

## CWSF 2007 - Truro, Nova Scotia



### Mélanie Claire Girard

#### Sun and Wind can be Twinned

**Division:** International / None

**Category:** Junior

**Region:** Central Okanagan

**City:** Summerland, BC

**School:** École Entre Lacs

**Abstract:** This project aimed at improving the efficiency of a solar powered garden light by combining it with a wind turbine. Electric potential (EP) and current (EC) of solar panels were measured at different light intensities. EP and EC of motors with different propellers were measured at various wind speeds. A hybrid solar-wind power prototype was devised that can be easily assembled and used by consumers.

#### Biography

My name is Mélanie Girard. I am 13 years old and live in Summerland, BC. My after school activities include gymnastics, soccer and music. Currently I compete in Provincial Level two with the Springers Gymnastics Club in Penticton. At the end of April, I went to BC Gymnastics championships, ranking 15th all around. I am on the Penticton Pinnacles soccer team, a select team that trains twice a week. I play Royal Conservatory Grade 5 Violin at the Penticton Academy of Music and I also participate in an adult orchestra. When I have free time at home, I spend it with family and friends, listening to music and doing tricks on the trampoline in my backyard. I go to a Francophone school in Penticton called École Entre Lacs. Being bilingual is an important part of my education and Canadian heritage. I have won numerous awards in music festivals, school and gymnastics.

#### Awards

#### Value

The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Physical & Mathematical Sciences - Junior Sponsor: Encana Corporation	\$700
Total	\$2 200