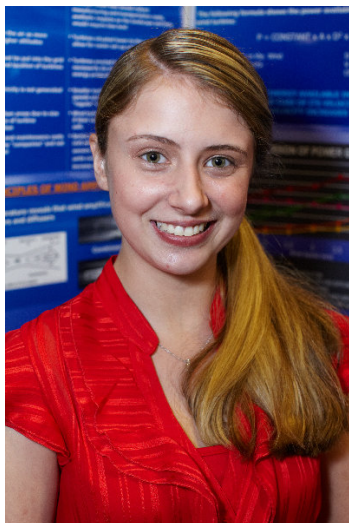


# CWSF 2012 - Charlottetown, Prince Edward Island



## Wind Amplification in a Multi-Stage System: Let's Amp Up the Power! Part 2

**Challenge:** Energy

**Category:** Intermediate

**Region:**

**City:** ,

**School:**

**Abstract:** Power generated by a wind turbine increases eight-fold when wind velocity is doubled. The wind amplification apparatus designed and built in 2011 was re-designed into a multi-stage configuration. Electricity generated was increased 2.70 times, with a maximum increase of 8.22 times. A "Dual Generator Turbine", which generates electricity both at the hub and around the rim, was tested in the multi-stage configuration.

Awards	Value
Excellence Award - Intermediate - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 300