

# CWSF 2019 - Fredericton, New Brunswick



## Shaun Plassery

### Slick Sorbents for Cleaning Up Ocean Oil Spills Using Hair, Wool and Jute

**Challenge:** Environment

**Category:** Junior

**Region:** Peterborough

**City:** Peterborough, ON

**School:** St. Catherine Catholic E.S.

**Abstract:** The current methods for oil spill cleanup are either expensive, inefficient or non eco-friendly. A novel experiment was conducted using natural sorbents, hair, wool and jute, to find their oil adsorbent capacity. The study was done in different ocean temperatures and water conditions to understand its effect on oil adsorption. It is expected that this experiment will open a new era of oil spill cleanup.

#### Biography

Hello! My name is Shaun and I am a Grade 8 Student at St. Catherine C.E.S., Peterborough. My hobbies include playing guitar, basketball and solving puzzles especially the Rubix Cube. I am very involved in my school and community. I am a member of the school Student Council and participate in safety patrolling. I help the local food share program and altar serve at my parish. I have received awards in various math contests and had the honor of being in the Waterloo Honour Roll of Mathematics and Computing. My inspiration for this project was the news about the Trans-Mountain Pipeline Expansion and the risk it could pose on the marine animals and their habitats. I wanted to see if natural fibers in the form of containment booms, that are cheap, available and efficient, could be used to clean up an oil spill. In the future, I would like to investigate the different ways for the safe disposal of used booms. My advice to fellow students is not to underestimate your ideas and get it enriched by supporting research and by interacting with experts. Science fair is a great platform to meet like minded people and experts.

#### Awards

#### Value

Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 000