

## CWSF 2011 - Toronto, Ontario



### Mariem Oloroso

#### Toxic Tailings: Considering Carbon Clean-Up

**Challenge:** Environment

**Category:** Senior

**Region:** Peace Country

**City:** High Level, AB

**School:** High Level Public School

**Abstract:** Since activated carbon (AC) is able to adsorb more poisons than any other substance, this project studied whether AC could effectively be utilized in decontaminating tailings ponds of the oil sands of Alberta. It was found that the adsorption properties of AC show its potential to clean tailings. However, more research and actual experimentation are needed in order to verify its effectiveness.

#### Biography

My name is Mariem Oloroso and I am a grade 12 student at High Level Public School in northern Alberta. I am co-president of my school's student council, a member of the yearbook and grad executive committees, and, of course, a member of the science fair team. I love to sing and explore different genres of music and am always attempting to teach myself how to play the guitar. I have always loved to read and am very interested in post-apocalyptic/dystopian literature. I also enjoy spending time with my friends and family, traveling, volunteering at the local hospital, and being physically active, whether it's playing basketball, exercising, or doing yoga. I hope to one day get involved in clean water and sanitation projects around the world and plan on continuing my interest in science by pursuing a career in obstetrics or anaesthesiology or a career in medical research. After 8 years of being involved in science fair, I am very excited to be attending the CWSF for my third and last time.

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040