



CWSF 2010 - Peterborough, Ontario



Alison Underwood

A Concrete Solution

Division: Physical & Mathematical Sciences

Category: Junior

Region: Avon Maitland-Huron Perth

City: Wingham, ON School: Turnberry P.S.

Abstract: During tire recycling, tire crumb and steel are removed; the remaining

material is called Tire Fluff. In an attempt to find an end use for this material it was added to concrete. Tire Fluff from the Ambient and Cryogenic

recycling processes were tested in varying amounts and compared to traditional concrete. Concrete with tire fluff exhibited a unique ductile

characteristic not found in traditional concrete.

Biography

Alison Underwood is 13 years old and a grade 8 student at Turnberry Central Public School. She lives on a farm just outside Wingham, Ontario with her parents and three older brothers. Alison has been a member of many school sports teams including soccer, basketball, and volleyball and also plays hockey. In her spare time she enjoys babysitting, volunteering in her community and spending time with her friends. A Concrete Solution, is Alison's second science fair project and it won ?Best in Fair' at the Avon Maitland regional science fair this spring. Alison's future plans include attending high school and university, where she has aspirations of becoming a pediatrician or bio-medical engineer.

Awards	Value
The University of Western Ontario Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Western Ontario	
Bronze Medal - Environmental Innovation - Junior	\$300
Sponsor: EnviroExpo, Presented by VIA Rail Canada	
Total	\$1 300



