

CWSF 2008 - Ottawa, Ontario



Jason Lamb, Joen Rowledge

The ACELL System

Division: Health Sciences / Environmental Innovation

Category: Junior

Region: Calgary Youth

City: Calgary, AB

School: Branton Junior High School

Abstract: Our project seeks to reduce or completely eliminate the heating and cooling costs of a supermarket. Super-insulated thermal storage cells beneath the parking lot serve to capture and store seasonal ambient air and earth temperatures. These are enhanced by solar-fired refrigeration and heating. A "Temperature Modulating System" controls these elements to provide low-cost, off-the-grid heating and refrigeration for the supermarket.

Biographies

Jason - Jason William Lamb. I was born and raised in Calgary, Alberta. I enjoy almost all areas of science, except biology. My favourites are engineering, physics, and aerodynamics. I also enjoy mathematics and language arts.

Joel - Joel Rowledge is a grade eight student at Branton Jr. High School in Calgary, AB. Long fascinated with almost all forms of science, he has participated in Calgary's Youth Science Fair since 2006 (silver medal). With partner Jason Lamb, they earned gold and the Canadian Parents for French Award in 2007, and gold medals, the University of Calgary's Schulich School of Engineering First Place Award, and the American Society of Heating Refrigeration and Air Conditioning Award in 2008. Joel enjoys mountain hikes, searching for fossils, hapkido, and road trips. He lives with his parents and three pets in Calgary, and is begging to disassemble his mo...