

# CWSF 2006 - Saguenay, Québec



## Robyn Thom, Thomas Sun

### Poly(vinyl chloride) Bioplastifiers

**Division:** Engineering & Computing Sciences

**Category:** Senior

**Region:** Greater Vancouver

**City:** Vancouver, BC

**School:** Sir Winston Churchill Secondary

**Abstract:** PVCs are dangerous to the environment, and also pose human health risks through the leaching of DEHP, a primary plasticizer. We replaced DEHP with safe, readily-available vegetable oils and tested for plastic performance. From our results, safflower oil appears to be a safe, biodegradable DEHP replacement.

Awards	Value
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
The University of Western Ontario Scholarship Gold Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Earth & Environmental Sciences - Senior Sponsor: Petro-Canada	\$700
Gold Medal - Automotive - Senior Sponsor: AUTO21	\$1 500
<b>Total</b>	<b>\$7 700</b>