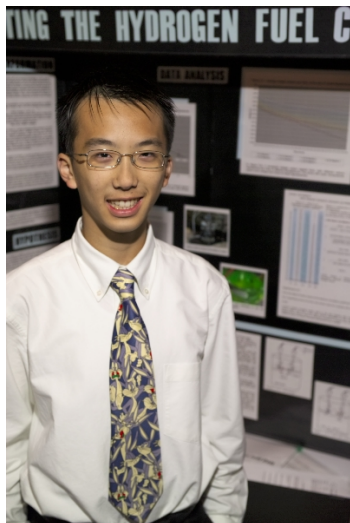


# CWSF 2005 - Vancouver, British Columbia



## Arthur Yip

### Heating the Hydrogen Fuel Cell

**Division:** Engineering & Computing Sciences

**Category:** Intermediate

**Region:** Greater Vancouver

**City:** Vancouver, BC

**School:** Sir Winston Churchill Secondary School

**Abstract:** By constructing a simple model of a hydrogen fuel cell with two platinum electrodes and sulphuric acid solution electrolyte, I investigated the effects of temperature on the reverse electrolysis effect, by heating (and also cooling) my model fuel cell. Unexpectedly, my results show increasing voltage outputs at lower temperatures.

Awards	Value
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Automotive - Intermediate Sponsor: AUTO21	\$300
Bronze Medal - Engineering - Intermediate Sponsor: Youth Science Foundation Canada	\$300
<b>Total</b>	<b>\$1 600</b>