



## CWSF 2016 - Montreal, Quebec



## The Graphene Enhanced S.W.I.F.T. Unit

Challenge: Resources Category: Junior

Region: City: School:

**Abstract:** The Solar Window Insulating Furnace Technology (S.W.I.F.T.) Unit was

developed to insulate windows against heat loss, generate electricity and heat rooms. The S.W.I.F.T. Unit is an inexpensive method of heating rooms lacking equator facing windows and therefore not heated through passive heating. Mechanical and electrical enhancements, such as the use of thermovoltaic cells and graphene-coated sheets, have been used to

improve the S.W.I.F.T. Unit.

Awards	Value
Canadian Artificial Intelligence Association Award - Junior	\$500
Sponsor: Canadian Artificial Intelligence Association	
Challenge Award - Resources - Junior	
Sponsor: Youth Science Canada	
Excellence Award - Junior - Gold Medal	\$250
Sponsor: Youth Science Canada	
Western University Scholarship	\$4 000
Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: Western University	
Total	\$4 750



