

## CWSF 2019 - Fredericton, New Brunswick



### Yashvi Juneja

#### **Cold Current Event: Predicting Changes in Ocean Circulation as Glaciers Melt**

**Challenge:** Environment

**Category:** Junior

**Region:** Waterloo-Wellington

**City:** Waterloo, ON

**School:** Kitchener Waterloo Bilingual School

**Abstract:** This experiment is used to mimic the effect of melting glaciers in the northern latitudes as global warming is occurring. Oil was used to mimic ocean water and candle heat was used to create a density difference to create a current. To mimic melted glacier water, a hairdryer in its cold-setting was used. Temperature fluctuations and changes in convection cell diameters over time were noted.

#### Biography

My name is Yashvi Juneja and I am a 14 year old, grade 8 student at the Kitchener Waterloo Bilingual School in Waterloo, Ontario. My family is from India, however I was born in Halifax, Nova Scotia, and my family and I moved to Waterloo when I was three years old. Both my parents are in the medical field so I developed an interest for science early on. I've always enjoyed reading about topics that interest me and enriching my understanding on the current and major, past and present events going on around the world. While browsing the Internet, I came across a video that mentioned how global warming could possibly affect the ocean's currents and I wanted to learn more. This project certainly sparked an interest for predicting changes the world will undergo due to global warming. For those looking into doing a project, think of a project idea that will not only show off your knowledge but that will shine light on important implications that may change the ways we lead our day to day lives.

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040