

CWSF 2007 - Truro, Nova Scotia



Llew Falla

CH4 Optimization of BioWaste

Division: Biotechnology / Automotive

Category: Junior

Region: Lambton County

City: Sarnia, ON

School: St. Anne E.S.

Abstract: In this study, experiments were done with home designed equipment to determine the optimum conditions for generating methane gas from dairy cow manure by varying the temperature, time, and water dilution. Experiments were also done to investigate the effect that changes to the pH of the waste have on gas generation rate and the amount of gas produced.

Biography

My name is Llew Falla and I reside in Sarnia, Ontario. I am a grade 8 student at St. Anne Elementary School. At school, I am involved in soccer, volleyball, hockey, and cross-country as well as the following clubs: robotics, chess and tech. In the Sarnia Lambton community I have volunteered with respite services with Community Living Sarnia, and I have volunteered as a goalie coach with lacrosse for the Sarnia Minor Athletic Association (SMAA). My hobbies and interests include reading adventure books and playing strategy games on the computer. I am a goalie for travel hockey and travel lacrosse as well as a goalie for SMAA soccer. My awards and achievements are in the sports arena, notably lacrosse and hockey, as well in the scientific field. This is my second trip to the Canada Wide Science Fair. My project "CH4 Optimization of Bio-Waste" is an investigation of the optimum conditions for generating methane gas from dairy cow manure. I am a hard-working young man who aspires in a scientific or engineering career.

Awards

Value

The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Automotive - Junior Sponsor: AUTO21	\$300
Silver Medal - Biotechnology & Pharmaceutical Sciences - Junior Sponsor: Rx&D Health Research Foundation	\$700
Total	\$3 500