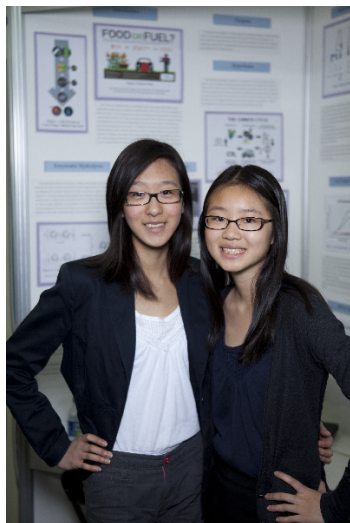


CWSF 2013 - Lethbridge, Alberta



Wendy Guo, Jenny Wang

Cellulosic Ethanol: Energy for the Future!

Challenge: Energy

Category: Intermediate

Region: Greater Vancouver

City: Burnaby, BC

School: Moscrop Secondary

Abstract: Cellulosic ethanol is a type of biofuel that has the capacity to sustain our energy needs, by utilizing leftover organic materials. This project tested for the optimal number of days required for cellulosic materials to turn into fuel, with the assistance of enzymes (cellulase and amylase) and distiller's yeast. The results finalize that the optimal amount of ethanol is produced within 5 days of fermentation.

Biographies

Wendy - Wendy Guo is a 16 year old student from Shanghai, China who currently lives in the Greater Vancouver area. She is actively involved in school as well as in her community, often taking her time to volunteer and plan events as part of Student Council. Her favourite subject is science; specifically health sciences because there is so much to be discovered and so many questions to be asked. Wendy aspires to become a doctor, someone who will give back to the world. In her free time, she enjoys playing the piano (with a dual ARCT performer's and teacher's diplomas). She also keeps active with lifeguarding, dance, gymnastics, and other sports. Conce...

Jenny - Jenny Wang is a student from Moscrop Secondary in Burnaby, BC. She enjoys doing many extracurricular activities such as robotics and volunteering. She loves to challenge herself by participating in many competitions such as science fair and business competitions. In the future, she wants to major in science or business at university and hopes to have a great career in those areas. Regarding this project, inspiration came from the fact that many people today complain about the rising gas prices and worry about the future of energy sources. Therefore, thinking about resources running out, it is essential to develop and improve dependable altern...