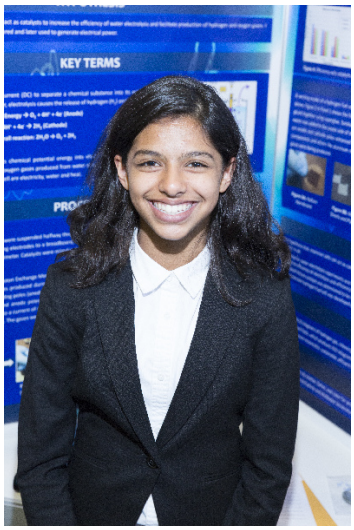
CWSF 2018 - Ottawa, Ontario



Neha Gupta

Using Catalysts to Increase Water Splitting Efficiency in a Homemade Fuel Cell

Challenge: Energy
Category: Junior
Region: Bay Area
City: Dundas, ON
School: Sir William Osler
Abstract: The goal of this project was to test chemical salts that would increase efficiency of water electrolysis and fabricate a device to harness energy from hydrogen that was produced by splitting water. A Cobalt Nitrate solution had the highest catalytic properties. A fuel cell prototype was designed and successfully tested. After data analysis, hydrogen was proven to be efficient, sustainable and clean source of energy.

Biography

My name is Neha Gupta, and I am a grade 8 student at Sir William Osler Elementary School in Dundas, Ontario. This is my second CWSF. I am excited and looking forward to the fun-filled week! I love school, math, and science being my favorite subjects. I am a competitive swimmer and competitive runner outside of school. Also, I play volleyball and basketball. My favorite pastimes are reading, singing, watching TV, playing musical instruments like the flute. My love for science began since I was a little girl. I enjoy exploring new concepts and ideas, hoping to find solutions to large-scale problems. I believe that each one of us has the power to change the world positively. My advice to other students who are interested in science fairs is to chose something that they are passionate about and to stay on their path despite the various obstacles that can appear.

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