

# CWSF 2017 - Regina, Saskatchewan



## Jaslin Ghotra, Azin Dolatabadi

### A Seed-E Alternative to Water Treatment

**Challenge:** Environment

**Category:** Senior

**Region:** Southeast Alberta

**City:** Medicine Hat , AB, Medicine Hat, AB

**School:** Medicine Hat High School

**Abstract:** This project investigated the use of Moringa oleifera seeds in water treatment by itself and in combination with filtration. These seeds act as a coagulant as they are composed of positively charged proteins that bind to negatively charged pathogens in water. This system can be utilized in locations where purified water is not accessible, such as third-world countries, as the materials are easily attainable.

#### Biographies

Jaslin - My name is Jaslin Ghotra and I am 17 years old attending Medicine Hat High School in grade 11. I have participated at Science Fair Regionals with Azin for 3 years, but this is our first year attending CWSF. We both love the idea of engaging and helping people around us, which is why we are so determined to build a water treatment system that will allow for better health in third-world countries. After school I volunteer at the Medicine Hat Regional Hospital, as well as I am a part of the Royal Canadian Air Cadets, and I also take lessons to play the guitar. At my school I am a part of the Rotary Interact Club. I enjoy playing several differen...

Azin - My name is Azin Dolatabadi and I am 15 years old attending Medicine Hat High School in grade 10. This is my third year doing a Science Fair project on water purification with Jaslin. However this is our first year going to CWSF. This year we were awarded best overall and best environmental science project in our age group. On my free time I volunteer at the Medicine Hat Regional Hospital and Saamis Immigration. I am also a part of the Rotary Interact Club at my school. I enjoy playing sports, including badminton and swimming. After school, I am taking classes to become a lifeguard, and pursuing my passion for the piano.

#### Awards

#### Value

Canadian Stockholm Junior Water Prize - Senior Sponsor: Canadian WEF Member Associations, the Canadian Water and Wastewater Association, and Jacobs	\$300
Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 300</b>