

ESPC 2013 - Lethbridge (Alberta)



Nicole Schmidt

Double Bubble, Boil and Trouble

Défi: Découverte

Catégorie: Junior

Région: Calgary Youth

Ville: Calgary, AB

École: F. E. Osborne School

Sommaire: Researching the process of cavitation by altering the liquid conditions that impact the stages of bubble formation and implosion; and experimentation with the toroidal bubble phase. The liquids are changed thermodynamically and by varying viscosity and density through the addition of NaCl. To apply the components of the Rayleigh-Plesset equation to further understand the dynamics of cavitation bubbles in different liquid conditions.

Biographie

My name is Nicole; I am a junior-high student from Calgary. I really love science because it opens worlds of discovery and application. This is my first Canada-Wide Science Fair and I have participated in three Calgary Youth Science Fairs. My past projects have been on fluid dynamics, which I find both intriguing and challenging. This year I furthered my knowledge of fluid mechanics, by investigating cavitation. I love the performing arts: drama, guitar and dance. At school, I am involved in yearbook and directing the musical production. Writing, sculpting, and illustrating are how I spend free time. In the past, my art has been featured on two magazine covers and in a museum. I believe art is a great tool for teaching science. I learned about this connection when I created a science poster illustrating different types of energy production. This poster was awarded first-place at the "North American Air and Waste Water Management Conference". In the future I hope to have a PhD and become a science photographer. I am ecstatic to be attending the Canada Wide Science Fair. This is a wonderful opportunity to promote science to Canadians and encourage youth to pursue their curiosity.

Prix

Valeur

Prix d'excellence - Junior - Médaille d'argent Commanditaire: Sciences jeunesse Canada	300,00 \$
Bourse d'études de Western University Médaille d'argent - Bourse d'admission de 2 000 \$ Commanditaire: Université Western	2 000,00 \$
Total	2 300,00 \$