

# CWSF 2017 - Regina, Saskatchewan



## Ayanna Jeyakanthan

### The Effects of Microwave Radiation

**Challenge:** Environment

**Category:** Junior

**Region:** Durham

**City:** Ajax, ON

**School:** Roland Michener P.S.

**Abstract:** My project studied the effect of exposure to microwave radiation on the growth and survival of different organisms - plants, bacteria, and fungi. A control sample was not exposed to microwaves; other samples were microwaved for 5, 15, and 30 seconds. I concluded that 30 second exposures resulted in decreased growth compared to control samples. The 5 second and 15 second samples showed intermediate effects.

### Biography

I was awarded the Athletics Rookie of the Year Award in Grade 4. Later that year, I participated in the Ajax Public Library's Design-A-Bookmark Contest, and won first place in the Grade 4 division. In Grade 5, I participated in my first science fair and won second place in the elementary division. My project was to see which eraser worked the best. This year, I participated in my school's science fair. My project was about the effects of microwave radiation on organisms. I thought of this when I was doing my homework and my parents called me to eat dinner. I didn't come on time, so I depended on a microwave to warm my meal. It occurred to me that the radiation could be harmful to organisms, so that's what I tested. I won first place in the Grade 7/8 division at my school. This year, I was also selected to go to the DDSB STEM Science Olympics and Makerspace. I enjoyed the challenge of building and testing things that would have enough stability to withstand weights and different weather conditions. In addition, I play the flute in our school's band, and enjoy reading, doing DIY crafts, and playing badminton.

### Awards

### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000