

## CWSF 2011 - Toronto, Ontario



### Sarah MacLean

#### Nanobots in a Virtual World

**Challenge:** Environment

**Category:** Junior

**Region:** Sudbury

**City:** Sudbury, ON

**School:** Algonquin Road P.S.

**Abstract:** This project used assembly language (computer programming) to instruct nanobots to convert oil sludge into energy in a virtual world. Multiple programs were written and tested to determine which variables were most important in maximizing the efficiency and energy production of the nanobots. The use of virtual simulations allowed me an opportunity to design, modify and test variables not yet available in the real world.

#### Biography

My name is Sarah MacLean. I am an eighth grade student at Algonquin Road Public School in Sudbury, Ontario. I enjoy playing sports such as basketball, softball, volleyball, cross-country running and floor hockey. Outside of school I am a competitive swimmer and I also play the piano. This is my second year taking part in Science Fair and I am very excited about travelling to Toronto and participating in this event. I am looking forward to meeting other students and when I am older I would like to pursue a career in engineering.