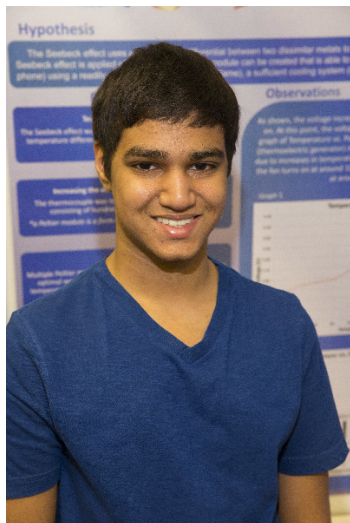


# CWSF 2014 - Windsor, Ontario



## Priyank Patel

### You're Hot and You're Cold: Using the Seebeck Effect to Produce Usable Energy

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Lambton County

**City:** Sarnia, ON

**School:** Northern C.I. & V.S.

**Abstract:** The goal of this project is to create a viable method of converting heat from readily available sources into usable electricity. This technology can be used in remote areas or in the case of emergency situations to charge a dead cell phone, or to power an LED(s). The designed device will be cost effective (less than \$70), simple, compact, and efficient.

#### Biography

My name is Priyank Patel and I am a student at NCIVS in Sarnia, ON. I have a passion for science, which has driven me to participate in the Science fair. I plan to pursue a career in the field of science through post-secondary school and later. The muse of my project was an article published in The New York Times, reporting on the severe lack of electricity in third world countries. I decided that I would create a method of producing usable electric energy from an easily attainable resource, to solve for this deficiency. After creating my project, I have plans to expand upon it to make it a more marketable product, and perhaps have it as a selling product one day. As a science fair participant myself, I would strongly recommend participating in a local science fair, as it is a great learning experience with lots of opportunities.

#### Awards

#### Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$1 100</b>