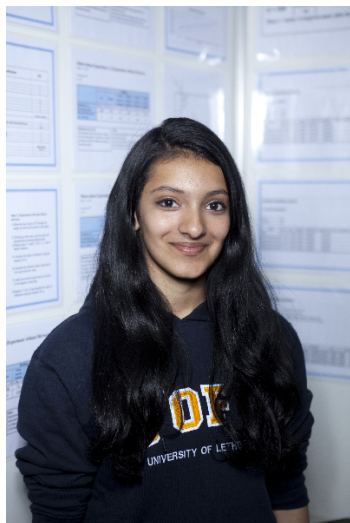


# CWSF 2013 - Lethbridge, Alberta



## Devika Vishwanath

### Refracting Rays

**Challenge:** Discovery

**Category:** Intermediate

**Region:** South Fraser

**City:** Delta, BC

**School:** Seaquam Secondary

**Abstract:** Red Lasers are ideal for precision measurements. They have the same wavelength, same phase, diverge very little and scatter less than other visible wavelengths. I used it to measure the refractive index of solutions with different salinities. I ended up with some innovative methods of increasing accuracy, derived an equation for the angle of refraction, and established an empirical relationship between salinity and refractive index.

### Biography

My name is Devika Vishwanath. I am in grade nine at Seaquam Secondary in Delta, BC. I participated in National Science fair last year as well, by winning a gold in my region. In fact I started doing the science fair in grade seven. The school district also selected me to participate in "Math Stretch" and "Math Celebrations". I find Math and Science extremely interesting and I especially love Physics. My other loves are music and dance. I play the piano and the flute, which gave me opportunities to play in my school band and in my community orchestra. I was the music award winner in my elementary school as well. I have been learning Indian classical dance for nine years now and I do stage performances. My other interests include hiking and reading. I have also been in student council and have volunteered for The Heart and Stroke Foundation. My goal is to become an Astrophysicist. The secret of doing a great science project is blending your crazy ideas with systematic methods. Do not just solve your problems; solve them in ways that have never been tried before.

### Awards

### Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100