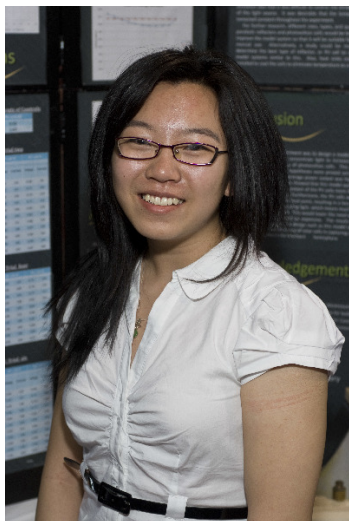


## CWSF 2010 - Peterborough, Ontario



### Joy Liu

#### A New Focus: Reflecting Towards Higher Power Output of Photovoltaics

**Division:** Life Sciences

**Category:** Intermediate

**Region:** Bay Area

**City:** Hamilton, ON

**School:** Westmount S.S.

**Abstract:** The objective of this project was to create a solution to the lack of sufficient irradiance in northern regions for solar power to be a major energy source. A model system was created and evaluated. It proved to be successful in concentrating light onto photovoltaic (PV) cells and increased the power output, thereby improving the performance of the PV system.

#### Biography

Hi, my name is Joy and I'm 15 years old. My religious view is Christianity. My main interests include visual art (graphic/digital art, anime/manga style and art in general), science and engineering, and karate. I love drawing, and sometimes I sell my art at anime conventions (it's a great place to meet new friends too!). My other passion is science, and I recently found an interest in engineering because of participating in science fairs. I've been doing karate for 4 years and have a black and red belt (the belt before black). I hope to pass my black belt grading sometime in the next year or maybe two. In the future, I want to become an environmental engineer because I want to make a difference in the world that will prolong for generations. My future plans for now are to major in environmental/civil engineering and learn Japanese to study abroad.

#### Awards

#### Value

The University of Western Ontario Scholarship	\$2 000
Silver Medallist - \$2000 Entrance Scholarship	
Sponsor: University of Western Ontario	
Silver Medal - Engineering - Intermediate	\$700
Sponsor: Youth Science Canada	
Total	\$2 700

