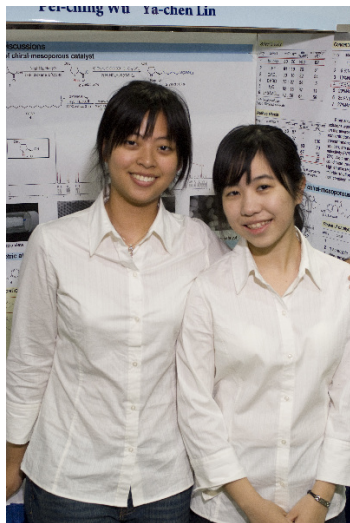


## CWSF 2009 - Winnipeg, Manitoba



### Ya-Chen Lin, Shanice Wu

#### Synthesis, Reactivity and Recycling of the Organic-inorganic catalyst

**Division:** International / None

**Category:** Senior

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

**City:** Taipei,

**School:**

**Abstract:** A solid supported chiral organocatalyst was readily prepared by co-condensation of surfactant and trans-4-hydroxy-L-proline derivative under basic conditions. The mesoporous material anchored chiral organocatalyst was used catalytically to catalyze asymmetric aldol reaction. High enantiomeric excess was obtained when 4-nitrobenzaldehyde was reacted with cyclohexanone catalyzed by this chiral catalyst. This catalyst can be used for up to three times under the same reaction conditions.

#### Biographies

**Ya-Chen** - My name is Jane. I came from Taiwan. I am 18 years old. I love to see movies and collect movie tickets. On the other hand, Our research is about organic chemistry.

**Shanice** - I'm Shanice. I'm a Gr.12 student living in Taiwan. My high school life consists of three major things: reading, Irish dance, and science. The reading part is the way to kill time, and Irish dance is my favorite activity. About the science part, actually, I hated chemistry before! There were too many recitals and calculations. I did this research just because I was assigned to. However, in the process of the experiment, I found that I was involuntarily in love with organic chemistry, especially the experiments. That's why I'm here and asking you to allow us to introduce our project!

#### Awards

#### Value

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

