



CWSF 2017 - Regina, Saskatchewan



Selina Zhou

Changes in Volatile Organic Compounds Emission Under Stressed Conditions

Challenge: Health Category: Senior

Region: Greater Vancouver
City: North Vancouver, BC
School: Collingwood School

Abstract: This project attempts to look for a relationship between human mental

stress level and biogenic volatile organic compounds(VOC) emission similar to that of plants. Measurements were taken both in group environments and individually. Results suggest a correlation between stress level and VOC emission, but also demonstrate great interpersonal differences in emission

level.

Biography

My name is Selina Zhou and I'm a grade 11 student from Collingwood, West Vancouver. I am an active member of my school's science club and enjoy going to competitions with my team. Besides science, I am passionate about art and giving back to my school community through working with the student arts committee and writing in our art publications Arts Mag. In my free time, I enjoy drawing, photography, table tennis, piano, and working on random projects. My project was inspired by the people around me who often complain about stress, which leads me to wonder if there's an easier way to measure people's stress level. I plan on continuing this project by expanding sample size, and if data is supportive, by developing an actual instrument. What I have learned through this project is that you shouldn't be afraid of not having enough knowledge to do what you want, because you can learn so much along the way.

Awards	Value
Excellence Award - Senior - Bronze Medal	
Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$2 000





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