

## CWSF 2016 - Montreal, Quebec



### Alec Krawciw

#### Graphene: The Next Generation of Printed Circuits

**Challenge:** Innovation

**Category:** Senior

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** Mount Douglas Secondary

**Abstract:** Graphene was discovered in 2004 and has since been actively researched due to its strength and conductive properties. In this project, the conductive, and capacitive effects of this material are explored using a less expensive method of fabrication: graphene oxide laser reduction.

#### Biography

My name is Alec Krawciw and I am a Grade 11 student at Mount Douglas Secondary in Victoria, BC. I have been involved in science fair since Grade 6. I have done various projects relating to energy and engineering. I am also very involved in robotics through FIRST Tech Challenge. My team has qualified for the world championships for two years in a row. Outside of science, I also play the piano and the viola and I play in a string quintet. I was inspired to do this project because of the recent flood of new discoveries related to graphene. I want to continue researching graphene and reduced graphene oxide to continue trying to make printed circuits. Some advice I would give those doing a project next year would be to keep experimenting with your project even if what you discover is not exactly what you set out to do.

#### Awards

#### Value

Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$2 000</b>