

## CWSF 2006 - Saguenay, Québec



### Jessica Reiniger

#### Save and Reuse: PET Plastic vs. Epoxy Resin in composites

**Division:** Health Sciences

**Category:** Junior

**Region:** Northern Manitoba

**City:** Norway House, MB

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**Abstract:** Polyethylene terephthalate (PET) from pop bottles was used to replace epoxy resin in seven different composites. Samples were tested for buoyancy, tensile and flexural stress and strain, and impact resistance. The composites produced with PET differed significantly only in their 54.9 % decrease in impact resistance. PET samples were still reasonably strong and may be desirable for many applications because of environmental and cost benefits.

Awards	Value
Honourable Mention - Engineering - Junior Sponsor: Youth Science Foundation Canada	\$100
Total	\$100