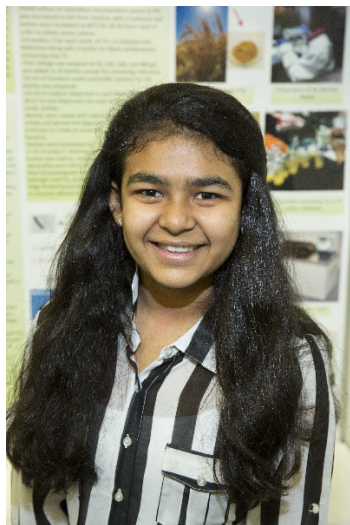


CWSF 2014 - Windsor, Ontario



Maitry Mistry

Fermentation of thin stillage for biofuel production by Clostridium thermocellum

Challenge: Environment

Category: Junior

Region: Manitoba Schools Science Symposium

City: Winnipeg, MB

School: Acadia School

Abstract: The experiment is to unveil the potential of TS as an alternative growth medium in cellulosic bio fuels production. The thermophilic bacterium Clostridium thermocellum a candidate for consolidated bio-processing was used to produce fuels such as H₂ and ethanol. In my experiment, various concentrations (50-400 g/L) of TS was tested with or without added cellulose replacing the ingredients of growth medium.

Biography

My name is Maitry Mistry, and I am currently a grade 8 student in Winnipeg, MB. This is my second year doing a science fair project. In the 2 years, I have gone to over 5 science fairs and have achieved outstanding results which have motivated me to go further in my research. The inspiration for my project came from the waste surrounding us. I wanted to use the waste products for something beneficial to our community and environment. As a student, I plan to continue with this topic and study in the Microbiology field. I have not only learnt about the Microbial process but have been fortunate to work with U of M and carry out my experiment. I am very privileged to have an opportunity to share my results and research with huge crowds, passing on my learning and new discoveries.

Awards

Value

Excellence Award - Junior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100