

CWSF 2016 - Montreal, Quebec



Dylan Peil

Active Solar Tracker

Challenge: Innovation

Category: Intermediate

Region: West Kootenay & Boundary

City: Nelson, BC

School: L V Rogers Secondary

Abstract: This year I continued to develop a way to track the sun and aim a parabolic dish at it to harness powerful rays in order to generate electricity or to heat my home. I have developed a substantial amount of prototyping to be implemented for a full scale frame and dish apparatus.

Biography

I am a grade nine student from Nelson BC. I started out doing this project in grade seven as a way to prove that clean and green solar power doesn't have to be created by solar panels using expensive photovoltaics that contain rare earth minerals and lots of carbon heavy plastics. I think truly green energy means reducing the carbon footprint and also searching for the most efficient way to do it. I have been working on various models of tracking the sun and have settled on a simple and effective system that uses very few expensive parts, and makes due with the lowest power consumption possible. Sun trackers increase the efficiency of solar collectors by 30% in most cases. I plan on completing a full scale working version later this year and I'll be able to finally create some real power with my dish very soon. I think youths should be more involved in finding scientific solutions to the world's problems because we're the ones who have to live the longest in it! Finding ways to improve lives while improving our impact on the world is why I did this, and why you should get involved too.

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