Professional System



Silicon Solar Cell

Experimental Setup-Dye Sensitized Solar Cell

Multi-electrometers



Variable resistor/load

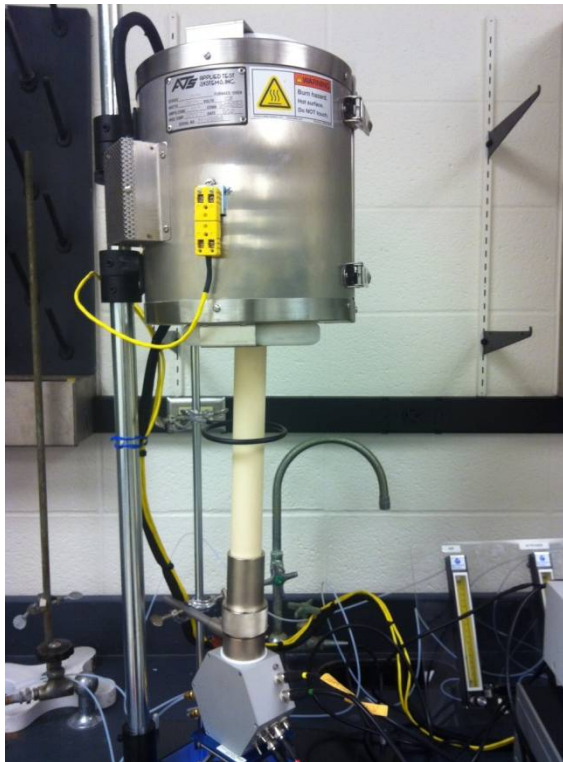
TiO₂ Solar cell



Dye Sensitized Solar Cell Kit
(DSSC1001)

Nanocrystalline Solar Cell

Experiment of Solid Oxide Fuel Cell (SOFC)



Solid oxide fuel cell



OUTCOME

- Both theoretical and experimental knowledge in environmentally friendly approaches for power generation
- Useful information and techniques that could be taken into teaching