

## CWSF 2010 - Peterborough, Ontario



### Thomas Leckey, Andrew Crews

#### Comparison and Production of Biofuels

**Division:** Health Sciences

**Category:** Senior

**Region:** Peterborough

**City:** Wooler, ON, Trenton, ON

**School:** East Northumberland S.S.

**Abstract:** The purpose of this investigation was to produce four biofuels and to rank them in order of usefulness as replacements for fossil fuels. Syngas was ineffective due to energy costs. Although small-scale ethanol production was possible, it could not be justified due to energy costs. Biogas was readily prepared from waste. Biodiesel was the superior fuel; it was easily produced and it powered an automobile.

#### Biographies

Thomas - My name is Thomas Leckey. I am 18 years old, and I am currently in my second year of grade 12 at East Northumberland Secondary School. I have always been interested in making the planet a greener place. Living on a farm has really given me insight to the real world and a kinesthetic view on the world around me. I believe this has influenced my interest to pursue an education and career in Engineering. I am currently a busy individual. Much of my time is spent at the school with after school activities: Jazz band, Concert Band, Science Club, School Musical and Science Fair Project work. My greatest interests are music and science. I have been ...

Andrew - My name is Andrew Crews and I am terrible at writing about myself. I tend to grow excessive amounts of hair, because my family has a history of baldness and my motto is "have it while you can" I am the ninth generation of farmers in my family and my interest in biofuels was sparked by a trip I took to Europe with my father and the Progressive Dairy Operators to investigate their use of biogas, and to work on developing the industry in Canada. I am an 18 year old second time through grade, because last year I had no idea what I wanted to do. Now I have decided on an engineering degree, and have basically set my mind on UOIT to pursue this.

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