

# CWSF 2012 - Charlottetown, Prince Edward Island



## Hao-Lun Hsu, Shih-Ting Hsu

### Thylakoid-Sensitized Solar Cell Using Shade Plants and Sunny Plants

**Challenge:** International

**Category:** Senior

**Region:** Taiwan, R.O.C.

**City:** Yilan, , Yilan County,

**School:**

**Abstract:** Shade plants live with little sunshine, but they still thrive. Therefore, we aim at discussing the Thylakoid-Sensitized Solar Cell of shade plants. The result indicates that among shade plants plants, *Callicarpa formosana* (Formosan Beauty-berry) is the best plant for cell. Its photoelectric conversion efficiency is up to 0.3%.

#### Biographies

Hao-Lun - I'm Hao-Lun Hsu, coming from Taiwan. I'm glad to visit Canada for a fantastic trip. My project is to research chloroplast membrane cells of undergrowth plants.

Undergrowth plants can live under big trees. There is just a little sunshine but they still thrive. So, we think that they could produce energy more efficiently. In our project, undergrowth plant cells are really more efficient. In the future, I will focus on how to prolong the life of cells. Besides, the project is really time-consuming. My partner and I spent half a year on it. Therefore, patience is necessary.

Shih-Ting - My name is Shih-Ting,Hsu ,and my English name is Guava.That is because oh a interesting story when I was seven-year-ago.I believe that I am a kind person and very easy to get along with.I hope that I can learn lots of things and make many friends in this fair.

#### Awards

#### Value

Gold Medal - International	
Sponsor: Youth Science Canada	
Total	\$0