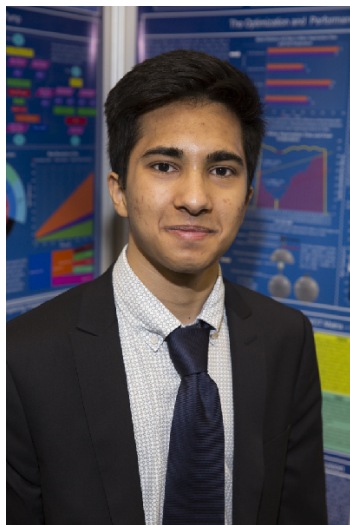# CWSF 2016 - Montreal, Quebec

Dhrumil Shah

Improving the Accessibility and Applicability of Water for Human Necessities

Challenge: Resources
Category: Intermediate
Region: Wood Buffalo
City: Fort Mcmurray, AB
School: Westwood Community High School

Abstract: A water pump was developed that can operate without supervision, electrical energy, human-powered mechanical energy, or a water stream. Additionally, a water vaporizer was developed which can vaporize water in 7.14s with 300W of input electricity. Together, the system was 946% more effective than current distillation heating wire technology, 38x faster than current coal/natural gas based home heating systems, and provided plenty irrigation water.

Biography

I am currently 16 years old, and I attend Westwood High School, which is located in Fort McMurray, Alberta. I enjoy playing multiple sports; however, I particularly excel at soccer. I play for my city's travel soccer team, and we have successfully competed at numerous provincial and Western Canadian tournaments. I also enjoy volunteering and benefiting my city. I am a member of MACOY and TAB, which is the mayor's youth advisory council and local library advisory board, respectively. I also regularly volunteer at the hospital, and local events. Academics are also important to me; for the past three years, I have received the Highest Average Award in my large school. I have successfully participated at my local science fair 6 times. I spend most of my free time developing my inventions, and I have recently been focused on inventing a new water pump and boiler system that can improve desalination, home heating, irrigation, and electricity generation systems.

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