

ESPC 2014 - Windsor (Ontario)



Callum Mitchell

The PipeLime: a Novel Solution to CO2 Emissions from Cars

Défi: Innovation

Catégorie: Sénior

Région: Northwestern Ontario

Ville: Thunder Bay, ON

École: Sir Winston Churchill C.V.I.

Sommaire: This project focuses on developing a new vehicle part or exhaust attachment to convert carbon dioxide from vehicle emissions into environmentally-friendly substances before it enters the atmosphere using a chemical reaction with Calcium Hydroxide ("hydrated lime"). This reaction was found to be effective. The main design goal is to allow the user to add their own reactants while ensuring that residual products are easily removed.

Biographie

I'm a grade 11 student at Sir Winston Churchill High School in Thunder Bay, Ontario. I am in the IB (International Baccalaureate) programme and am working towards acquiring the full diploma. I love music, and have taken up musical performance as a hobby. I perform regularly in my school band and as a solo pianist. Someday, I hope to perform or compose music as a part-time or full-time job. After high school, I plan to attend the University of Waterloo and get a degree in Systems Design Engineering, and perhaps start my own company one day. I am also into game development, and have started up a game design club at my school. I love math and enjoy taking part in regular math competitions. Currently, I am partaking in the Caribou Cup: a series of online math contests, of which I have written four and gotten first in my age group on two of them. Some of my other recent achievements include winning first place in the 2013 Lakehead Math Contest, getting the highest mark in Ontario on my grade 6 Conservatory Canada piano exam, and winning a bronze medal at the 2013 Canada-Wide Science Fair.

Prix

Valeur

Prix d'excellence - Senior - Médaille de bronze	100,00 \$
Commanditaire: Société de gestion des déchets nucléaires	
Bourse d'admission de l'Université d'Ottawa	1 000,00 \$
Médaille de bronze, sénior ? Bourse d'admission de 1 000 \$	
Commanditaire: Université d'Ottawa	
Bourse d'études de Western University	1 000,00 \$
Médaille de bronze - Bourse d'admission de 1 000 \$	
Commanditaire: Université Western	
Total	2 100,00 \$