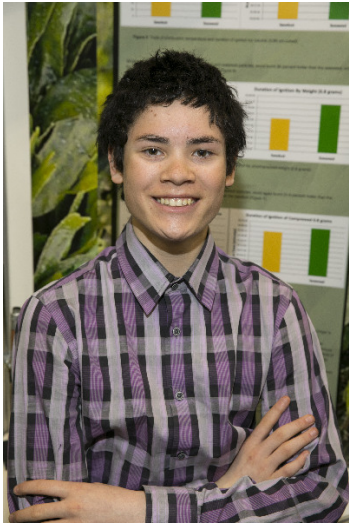


CWSF 2017 - Regina, Saskatchewan



William Campbell

Sea Fuel

Challenge: Energy

Category: Intermediate

Region: Kivalliq

City: Arviat, NU

School: John Arnalukjuak High School

Abstract: Communities north of the tree-line are dependent on unrenueable fossil fuels for heat and electricity. Research into renewable biomass fuels focuses on fuels within temperate climates supporting agriculture and forestry. In Nunavut seaweed washes up annually in great abundance. This study found that dried seaweed can sustain ignition and produce mean temperatures of 84.80C compared to 123.90C for wood making seaweed a viable biomass fuel.

Biography

My name is William Campbell, I am 14 years old and in grade 9. I live in a town called Arviat, Nunavut and go to school at John Arnalukjuak High School. I am intrested in science and love to play sports such as soccer, volleyball, badminton, and basketball. I got my inspiration of my project when my family and I went down to the coast of Arviat and my brothers and I started throwing dried seaweed into the fire. The seaweed started to smolder so I wanted to further investigate how seaweed burned. In the future I would like to add different materials into the seaweed and turn it into pellets.

Awards

Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000