

## CWSF 2007 - Truro, Nova Scotia



### Peter Warrington

#### Green Hydrogen

**Division:** Biotechnology / None

**Category:** Intermediate

**Region:** Central Alberta

**City:** Olds, AB

**School:** Olds Junior Senior High School

**Abstract:** The project was experimenting with a new biological method of producing hydrogen. I took soil samples and heat shocked them inactivating the hydrogen-consuming bacteria, while leaving the spore-forming hydrogen-producing bacteria alive. I then seal the sample in a reactor, and added water (to create necessary anaerobic environment), and sucrose (as a food source). The bacteria then converted the sugar to hydrogen and acids.

#### Biography

I have lived on a farm in rural Alberta for my whole life and attended school in the small town of Olds. I enjoy all kinds of sports; some that I actively participate in are climbing, soccer, fencing, football, futsal, hiking, snowboarding, and paragliding. I love to travel, in the past I have visited the U.K., Mexico and Cuba. In addition, in the past year I have been on school trips to Quebec and Vancouver Island. I am a member of Lost Leaders, a student-run organization which raises funds to send relief to third world nations. I also enjoy playing the piano. When I finish high school I would like to go on to post-secondary education studying science, perhaps medicine.

#### Awards

#### Value

The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Biotechnology & Pharmaceutical Sciences Intermediate Sponsor: Rx&D Health Research Foundation	\$700
<b>Total</b>	<b>\$2 200</b>