

# CWSF 2009 - Winnipeg, Manitoba



## Electricity From The Waste Heat of An Engine

**Division:** Health Sciences / Automotive

**Category:** Junior

**Region:**

**City:** ,

**School:**

**Abstract:** This project examines whether the waste heat of a small engine can be used to create usable electricity using Peltier modules and if this method could be applied to vehicles to replace alternators. A home-designed thermoelectric generator attached to a small engine was capable of making electricity but the design would not be practical to use in a vehicle to replace an alternator.

Awards	Value
Carlson Wagonlit Award - Junior Sponsor: Carlson Wagonlit Travel	\$500
The University of Western Ontario Scholarship Gold Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Engineering - Junior Sponsor: Youth Science Canada	\$700
Gold Medal - Automotive - Junior Sponsor: AUTO21	\$1 500
Total	\$6 200