

# CWSF 2017 - Regina, Saskatchewan



## Noha Shehata

### A Novel Way to Recycle Shrimp Shells into Biodegradable Plastic

**Challenge:** Innovation

**Category:** Senior

**Region:** Eastern Newfoundland

**City:** St. John's, NL

**School:** Holy Heart High School

**Abstract:** As the stability of the environment begins decreasing due to factors like climate change and waste production, it becomes more important to adapt our lives to it. This project aims to create an environmentally friendly plastic as an alternative to the harmful plastic that is being produced on a mass scale.

#### Biography

My name is Noha Shehata and I am a grade 11 student living in St. John's, Newfoundland. My favorite past times include volleyball, writing and also volunteering in my community. Though I have always leaned more towards literature and history, I am also very environmentally cautious. After months of looking for a project idea for the regional science fair, I remembered when I stumbled upon a plastic bottle floating in the middle of the Arctic ocean in 2016. It was a turning point for me. I tried finding ways to cut plastic out of my life, but then I realized that that goal was virtually impossible. So instead, I decided to try and find a way to make it less harmful to the environment, creating a low-cost, 100% biodegradable plastic material from shrimp shells. My trip to the Arctic, as well as the idea of the '3 R's' (reduce, reuse, recycle), inspired this project. By reusing shrimp shells and recycling them into biodegradable plastic, we can greatly reduce the amount of waste being put into our oceans.

#### 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>