

# CWSF 2013 - Lethbridge, Alberta



## Jared Trask, Kaitlyn Stockley

### Biodiesel Production Can Be a Fishy Business

**Challenge:** Energy

**Category:** Senior

**Region:** Eastern Newfoundland

**City:** Conception Bay South, NL

**School:** Holy Spirit H.S.

**Abstract:** Globally, 38 million tonnes of fish waste are sent to landfills or dumped in the ocean and provide no economic value. Our project focused on producing a biofuel from fish waste and looking at antifreeze proteins native to our species of fish. This was done using a modified fish meal processing method for oil extraction and performing oil yield, cold flow and lipid analysis tests.

#### Biographies

Jared - In high school, my favorite subjects are Chemistry, Physics and Mathematics ? areas that will position me to pursue my education and career interests in the field of engineering. Based on my high academic achievement last year, I won a competitive Research-Inspired Student Enrichment (RISE) Award from the Research & Development Corporation to attend the University of Toronto's Da Vinci Engineering Enrichment Program (DEEP) for 4 weeks. That was both an education and cultural experience as I met people from all over the world. I have been fortunate to have experience in a range of university research labs from genetics to process engineeri...

Kaitlyn - I am a grade 12 student at Holy Spirit High School. I am involved in many different things such as The Duke of Edinburgh Awards Program, Public Speaking (Skills Canada, School and Community Competitions), Volleyball, Tutoring for Tuition...etc. I have been accepted for the Fall 2013 semester to attend Memorial University of Newfoundland, in hopes of becoming a doctor. The inspiration for our project came last summer when I worked at Memorial University's Women in Science and Engineering Program in a laboratory setting. I loved working on extractions involving different species of fish, so I wished to pursue this matter further. Future investi...

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$100
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 100</b>

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