



CWSF 2010 - Peterborough, Ontario



Jordan Wentzell

Carbon Conquered by Sea, Salt, and Sun

Division: Physical & Mathematical Sciences

Category: Senior

Region: Northwestern Ontario **City:** Thunder Bay, ON

School:

Abstract: The hypothesis of this experiment is that carbon dioxide could be extracted

from the atmosphere through the spontaneous reaction with sodium hydroxide, generating sodium carbonate and water. The sodium hydroxide required for the reaction could be obtained by solar-powered electrolysis of sea water. The electrolysis would also produce hydrogen, which could provide electrical or thermal power, and chlorine, which could be used for

industrial processes.

Biography

I am fifteen years old, the eldest of five children, and am currently home schooled. In my spare time, I enjoy playing the piano, cycling, chess, and swimming. I was the gold medalist in Intermediate Physical and Mathematical Sciences at the Canada-Wide Science Fair, in Ottawa, 2008. I have always been keenly interested in science, especially the field of chemistry. My career plans involve research related to renewable energy and hydrogen.

Awards	Value
Dalhousie University Faculty of Science Entrance Scholarship	\$4 000
Senior Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: Dalhousie University, Faculty of Science	
UBC Science (Vancouver) Entrance Award	\$4 000
Senior Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: The University of British Columbia (Vancouver)	
University of Ottawa Entrance Scholarship	\$20 000
Senior Gold Medallist - \$20,000 Entrance Scholarship (\$5,000 each year	
for 4 years)	
Sponsor: University of Ottawa	
The University of Western Ontario Scholarship	\$4 000
Gold Medallist - \$4000 Entrance Scholarship	
Sponsor: University of Western Ontario	
Gold Medal - Physical & Mathematical Sciences - Senior	\$1 500
Sponsor: Encana Corporation	
Total	\$33 500



