

CWSF 2009 - Winnipeg, Manitoba



Biography

Currently a grade 9 student at St. Joseph's Morrow Park, Stephanie Gaglione is a talented, highly motivated, and athletic young woman. Constantly involved in activities, she is a member of the Leadership Ministry, school newspaper committee, math club, debate team, and volunteers at the local library on a teen advisory committee. Stephanie enjoys a variety of sports, and excels in competitive figure skating, swimming, cross country and alpine skiing, team sports, cross country, for which she placed 7th in Toronto, and track and field in the 3000 m event. Even so, she has maintained a 98% academic average in both semesters of this year, and enjoys science, particularly biology and chemistry, math, English, French, and economics, and loves to read. Stephanie participates in music, playing the French Horn and grade 6 piano. Over the summer, Stephanie takes pleasure in canoe tripping in Algonquin Park and will be exploring the wilderness on a two week canoe trip this summer. In the future, Stephanie seeks to enter the field of science, perhaps microbiology or engineering.

Stephanie Gaglione

Disappearing Oil:Enhanced Bioremediation of Oil-Contaminated Soil in Bioreactors

Division	Engineering & Computing Sciences / Environmental Innovation
Category:	Intermediate
Category.	Internetiate
Region:	Toronto
City:	Woodbridge, ON
School:	St. Joseph's Morrow Park C.S.S.
Abstract:	To effectively reduce the oil concentrations in highly contaminated soil, lab
	scale bioreactors were constructed containing varying amounts of oxygen,
	phosphorus, and nitrogen, as well as acclimated soil bacteria.
	Environmental factors were controlled and a method of oil quantification
	was employed. A tremendous reduction in contaminant concentration and
	the presence of microbial mate denoted the offectiveness of enhanced
	the presence of microbial mais denoted the enectiveness of enhanced
	bioremediation in ex-situ bioreactors.
	Awarda

Awards	Value
Petro-Canada Peer Innovation Award - Intermediate - Ontario South	\$200
Sponsor: Petro-Canada	
The University of Western Ontario Scholarship	\$1 500
Silver Medallist - \$1500 Entrance Scholarship	
Sponsor: University of Western Ontario	
Silver Medal - Earth & Environmental Sciences - Intermediate	\$700
Sponsor: Petro-Canada	
Total	\$2 400



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