

## CWSF 2009 - Winnipeg, Manitoba



### Shirley Nakhshon, Revi Bonder

#### Is there an alternative to oil-based plastics?

**Division:** Engineering & Computing Sciences / Environmental Innovation  
**Category:** Intermediate  
**Region:** York  
**City:** Maple, ON, Thornhill, ON  
**School:** Thornhill S.S.  
**Abstract:** This project introduced a biodegradable plastic container to replace the oil-based container, in purpose to reduce pollution. This was done by combining different concentrations of common household materials to create a durable plastic, then testing the plastic for qualitative and quantitative results. Results showed that the plastic made with potato starch and 2.5mL of glycerin would be most efficient in replacing the common oil-based plastic.

#### Biographies

Shirley - My name is Shirley Nakhshon, I was born in Holon, Israel and moved to Canada when I was two years old. I am currently in the gifted program at Thornhill Secondary School. I am co-president of Thornhill's Space Club and am a mentor for grade nine students. I have earned over 150 community hours volunteering at the Maple Health Centre and I also volunteer as a Kid's Help Phone Student Ambassador. I hope to enrol in the pre-medicine program at McMaster University, after which I hope to earn a doctorate in medicine and become a clinician. I enjoy spending time with my friends and family and greatly enjoy science, music, sports and art.

Revi - My name is Revi Bonder and I was born in Israel on March 18, 1993, and moved to Toronto, Ontario at the age of 6. I am currently in the gifted program at Thornhill Secondary School, with Science being my favourite subject. I am an active member of the student population at my school, as I am the co-president of Thornhill's Space Club and a mentor for grade 9 students. I also am a great contributor to my community having completed over 120 hours volunteering at places such as Thornhill Secondary School, Ace Daycare, the Maple Health Centre, and Kid's Help Phone. In the future, I hope to become a student at McMaster University, graduate with an...

#### Awards

#### Value

Honourable Mention - Earth & Environmental Science - Intermediate	\$100
Sponsor: Petro-Canada	
Total	\$100

