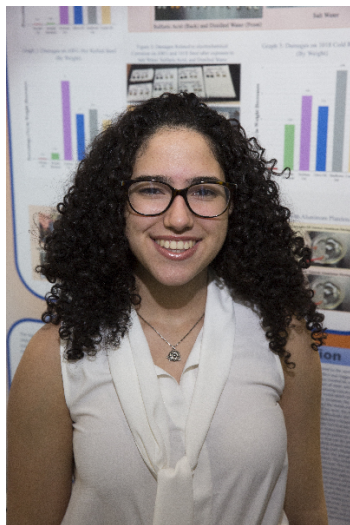


# CWSF 2019 - Fredericton, New Brunswick



## Christina Hanna

### Eco-Friendly Solutions Preventing Redox Reactions for Economic Sustainability

**Challenge:** Discovery

**Category:** Senior

**Region:** Bay Area

**City:** Oakville, ON

**School:** King's Christian Collegiate

**Abstract:** I developed an application for oils, that would be ideal coatings, for metals such as steel to reduce corrosion. It is very interesting because it saves the nation's economy from all the costs, damages and repairs related to the effects of corrosive environments on those metals. The methods used for this investigation were friendly for the environment, unlike most non-rust solutions found in today's market.

#### Biography

My name is Christina Hanna, a grade 11 student attending King's Christian Collegiate in Oakville, Ontario. I am very enthusiastic about new opportunities and am currently privileged with being heavily involved in my community. I have been truly blessed with numerous experiences including being a competitive swimmer, being a section leader in various choirs, being a "Prefect leader" at school, involvement in the music council, involvement in church, and more. My project was greatly inspired by an economic crisis within today's society directly linked with grand sums used for the restoration of infrastructures due to the depleting effects of corrosion. Further investigations would definitely include developing an application for commercial use in the future so that the benefits of this solution would be promoted, maximizing resistivity and reducing Redox reactions. I am definitely not an expert but if asked for advice in correlation with doing a project, I would definitely recommend finding a project that either solves a world issue that affects you on a personal level, or to consider doing a project on something that you are very passionate about.

#### 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>