

# CWSF 2016 - Montreal, Quebec



## Maximo van der Raadt

### Graphene Based Batteries/Supercapacitors

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Calgary Youth

**City:** Calgary, AB

**School:** Webber Academy

**Abstract:** Graphene is a single atom thick layer of carbon arranged in a honeycomb-like lattice, and is an excellent conductor of electricity. This project aims to create graphene based batteries/supercapacitors using nano-graphite and micro-graphite through mechanical exfoliation, as well as to observe the changes caused by different electrolyte solutions in a series of tests.

#### Biography

My name is Maximo van der Raadt, and I am a grade nine student at Webber Academy from Calgary, Alberta. I am a diligent student with a passion for both math and science. I especially enjoy learning about new technology that has the potential to alter how we perceive the world. This year, my science fair project is about graphene based batteries and supercapacitors. At the CYSF (Calgary Youth Science Fair) I won a gold medal, the Schulich School of engineering second prize, and the Lafarge Science, Technology and Science award. I have participated at the CYSF every year since I was in grade 6, however this is my first year to have the opportunity to participate at the CWSF. I am very thankful for this opportunity and I can't wait to meet people who share my interests in math and science!

#### Awards

#### Value

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