



CWSF 2016 - Montreal, Quebec



Biography

My name is Nattan Telmer, I am a grade eight student at Arbutus Global Middle School in Victoria, BC. I speak English, French, and Portuguese. I speak Portuguese because part of my family is from Brazil where I was born. I go there every year and live in a rural fisherman's village on the north eastern coast where there are beaches and coral reefs and manatees. I play competitive soccer, racket sports, ski in BC's amazing mountains, sail with the racing team in Victoria, and of course surf and skim board in Brazil's warm waters. Brazil is where I first learned to love the outdoors and sports and where I became incredibly curious about nature and science, including about how to generate electricity because the power there often fails. I have won several awards in different competitions including in music and creative endeavors in and outside of school. I have participated in science and math fairs since grade four. I was very happy to win first overall in the science fair this year and love the topic of electricity.

Nattan Telmer

Thermo-electric generators to charge electronic devices in the wilderness

Innovation
Junior
Vancouver Island
Victoria, BC
Arbutus Middle School
A device was designed to use thermal electric generators (TEGs) to exploit the temperature difference between natural waters and ambient air to charge batteries in the wilderness. It was tested under three climatic conditions, subtropical, temperate, and nordic. It performed best in summertime nordic conditions but can be further designed and upscaled to output significant power in most natural environments.

Awards	Value
Challenge Award - Innovation - Junior	
Sponsor: Youth Science Canada	
Excellence Award - Junior - Gold Medal	\$250
Sponsor: Youth Science Canada	
Western University Scholarship	\$4 000
Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: Western University	
Total	\$4 250



Youth Science Canada PO Box 297 Pickering ON L1V 2R4 www.youthscience.ca / info@youthscience.ca 416-341-0040

