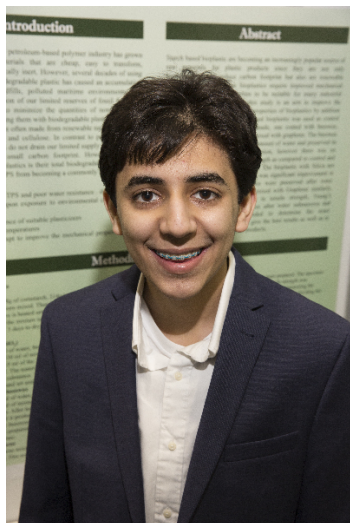


# CWSF 2019 - Fredericton, New Brunswick



## Momin Anwar

### Improving Bioplastics Properties by Incorporating Hydrophobic Materials

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Eastern Newfoundland

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

**School:** Holy Heart High School

**Abstract:** my project is on the use of hydrophobic material to improve bioplastics mechanical properties. I used hydrophobic materials such as silica graphene and beeswax and incorporated that into starch based bioplastics to improve their mechanical properties as well as their properties after water absorption and heating.

#### Biography

Hello my name is Momin Anwar and I am a grade 10 student going to Holy Heart of Mary high school in Newfoundland in Labrador. I love reading and playing chess as well as public speaking. My project is on a topic that I very recently just learned about in class and became obsessed with Bio plastics. I immediately love the idea and was really surprised when I learned that bio plastic only make up 10 percent of the plastic industry. I wanted to learn why and that was because of their lack of tensile strength and water absorption abilities compared to plastic my project was to combat this in a different way then just by trying to make a new bio plastic by improving the ones we have using hydrophobic materials.

#### 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