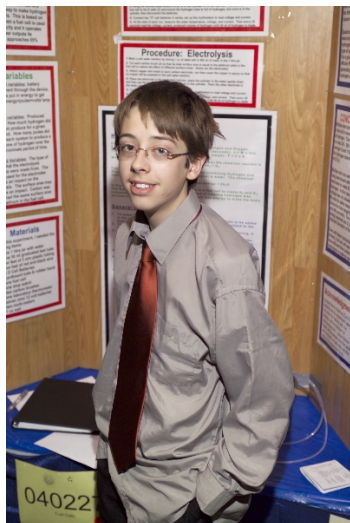


# CWSF 2006 - Saguenay, Québec



## Johnathan Krest

### Fuel Cells

**Division:** Health Sciences

**Category:** Intermediate

**Region:** Edmonton

**City:** Stony Plain, AB

**School:** St. Matthew Lutheran School

**Abstract:** This experiment determines if PEM fuels cells are more efficient and environmentally friendly than carbon electrode electrolysis apparatus when it come to creating hydrogen gas from water. Traditionally PEM fuel cells are used to create electricity from hydrogen and oxygen, but in this experiment the process is reversed. Electricity and water are used with a PEM fuel cell to create hydrogen.

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
Total	\$1 300