

# CWSF 2012 - Charlottetown, Prince Edward Island



## Ankur Shahi

### Biochar: A Low Cost Solution for Water Treatment Using Industrial Waste

**Challenge:** Environment

**Category:** Intermediate

**Region:** Northwestern Ontario

**City:** thunderbay, ON

**School:** Sir Winston Churchill C.V.I.

**Abstract:** The demand for clean drinking water is increasing worldwide. The consumption of contaminated water is the main cause of disease today. This experiment, removed contaminants in water using activated biochar. Biochar is a carbon rich by-product of bioenergy, produced through pyrolysis. Industries pay millions of dollars annually to dispose off this waste. The results show effective low cost solution for water treatment using biochar.

#### Biography

Ankur Shahi came to Toronto, Canada in 2003 from India with his parents at the age of eight years. He moved to a small town, Thunder Bay, in Northwestern Ontario in 2007. Ankur has an inquisitive mind and takes keen interest in developing innovative ideas. His Science Fair project was adjudged as the best in Junior Category at Northwestern Ontario Regional Science Fair 2009. He also received the best in Junior Life Sciences Category Award and Lakehead University Psychology Award for the same project. In the Northwestern Ontario Regional Science Fair 2012, Ankur's project received the best in Intermediate Category award, Professional Engineers of Ontario Award, Best in Environmental Sciences and Lakehead University Engineering Award. Ankur also likes Mathematics and has represented his school in a number of contests as Lagrange Mathematics Contest (Mathematica), American Mathematics Contest, Waterloo Mathematics Contest, TD Canada Mathematics Competition and Fryer Maths Contest. Ankur is equally good at sports and has won medals as Winners in 2010 Superior Secondary Schools Athletic Association (SSSAA) Football Championship, 4th place for Junior Boys Indoor Soccer SSSAA 2011-2012, and Winner of Lakehead University Cricket Tournament 2011-2012. He also volunteers his time for a n...

#### 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>