

# CWSF 2012 - Charlottetown, Prince Edward Island



## Prakriti Pratijit

### Constructing Economical and Durable Rural Roads using Stabilized Soils

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Saskatoon

**City:** Saskatoon, SK

**School:** Walter Murray Collegiate

**Abstract:** Work was done on creating a substitute for gravel used in rural roads in Saskatchewan using a locally available soil (glacial till), a locally available fiber (flax fiber) and a cementing agent (fly ash). This substitute is more environmentally, economically, and ergonomically friendly than gravel. The same concept can be used all over the world, saving tax payers' money and the environment.

#### Biography

Hi! My name is Prakriti and I am currently in grade 10 at Walter Murray Collegiate in Saskatoon, SK. I love to be involved in and around school, I am the captain of my school envirothon team, I am in various clubs, and was on the school's badminton team. Some of my hobbies are art, dance, music, and languages. I know hip hop and Latin dance, I can play piano and flute, and I can speak Hindi, English, German, and French. After high school, I am planning to take either architecture or engineering, hopefully at MIT or Cambridge University. Most of the awards I have won have been in science, math, art, and linguistics. I got the inspiration for my project from my dad. We were talking about how expensive and inconvenient gravel was in places that aren't near mountains or in the Canadian shield, and I thought to myself, why hasn't a cheaper, more effective substitute been made yet? In the future, I hope to use the same method and different materials to make this substitute available in different countries and regions. My advice to students thinking about doing a project is don't think, do.

#### Awards

#### Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$1 300</b>