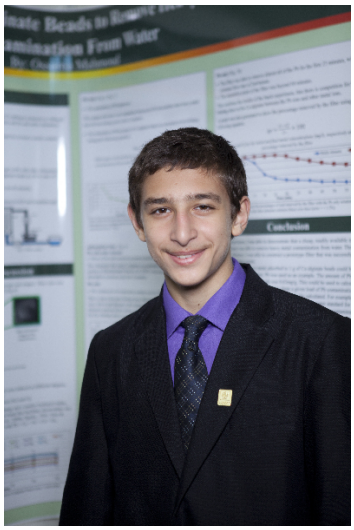
CWSF 2013 - Lethbridge, Alberta



Ossama Mahmoud

The use of Ca-alginate beads to remove heavy metal contamination from water

Challenge: Environment
Category: Intermediate
Region: London District
City: London, ON
School: Al Taqwa Islamic Secondary School

Abstract: In this project, I tested the potential of an affordable readily available material (Ca-alginate beads) to remove heavy metals (using a multi-element solution and a single element solution of Pb) from our water systems. The Ca-alginate beads were able to remove all the heavy metals from the water at different degrees. Also, a prototype filter using the Ca-alginate beads was constructed and successfully tested.

Biography

My name is Ossama Mahmoud, I am in grade 9 and go to the Al-taqwa Islamic School. I really enjoy science and math. I got inspired to do this project because I wanted to find out how clean the water is in London, especially that one of the biggest water polutants are heavy metals. I did some research and found out that I can use certain types of plants to clean water. My favorite sport is Judo, I am a blue belt and enjoy competing at high levels. This is my second year in the Canada wide science fair. In the future I would like to be a physician.