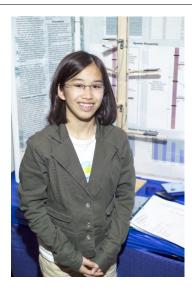




CWSF 2006 - Saguenay, Québec



Eden Full

The Nerdy Tree

Division: Engineering & Computing Sciences

Category:IntermediateRegion:Calgary YouthCity:Calgary, AB

School: Queen Elizabeth Junior Senior High School

Abstract: Picea Glauca (White Spruce) tree morphology was analysed to design a

photovoltaic solar panel system. The best-looking phenotypes were examined, and the tree's south and southwest sides were measured. The constructed system was based on the mathematical data collected. The system was compared to an average single-panel system with a rotating motor. Results proved this system generated 268% more power output in a

series circuit.

Awards	Value
AECL Award for Excellence in Science - Intermediate	\$750
Sponsor: Atomic Energy of Canada Ltd.	
George Fletcher Award - Intermediate	\$500
Sponsor: Canadian Council of Technicians and Technologists	
Natural Resources Canada (NRCan) Office of Energy Efficiency Award	\$500
Intermediate	
Sponsor: Natural Resources Canada (NRCan) Office of Energy Efficiency	
Petro-Canada Peer Innovation Award - Intermediate - Western Canada	\$200
Sponsor: Petro-Canada	
The University of Western Ontario Scholarship	\$1 500
Silver Medallist - \$1500 Entrance Scholarship	
Sponsor: University of Western Ontario	
Silver Medal - Earth & Environmental Sciences - Intermediate	\$700
Sponsor: Petro-Canada	
Total	\$4 150



