

CWSF 2012 - Charlottetown, Prince Edward Island



Candace Brooks-Da Silva

Quick! Sound the Alarm: Rescuing Objects From A Non-Newtonian Fluid

Challenge: Innovation

Category: Junior

Region: Windsor

City: Windsor, ON

School: Lakeview Montessori School

Abstract: Oobleck, a colloidal dispersion of cornstarch in water, with dilatant properties similar to quicksand was tested to discover if sound frequency could rescue a submerged object. Variables tested were water to cornstarch ratio (1:1.5 and 1:2), wave type (sine, square, and triangle), wave frequency (20 to 40 Hz), object shape (cube, sphere, square-based pyramid, and disk), and weight (10 g to 50 g).

Biography

Candace is a dreamer who sees the world in a unique way and who makes surprising connections. She believes possibilities are endless and absolutely within reach of a 12 year old armed with dedication and determination. She is a playwright and actress whose first bilingual play "Marie Antoinette" was performed by her school this year, and whose classmates anxiously await the next installment of her latest novella. She is also a championship speller who is proud to be representing her region at the Spelling Bee of Canada's Ontario Provincial Championship on May 6th, and who first represented her school at a CanSpell Spelling Bee at the age of 10. Candace was also 10 when she won her first school science fair, and she is exceedingly pleased to represent Lakeview Montessori and the Windsor region at the Canada-Wide Science Fair this year in Charlottetown, Prince Edward Island. In addition to science, Candace loves attending operas, learning languages and instruments, kayaking, interior camping, traveling, and exploring everything from shipwrecks to pyramids.

Awards

Value

Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 700