

CWSF 2015 - Fredericton, New Brunswick



Emily Moseley

Watt a Waste: Boundary Layer Effect + Axial Flux Generator = Clean Energy

Challenge: Energy

Category: Junior

Region: Central Okanagan

City: Summerland, BC

School: KVR Middle School

Abstract: My innovation is a device that can create electricity using household water pressure, in order to harvest energy from water that is already being used. I constructed an axial flux generator using a Tesla turbine to spin magnets, using the boundary layer effect of the running water. My device successfully created measurable electricity. The water pressure was unaffected by passing through the device.

Biography

My name is Emily and I am a grade 7 student at KVR Middle School (Penticton, B.C.) in the Late French Immersion program. I live in Summerland, B.C. I am very active in my school's Me to We club and I even got to attend We Day this year. I am on my school's basketball, volleyball and track teams. I enjoy camping, crafts and community service with the Penticton Pathfinders. I am an active participant in my school's Environment Club. The reason I chose my science fair project is that I'm very concerned about preserving the environment by finding alternative energy sources.

Awards

Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000