

## CWSF 2012 - Charlottetown, Prince Edward Island



### Edward Wong

#### Get into the Spirits Part II

**Challenge:** Energy

**Category:** Intermediate

**Region:** Greater Vancouver

**City:** Vancouver, BC

**School:** Killarney Secondary

**Abstract:** This project tested the cellulolysis's potency of chemical pretreatments for the abundant biomass from the Mountain Pine Beetle epidemic in BC. Pretreated substrates were hydrolyzed by cellulase from *Aspergillus niger*. Quantitative glucose determination of aliquots at 1, 2, 4 and 24h were measured in a spectrophotometer. Non-chemical pretreatment may be a better choice in consideration of environmental impacts and cleaning costs after all.

#### Biography

Edward Wong, a consecutive three-time BC finalist for the Canada Wide Science Fair, has accomplished many achievements in recent years including winning a scholarship to University of Western Ontario as a CWSF Bronze medalist at Grade 7 and being the semi-finalist of BC year of Science YouTube contest last year. His project started out by simply observing his surroundings, which at the time was a mountain pine beetle infested area. He aims to pursue a career in energy and environmental science and dreams of contributing to global sustainability solutions one day. In his leisure time, he enjoys spending time outdoors on his mountain bike. He plays chess, electric guitar, piano, hockey and basketball. He also swims like a fish and snowboards with his GoPro. He is addicted to YouTube for comedy and tutorials of all sorts. He is currently attending Killarney Secondary School in Vancouver as a grade nine student. He delights in volunteering with Big Brothers of Vancouver mainly playing intense soccer. To complete his science project, Edward employs a variety of winning strategies by starting early, interpreting scientific journals, asking numerous questions, sticking to the scientific method and watching the inspirational movie "October Sky".

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