

# CWSF 2007 - Truro, Nova Scotia



## Mark Stothers

### Feel The Flow 2: Microbubbles

**Division:** Health Sciences / Automotive

**Category:** Senior

**Region:** Greater Vancouver

**City:** Surrey, BC

**School:** Lord Tweedsmuir Secondary

**Abstract:** In the past Engineers have struggled to decrease ship resistance by 1% or less, by means of new ship hull designs. "Feel The Flow 2: Microbubbles" uses microbubbles to create a boundary layer between the ship hull and water to attempt to reduce drag by 20%. A 2.4m drag tank was constructed in my basement for testing, statistics were used in the treatment of data.

### Biography

My name is Mark Stothers, and I am a grade 11 student living in Surrey, BC, attending Lord Tweedsmuir secondary school. Throughout high school I have had a 4.0 GPA, and recently scored 98% on my Math 12 provincial examination. I am also taking Calculus 12 this semester. This is my fifth year participating in the Greater Vancouver Regional Science Fair, and my second year heading to the CWSF (I attended last year's fair in Saguenay, Quebec). In grade 7 I began competing in the GVRSF, and have been addicted ever since. Sports that I am involved in include Badminton, Floor Hockey, Track, and Curling (for the past seven years). This year I skipped my curling team to first place in my block. I have now been playing trumpet for the past five years, after having an amazing band teacher in grade 7. I have won numerous outstanding instrumentalist awards at my school. I also help younger math students at my school in math tutorials on Tuesday and Thursdays, in addition to being involved in the students council. Academic teams I am involved in include the Physics Olympics, Kwantlen Science Challenge, and the Math team at my school.

### Awards

### Value

International Summer School for Young Physicists Award Sponsor: Perimeter Institute for Theoretical Physics	\$2 500
<b>Total</b>	<b>\$2 500</b>