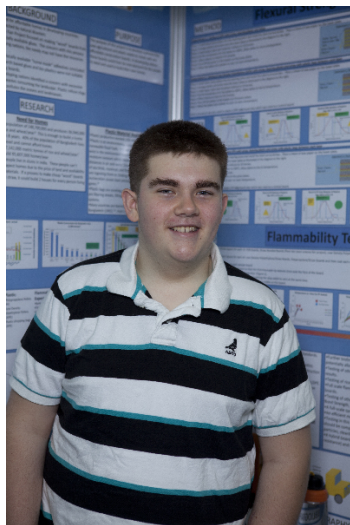


# CWSF 2013 - Lethbridge, Alberta



## Kyle Potts

### Flexural and Flammability Properties of Straw-Plastic Composites

**Challenge:** Resources

**Category:** Senior

**Region:** Simcoe County

**City:** Barrie, ON

**School:** Eastview S.S.

**Abstract:** This project created construction boards out of waste straw and waste plastic. It investigated the impact of the type of plastic and the plastic-to-straw ratio on flexural strength of the boards. Two types of plastics were examined: polyethylene and polypropylene. Flammability was also investigated. Plastic-straw composite boards exceeded flexural requirements of the ANSI standards and were more flame resistant than commercially available oriented strand boards.

#### Biography

Kyle Potts is a 16-year-old student in grade 10. He enjoys playing hockey, baseball, and basketball. He likes to swim, play guitar and the french horn. He is inquisitive and fascinated by science and technology. He is involved in choir and orchestra at his school. One day he hopes to pursue a career in science or computers.

#### Awards

#### Value

Canadian Commission for UNESCO - Science for Peace and Development (MILSET ESI) Award Sponsor: Canadian Commission for UNESCO	\$5 000
Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$100
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$7 100</b>