

# CWSF 2015 - Fredericton, New Brunswick



## Ahmad Ali

### Waste to Watts II

**Challenge:** Energy

**Category:** Junior

**Region:** Windsor

**City:** Windsor, ON

**School:** Al-Hijra Academy

**Abstract:** The purpose of this investigation is to create and test different electrode designs in a two-chamber microbial fuel cell in order to increase its voltage capability. This project is one of five investigations, where I have experimented with different components of a two-chamber microbial fuel cell (substrate, chamber size, membranes, and electrodes) in order to determine the best design for a microbial fuel cell.

### Biography

My name is Ahmad Ali; I'm an 8th grade student at Al-Hijra Academy in Windsor, ON. I moved to Canada 3 years ago from Texas, USA. I love cross country, drawing, Lego's, and Minecraft. One day I'd like to be an architect or a scientist. I'm a published poet and have won gold 3 times at school science fairs. Last year I won gold at Regionals with my microbial fuel cells and that inspired me to want to develop them further in hopes of getting them to produce more energy. I have always been interested in green energy and participating in science fairs has given me the opportunity to explore these interests. Last year I never imagined that I would win gold at Regionals; I was just happy to be there. This year I was completely shocked when they announced that I was the grand prize winner at Regionals. I attribute my success to God's mercy, support from my parents and teachers, hard work, and a passion for the subject. I plan to continue developing microbial fuel cells during high school and university. I hope by that time they will be used as a part of everyday energy production.

### 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