

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