



## CWSF 2011 - Toronto, Ontario



## **Mark Tan**

## **Photocatalytic Degradation of Formaldehyde**

Challenge: Innovation Category: Senior

**Region:** Greater Vancouver **City:** Vancouver, BC

**School:** Sir Winston Churchill Secondary

Abstract: This experiment tested whether coating TiO2 onto activated carbon paper

can improve the paper's effectiveness in removing CH2O and if the effectiveness is positively correlated to the percentage concentration of TiO2. It was found that the TiO2 coated sheets reduced considerably more formaldehyde at a faster rate than the plain activated carbon sheet did. However the effectiveness had no strict correlation with the TiO2

concentration.

## **Biography**

My name is Mark Tan. I am enrolled in the IB program at Sir Winston Churchill Secondary School. I am very involved in both my school and my community. At Churchill, I am an editor and columnist for the chemistry section of a well-established school science magazine. Also, I participate in the Model UN club, the Key club and the Student Social Network club. Outside of school, I volunteer as a tour guide for the Dr. Sun-Yat-Sen Classical Chinese Garden and as a workshop leader for the Bolton Academy of Speech Arts. During winter, I work as a ski instructor. Some of my extracurricular activities include skiing, swimming, tennis, saxophone and speech and drama. I have received the Level 1 ski instructor license, the lifeguard certificate, the level 7 Trinity speech exam certificate, the Highest Achievement Award at the B.A.S.A. Speech Arts Festival, and first place awards at the CDMF. After graduation from secondary school, I plan to go into chemistry. However, I also love acting. Frankly, I have not made a definite decision vet. I have had many memorable experiences. Nevertheless, I believe that my participation in the CWSF will become my most notable experience!

Awards	Value
Excellence Award - Senior - Bronze Medal	\$300
Sponsor: Youth Science Canada	
The University of Western Ontario Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Western Ontario	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Total	\$2 300





