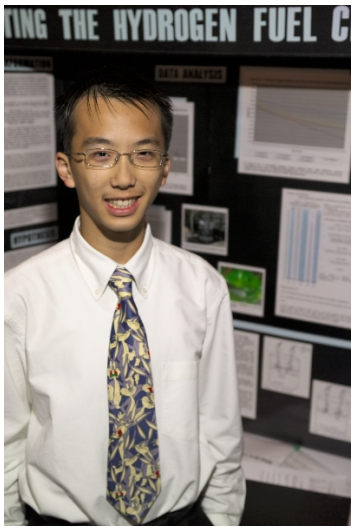
# CWSF 2005 - Vancouver, British Columbia




## 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<br>Bronze Medallist - $1000 Entrance Scholarship<br>Sponsor: University of Western Ontario | $1 000 |
| Bronze Medal - Automotive - Intermediate<br>Sponsor: AUTO21 | $300 |
| Bronze Medal - Engineering - Intermediate<br>Sponsor: Youth Science Foundation Canada | $300 |
| Total | $1 600 |



Youth Science Canada
PO Box 297
Pickering ON L1V 2R4
www.youthscience.ca / info@youthscience.ca
416-341-0040