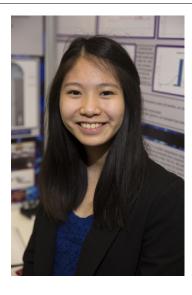




## CWSF 2016 - Montreal, Quebec



## Joanne Zichen Peng

Go With the Flow: Continual Monitoring of Pollutant Filtration

Challenge: Environment
Category: Intermediate
Region: Regina
City: Regina, SK

School: Campbell Collegiate

**Abstract:** In 2014, the drinking water in the city of Flint had been contaminated with

lead. An alternative method of collecting water was proposed and tested using the Peltier effect. Samples from a polluted water source were tested after various filtration/purification systems for organic pollutants, bacteria, and TDS. The discovery was that continuous testing of water could provide

an accurate, real time measurement of water quality.

## **Biography**

Joanne Zichen Peng is a Grade 10 student currently enrolled in the I.B. Program at Campbell Collegiate in Regina, Saskatchewan. She has an interest in science, as well as business, music performance, and visual arts. As the student leader of her school's ACT Team, VP of Sponsorship in the Business Club, and Assistant Concertmaster of the South Saskatchewan Youth Orchestra, Joanne is extremely dedicated to and involved in her extracurricular activities. She is also currently pursuing her ARCT in violin through the Royal Conservatory of Music. Through her experience with music performance, she has won the provincial gold medal three years in a row, as well as numerous scholarships in music festival for multidisciplinary excellence. She has also attended the Meadowmount School of Music for the past two summers. In addition, Joanne enjoys business-related activities, by competing in national case competitions, as well as attending and planning business events. She is also well versed in the academic field, receiving the highest grade point average award in both elementary and high school. Joanne plans to pursue either music performance, law, medicine, or entrepreneurship after graduation.





