

# CWSF 2016 - Montreal, Quebec



## Philip Kawalec

### Cavendish Clones: A Solution to Sustainable Water Filtering

**Challenge:** Environment

**Category:** Senior

**Region:** Winnipeg Schools

**City:** Winnipeg, MB

**School:** Sisler High School

**Abstract:** My project focused on creating a sustainable water filter to extract iron and calcium from water using banana peels as the main filtering agent. I found that the peels were effective in tackling water quality issues such as brown and hard water, caused by iron and calcium, respectively. As well, I have developed several prototypes of filters that use the peels to filter effectively.

### Biography

My love for science has always been an integral part of my life: it stretches from the science books that I read as a child to my current work with my research projects. Of course, my perception of science has changed drastically over those years as well. Whereas before I thought science to be a simple and linear subject, I now realize that it is a mixture of experimentation, calculation, trial-and-error tactics, and determination. Many are the times that I have spent weeks trying to solve a problem in my project; each time I tried a solution, I hit a brick wall. However, with determination, I broke through those brick walls each time and derived solutions to those problems. For me, determination and persistence do not only restrict themselves to the scientific part of my life. I am a committed track and field athlete, leader and founder of Sisler's Political Youth (a youth group at my school), volunteer at my local hospital, and AP student. In my spare time I love to spend time with my friends and visit my local gym, both of which let me release some steam; after all, healthy body, healthy mind!

### 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
Total	\$2 300