



## CWSF 2018 - Ottawa, Ontario



## **Alex Chan**

## Joint Solar Panel Cooling and Waste Heat Harvesting with a Stirling Engine

Challenge: Energy Category: Senior

Region: Frontenac, Lennox & Addington

City: Kingston, ON

**School:** Kingston Collegiate Vocational Institute - KCVI

**Abstract:** Today, solar panels are one of the cheapest forms of electrical generation,

and thus have become one of the most popular forms of energy generation. However, there are problems associated with the solar generation of electricity. This project seeked to design a new method of energy

generation, combining both solar panels and Stirling engines to solve many

of those problems.

## **Biography**

Hello, my name is Alex Chan and I'm a Grade 11 student in the full IB Programme at Kingston C.V.I. I have competed in science fairs for several years, and I am excited to be back again for my second CWSF! I was given the opportunity to attend the SHAD program last summer, and that's really where I first got the idea for my project. I attended the program at the University of Calgary campus and met many great people. Outside of school I also participate in DECA, which is like science fair but for business, and I play on my school's soccer and badminton teams. In the future, I look forward to taking a year off before attending university - hopefully in the field of science.

Awards	Value
Excellence Award - Senior - Bronze Medal	
Sponsor: Youth Science Canada	
Carleton University Entrance Award	\$1 000
Senior Bronze Medallist - \$1,000 Entrance Award	
Sponsor: Carleton University	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$3 000



