



ESPC 2010 - Peterborough (Ontario)



Biographie

Currently in the pre-International Baccalaureate Program at Korah Collegiate in Sault Ste. Marie, Karl enjoys being active in his school, whether it is through student council, environmental commitees, sports teams, or the Duke of Edinburgh's Club. Outside of school, Karl enjoys cross-country ski racing and triathlon racing. He enjoys challenges, both academic and athletic, and prides himself in being able to design creative solutions to problems. Karl has always been interested in scientific inquiries and the environment. He loves being outdoors hunting, fishing, kayaking, hiking, camping, and just walking in the forest. He plans on pursuing a career in environmental sciences.

Karl Zimmermann

Can Hydrogen Peroxide Aid in the Efficiency of the Combustion of Ethanol?

Division:	Sciences physiques et des mathématiques
Catégorie:	Intermédiaire
Région:	Algoma Rotary
Ville:	Echo Bay, ON
École:	Korah Collegiate & Vocational School
Sommaire:	This experiment tested to see if adding various concentrations of hydrogen peroxide to ethanol could increase the energy output during combustion. This is based on the oxidizing qualities of hydrogen peroxide, in the hopes of determining a more efficient version of the environmentally-friendly fuel, ethanol. The experiment was conducted using a calorimeter, and 11

different ratios of ethanol to hydrogen peroxide.

Prix	Valeur
Bourse d'études de l'Université Western Ontario	1 000,00 \$
Médaillé de bronze - Bourse de début d'études de 1 000 \$	
Commanditaire: Université Western Ontario	
Médaille de bronze - Innovation environnementale - Intermédiaire	300,00 \$
Commanditaire: EnviroExpo, présenté par VIA Rail Canada	
Total	1 300,00 \$



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