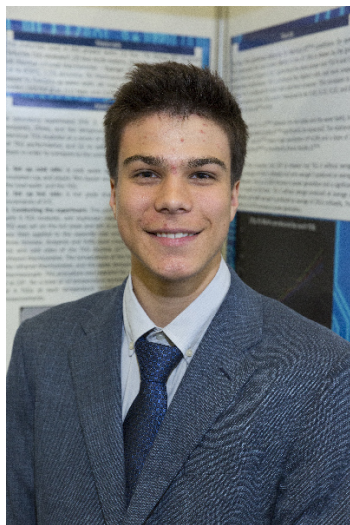


CWSF 2018 - Ottawa, Ontario



Nattan Telmer

Defining Characteristics of Bismuth Telluride TEGs

Challenge: Innovation

Category: Intermediate

Region: Vancouver Island

City: Victoria, BC

School: Mount Douglas Secondary

Abstract: My project is about determining the faults with Thermo-Electric Generators (devices that turn a heat difference into electrical power). And then by analyzing these faults determine a way to improve the device. In my case I insulated them with Aerogel, a material which has half the conduction rate of air. By doing this I increased their output power therefore making them a more viable technology.

Biography

My name is Nattan Telmer. I'm a grade 10 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.