



## CWSF 2012 - Charlottetown, Prince Edward Island



## **Laurence Emery**

## Bioindicators Reveal the Most Eco-Friendly Road Salt Part 2

Challenge: Environment

Category: Junior

Region: Peterborough
City: Peterborough, ON
School: Queen Mary P.S.

Abstract: Currently, road salt is an environmental concern in Ontario. There are many

types and likely some are better for the environment than others. I hypothesized "Organic Melt", made mostly from beet juice, would perform the best. Using snails, daphnia and freshwater hydra, I investigated seven de-icers at three different concentrations. Measuring death, birth and

respiration rates, this experiment revealed some are more "Environmentally

Friendly".

## **Biography**

I'm Laurence Emery a grade 8 student at Queen Mary PS, Peterborough, Ontario. The first Regional SF I entered was in grade 2 with a project called, "The Eggsperiment." It wasn't a prize winner but the rewarding experience encouraged me to participate each consecutive year. I have interests in various disciplines of science which are reflected in the projects I have done, they include: physics, mechanical applications, human physiology, chemistry and now environmental studies. As I progressed and saw the older students' projects I hoped I could present a high quality experiment that would send me to the CWSF. This is the second year I'm eligible and my dream has come true again! At school I volunteer at the library and make the daily announcements, my riddle of the week is very popular. I also compete on the Track Team and tend to our award-winning butterfly garden. At home I build model airplanes and I'm passionate about fish. I am the neighborhood expert on aquariums. For years I have participated in the Canadian cross country skiing program. I'm also a Scout, figure skater, triathlon participant, air cadet and an avid canoe tripper. I hope for an amazing experience this year.

Awards	Value
Challenge Award - Environment - Junior	\$500
Sponsor: Encana Corporation	
Excellence Award - Junior - Gold Medal	\$1 500
Sponsor: Youth Science Canada	
Western University Scholarship	\$4 000
Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: Western University	
Total	\$6 000





