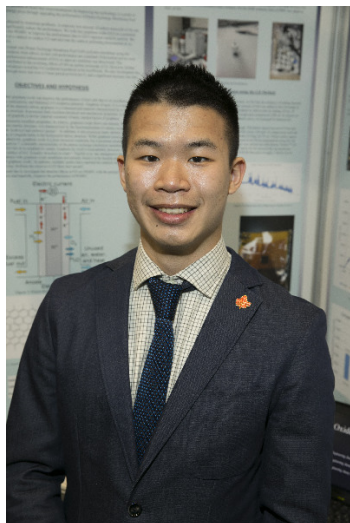


ESPC 2017 - Regina (Saskatchewan)



Bill Chen

Graphene Oxide Enhanced Proton Exchange Membrane Fuel Cell

Défi: Énergie

Catégorie: Sénior

Région: Greater Vancouver

Ville: Vancouver, BC

École: Prince of Wales Secondary

Sommaire: Graphene oxide (GO) thin films were coated onto Proton Exchange Membrane Fuel Cell's polymer membrane using LB Method in hopes of improving fuel cell performance. Polarization curves were collected and a maximum performance enhancement of 81% in open-air condition was discovered. The improvement was attributed to the co-catalyzing effects of GO. An increase in fuel cell durability was also discovered.

Biographie

A senior at the Prince of Wales Secondary School, I am elated but also a bit sad to have my first but also my last CWSF this year; but I am sure of one thing: I will continue to involve myself in science as I had done in my years at high school: I will continue to propagate existing knowledge the same way as I founded my computer science club; I will continue to search for new knowledge with researches similar to the one I had done this summer at SBU for my CWSF project; and I will continue to enjoy myself as I marry solutions from completely unrelated fields to solve demanding problems. Exist in a suffocating world where carbon dioxide approaches its highest value in 650,000 years. Energy consumption is lavish. However, with novel materials, I aspire to make greener energy more available, not less. I built my first bridge with this CWSF project and I plan to do the same for the years to come; I will be going to Columbia Engineering this fall and I can't wait to become an innovator who not only searches for truths, but apply them to the real world.

Prix

Valeur

Prix d'excellence - Sénior - Médaille d'argent Commanditaire: Sciences jeunesse Canada	
Bourses d'admission de la Faculté des sciences de l'Université Dalhousie Médaille d'argent, sénior - Bourse d'admission de 2 500 \$ Commanditaire: Université Dalhousie, Faculté des sciences	2 500,00 \$
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