

## CWSF 2013 - Lethbridge, Alberta



### Eric McMullen

#### Black Ice

**Challenge:** Innovation

**Category:** Junior

**Region:** Simcoe County

**City:** Barrie, ON

**School:** St. Monica's E.S.

**Abstract:** This project invented a detection system to alert drivers of potential transparent ice on roads. This innovation's purpose was to design a speed limit sign that alerts drivers of dangerous, icy roads in applicable climates. When moisture was present and the thermometer circuit read below 0° Celsius, the L.E.D. display illuminated. Driver awareness of black ice could prevent road related accidents and promote road safety.

#### Biography

My name is Eric McMullen. I am a 13-year-old Grade 8 student from St. Monica's School in Barrie, Ontario. I am very active with hockey and cross-country skiing in the winter and soccer, tennis and football in the summer. Inspiration for my project came when I saw a car skid on black ice; I thought, What could I do about this? I designed and constructed a detection system that detects black ice. This may save many people's lives in the future and I hope it does. My motto is "Don't be afraid to try new things". And that is just what I did when I designed my model.

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040