

# CWSF 2014 - Windsor, Ontario



## Vicki Kleu, Austin Sawyer

### Oil RiDD'rs: Fully Biodegradable Booms for Oil Spill Recovery and Containment

**Challenge:** Environment

**Category:** Senior

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** Lambrick Park Secondary

**Abstract:** An inexpensive adsorbent boom that picks up over 32 mL of motor oil per gram of fibre was built. Approximately 90% of the adsorbed oil can be recovered. Residual oil can be washed out using canola oil. Heat of combustion tests done on soil near the buried fibre showed that the oil did not migrate with water movement in typical watering conditions.

#### Biographies

Vicki - My name is Vicki Kleu and I am a grade 12 student at Lambrick Park Secondary School. I've lived in Canada, more specifically Victoria, BC., for seven years. My South African accent, though still present, is now mingled with a Canadian drawl. This is my sixth year participating in science fair and my fourth time attending the CWSF. I now spend more waking hours in a lab during science fair season than in my own house! When not in the lab, I can be found actively engaged in leadership projects or dancing. Though my career choices are pointing me toward being a pediatrician, focusing in oncology or cardiology, I am also passionate about the heal...

Austin - My name is Austin Sawyer and I am from Victoria British Columbia. This year my partner and I were inspired to investigate the possibilities in the field of oil spill clean up. This stemmed from the proposed construction of the Northern Gateway Pipelines, making large oil spills an extreme possibility in our own backyard. Ever since my first Canada Wide in grade eight I have been memorized by science. Science fair is a phenomenal way to find your true passion and change the world through invention. Although loving science, sports and music are also a focal points in my life. I enjoy playing soccer, basketball, track and field, and guitar. I wo...

#### Awards

#### Value

The Manning Innovation Achievement Award Sponsor: Ernest C. Manning Awards Foundation	\$500
Excellence Award - Senior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$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>\$2 600</b>

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