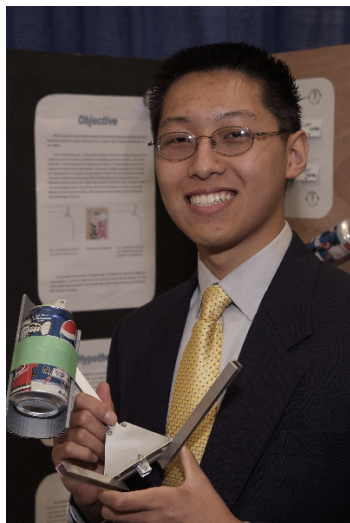


# CWSF 2007 - Truro, Nova Scotia



## Freeman Lin

### Trapped - Reducing Trapped Fluids in an Aluminum Beverage Can

**Division:** Engineering & Computing Sciences / None

**Category:** Senior

**Region:** South Fraser

**City:** Surrey, BC

**School:** Semiahmoo Secondary

**Abstract:** My experiment shows results that suggest a slight uniform compression on the rim underneath the opening of a standard aluminum beverage can will reduce the average trapped liquids at 45 degrees by 0.25mL. This could mean an overall reduction of 50 million liters of waste fluids per year that would have to be processed during the can's final recycling stage process (reduction in energy consumption).

#### Biography

I immigrated to Canada from Beijing, China when I was 10. Currently I am in Grade 11 of the IB diploma program at Semiahmoo Secondary. The program is challenging but that's what life is all about! I love the sciences, in particular Biology because I think that living organisms represent the closest thing we know to the perfect machines. I love to build anything mechanical. In my spare time, I'm involved in building Radio Controlled cars, airplanes and boats. This hobby gave me the materials and skills needed to build the apparatus used in my experiment. My other extracurricular activities include range (rifle marksmanship), computer 3D design, website design, conceptual art, and biking. I am a member of the Royal Canadian Air Cadets. Through the amazing program I earned my Glider Pilot license when I turned 16. This summer I will once again go through another scholarship program to earn my Private Pilot license for single-engine aircrafts. I love the freedom of flight and hope to pursue a career in aeronautical or aerospace engineering. As for the future, things could change, but I am working to attend an Ivy League university and major in engineering.

#### Awards

#### Value

Honourable Mention - Earth & Environmental Science - Senior	\$100
Sponsor: Petro-Canada	
<b>Total</b>	<b>\$100</b>