

# CWSF 2019 - Fredericton, New Brunswick



## Nattan Telmer

### A Flexible TEG Prototype (FlexiTEG) for Wearable Electronics

**Challenge:** Innovation

**Category:** Senior

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** Mount Douglas Secondary

**Abstract:** The goal of this project is to engineer and test a prototype flexible Thermo-Electric Generator that can power wearable electronics. A Thermo-Electric Generator is a device that turns a heat difference into electricity. The final product was able to power a standard analog or digital watch and with improvements a smart watch as well.

#### Biography

My name is Nattan Telmer. I'm a grade 11 student attending Mount Douglas Secondary School. Currently I am a competitive rower and spend a large portion of my time training. In the future I plan on entering an engineering school and becoming a material or chemical engineer. My inspiration for this years project came from my previous projects as they utilize the same devices. This experience allowed me to identify some problems which I could solve. I am very excited to continue my work and already have multiple ideas on what I can do to further improve Thermo-Electric Generators. I think that anyone who wants to work on a science fair project should start thinking about a concept long before the fair and write down all of their ideas because at least one of them will most likely be pretty good.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 000</b>