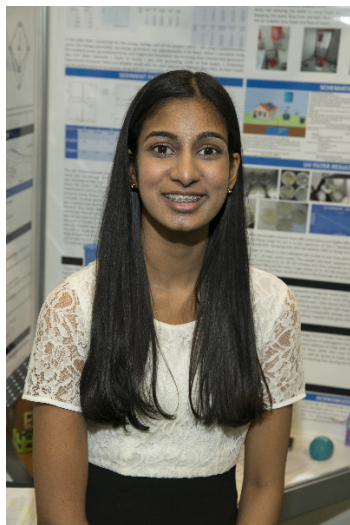


# CWSF 2017 - Regina, Saskatchewan



## Sahana Kalidindi

### Solar Potential Energy Storage & UV Filter Hybrid

**Challenge:** Resources

**Category:** Intermediate

**Region:** Windsor

**City:** Windsor, ON

**School:** Massey S.S.

**Abstract:** This is a hybrid system that produces electricity using solar photovoltaic means and stores it in the form of potential energy. Simultaneously, excess totally dissolved salts will be removed using a RO process. To decrease the large sums of people in equatorial areas suffering from diseases caused by lack of clean water a UV filter using natural sunlight to remove pathogenic microorganisms has been created.

#### Biography

My name is Sahana Kalidindi, I'm an 9th grade student at Vincent Massey Secondary School. This is my 3rd Regional Science Fair and my 2nd CWSF. My inspiration for my project began in the 7th grade when I realized harm inflicted upon our environment is only increasing as we use non-renewable energy sources and store them using gas-emitting batteries. Then in grade 8 and 9 I realized the amount of people suffering from diseases such as Fluorosis and Salmonella. When I went to India, I saw the large sum of people who drank water from unsanitary resources. To help stop three issues through one system, I created the S.P.E.S. & UV Filter Hybrid. My plans for the future include meeting up with local professors and researchers in India over the summer to expand my knowledge on this topic and incorporate Biomass into my project. Apart from science fairs, I have a passion for the arts, such as traditional Indian dance and playing the piano. At school, I'm privileged to be part of the Debate team and Science Olympiad team. Sports I like to play and watch include basketball, tennis, and swimming.

#### Awards

#### Value

|   |         |
|---|---------|
| Excellence Award - Intermediate - Silver Medal<br>Sponsor: Youth Science Canada                                 |         |
| Western University Scholarship<br>Silver Medallist - \$2000 Entrance Scholarship<br>Sponsor: Western University | \$2 000 |
| Total   | \$2 000 |