

CWSF 2010 - Peterborough, Ontario



Maxwell Poole

Reengineering LED Traffic Lights to Prevent Snow or Ice Buildup

Division: Life Sciences

Category: Intermediate

Region: Tri-County

City: Yarmouth, NS

School: Maple Grove Education Centre

Abstract: The project tested if LED traffic lights could be reengineered with cost efficient heat energy to prevent snow or ice buildup. A green LED traffic light was fitted with the proper amount of resistance wire to achieve a 15 watt grid heating element. In an ambient temperature of -17 degrees Celsius the lens temperature rose to +3 degrees Celsius, with average cycling of the light.

Biography

Maxwell Poole is 14 years of age and resides in Chebogue, Yarmouth County, NS. He attends Maple Grove Education Center as a grade 9 student. He is presently a member of the Senior and Stage Bands of Maple Grove Education Center as well as a member of the Intermediate Boys Track and Field team. His hobbies are competitive swimming, piano, guitar, trumpet, drums, and computer work. Maxwell is currently a member of the Yarmouth Y Whitecaps swim team with aspirations of some time swimming for his province and country. He volunteers at various community sports oriented events. Max enjoys competition and challenging himself against various technologies and other competitors. Max spends much of his time with his family traveling the maritimes for his and his brother's sporting events.

Awards

Value

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Engineering - Intermediate Sponsor: Youth Science Canada	\$300
Total	\$1 300