

CWSF 2013 - Lethbridge, Alberta



Ann Makosinski

The Hollow Flashlight

Challenge: Energy

Category: Intermediate

Region: Vancouver Island

City: Victoria, BC

School: St Michaels University School - Senior

Abstract: Using four Peltier tiles and the temperature difference between the palm of the hand and ambient air, I designed a flashlight that provides bright light without batteries or moving parts. My design is ergonomic, thermodynamically efficient, and only needs a five degree temperature difference to work.

Biography

Hi, my name is Ann Makosinski. I go to St Michaels in Victoria, and am in grade 10. I got the inspiration for my project when I found out humans are actually like 100 watt walking light bulbs. We have so much thermal energy in us, so why aren't we using it? For further investigations, I plan to make my flashlight smaller, brighter, and more efficient. My advice to future Science Fair participants would be to try to think of something original, because you usually get the most out of it, as you have to learn everything from scratch. Other than experimenting with electronics, I enjoy reading, acting, doing English accents, telling puns, eating cheese, field hockey, and editing and directing movies/plays. I have gotten second place in my category in grade 6 for the Vancouver Island Regional Science Fair, first place in grade 7, third place overall in grade 9, and this year I placed 2nd place overall. I also have won numerous awards (and cash!). My notable experiences in my short life so far have been meeting Joshua Bell, eating mealworms, and of course, discovering the world of innovation.

Awards

Value

Challenge Award - Energy - Intermediate Sponsor: Youth Science Canada	\$750
Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: Western University	\$4 000
Total	\$5 450