Katherine Teeter

Alternative Current: The Third World Electrical System

Challenge: Energy
Category: Junior
Region: Bluewater
City: Markdale, ON
School: Macphail Memorial E.S.

Abstract: This project investigated the potential of soil, water and organic matter to produce renewable electricity. Over seventy tests were conducted using combinations of these substances. The most power was produced by compacted raw soil saturated with creek water. Observations indicated that the reduction-oxidation reactions were enhanced by bacterial metabolism. A cost-effective electrical generator was designed to improve the health and welfare of third world communities.

Biography
Hi, my name is Katherine Teeter. I am a grade eight student attending Macphail Memorial Elementary School in Flesherton. This is my sophomore competition at CWSF and my third science fair project. I am passionate about alternative energy sources. I got the idea for my project when I realized that third world communities are in need of simple, frugal renewable energy sources created from resources that are available to them. I like to learn new things and I strive to succeed at all attempted endeavors. I play the clarinet in band, and I play piano in the RCM Examinations at a grade five level. In my spare time I like to read, write, make jewelry, compose music, take photos of nature, create home-made cards and play outside with my dog. I play girls hockey in the winter and my team has done very well at provincials. In the summer, I play fastball in a co-ed league. I have attended Olympia Sports Camp for fastball where I won the team player award. Science fair has and will continue to change my life. Future endeavors may include medicine, veterinary medicine or microbiology.

Awards	Value
Excellence Award - Junior - Bronze Medal Sponsor: Nuclear Waste Management Organization	$300
Western University Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: Western University	$1 000
Total	$1 300

CHARLOTTETOWN 2012