

ESPC 2011 - Toronto (Ontario)



Sujay Nagaraj

Bio-remediation of Naphthenic Acids by the Unicellular Algae *C.reinhardtii*

Défi: Découverte

Catégorie: Intermédiaire

Région: Calgary Youth

Ville: CALGARY, AB

École: Dr. Gordon Higgins Junior High School

Sommaire: Naphthenic acids (NAs) are a major contributor to the toxicity of tailings ponds from the oil sands operations. The potential of algae to bio-remediate tailings remains poorly understood. Here I discovered that the algae *C. reinhardtii* is able to tolerate several NAs at levels approximately 5 times higher than that found in tailings and significantly reduce the concentration of NAs by 18% in 2 weeks.

Biographie

My name is Sujay Nagaraj I am in Grade 9 and this is my first year participating in the Canada Wide Science Fair. Science has always been a passion of mine and this is my fourth year participating in my regional science fair in Calgary, Alberta. Since grade 6 I have won 2 silver medals and 2 gold medals, The LaFarge Science, Technology and Society award, Grassroots environmental awareness award, and a City of Calgary Water Services award. Apart from science I like to volunteer in my community at various community/cultural events. I am a member of the Woodwind Concert Band as well as our school's Jazz Band, where I am the lead Alto Saxophone player. Outside of school I play the Violin, which I have been playing for 5 years now. I enjoy sports such as Badminton and Skiing. Next year I will be attending the IB program. In the future I hope to pursue a career in science and also will continue the pursuit of my passion through local, national and international science fairs.

Prix

Valeur

Prix d'excellence - Intermédiaire - Médaille d'or Commanditaire: Sciences jeunesse Canada	1 500,00 \$
Bourse d'études de l'Université Western Ontario Médaille d'or - Bourse de début d'études de 4 000 \$ Commanditaire: Université Western Ontario	4 000,00 \$
Total	5 500,00 \$