

## CWSF 2007 - Truro, Nova Scotia



### Laurissa Christie

#### "McFries to McFuel" Biodiesel

**Division:** Health Sciences / Automotive

**Category:** Junior

**Region:** Bluewater

**City:** Tara, ON

**School:** Arran-Tara E.S.

**Abstract:** Biodiesel was manufactured with margarine oil. The combustion of biodiesel resulted in lower emissions than commercial and agricultural diesel fuels. The energy output of the various fuels was comparable. Vehicle performance tests were conducted to compare a 50% biodiesel blend with commercial diesel. A Vericom was used to measure the acceleration, horsepower, distance, and speed of the vehicles. The results were similar for both fuels.

#### Biography

Laurissa is a grade 8 student at Arran-Tara Elementary School. She lives in rural midwestern Ontario with her family on a broiler chicken and red deer farm. She loves to figure skate and proudly represents her local club at competitions. Laurissa enjoys spending time with her family snowmobiling in the winter and in the summer at the cottage swimming, boating, tubing, and riding the sea-doo. She also enjoys traveling to visit her aunts in southern California. She recently has done some acting with the local theatre group. In 2005 Laurissa was the teen trebuchet Canadian "pumpkin chuckin" champion and currently is the teen catapult Canadian "pumpkin chuckin" champion. Her interest in biodiesel was sparked by her father while he was reading an agricultural magazine article on renewable energy. In the future she hopes to attend university and pursue a career in the energy industry.

#### Awards

#### Value

The University of Western Ontario Scholarship Gold Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Engineering - Junior Sponsor: Youth Science Foundation Canada	\$300
Gold Medal - Automotive - Junior Sponsor: AUTO21	\$1 500
<b>Total</b>	<b>\$4 800</b>