

ESPC 2011 - Toronto (Ontario)



Hayley Todesco

CO2 Sequestration: Bio-Energy with Carbon Capture and Storage

Défi: Énergie

Catégorie: Intermédiaire

Région: Calgary Youth

Ville: Calgary, AB

École: Queen Elizabeth Junior Senior High School

Sommaire: A dual approach to addressing the issue of climate change through CO2 sequestration was researched. Geologic sequestration to target industrial emissions was investigated by measuring the effects on physical and chemical properties of sandstone storage rock. Specifically, changes in seismic wave velocities (leakage) and brine composition (ionic trapping). Biomass-related sequestration to address household waste and agricultural emissions was explored by creating a CO2 sequestration prototype.

Biographie

My name is Hayley Todesco and I am a grade nine student. Participating in my local science fair for five years, my previous projects were in the areas of engineering, agriculture and the environment. At my school, I have been part of the Youth Volunteer Corps, Jazz Band, Junior Girls Volleyball and Badminton Teams. I am also part of the Concert Band Program where I play the french horn. My other interests include skating, art, gardening and swimming. In 2008 my Synchronized Skating Team participated in the Skate Canada National Competition. I am still uncertain what I want to be when I grow up, so I have been using the regional science fairs to explore different areas of science to see which ones are most interesting to me. It is very exciting to be participating in the Canada Wide Science Fair again and I look forward to the overall experience.

Prix

Valeur

Prix d'excellence - Intermédiaire - Médaille d'argent Commanditaire: Sciences jeunesse Canada	700,00 \$
Bourse d'études de l'Université Western Ontario Médaille d'argent - Bourse de début d'études de 2 000 \$ Commanditaire: Université Western Ontario	2 000,00 \$
Total	2 700,00 \$