

CWSF 2017 - Regina, Saskatchewan



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Sole Power: A Novel Approach to Energy Harvesting using Piezoelectric Technology

Challenge: Innovation

Category: Intermediate

Region: Niagara

City: Niagara on the Lake, ON

School: Saint Paul High School

Abstract: This project is a multi-step process of discovery and engineering innovation. The purpose was to conceptualize, design, and successfully prototype the most efficient piezoelectric system that uses mechanical energy to provide constant energy to illuminate LEDs for use in emergency situations. Various carpet style and tile style prototypes were engineered and harvesting systems researched and designed. The outcome; usable Piezoelectric Energy Harvesting system "Sole Power".

Biography

I am 13, a grade 9 student at Saint Paul High School in Niagara Falls Ontario. I love science and am thinking of going into Medicine or Biophysics. High School is so much fun! I jumped in and got involved in Chamber Choir, Dance team, Cappies Review team, and I was in the school Musical Sister Act! Outside of school I am a ballet dancer! In fact dancing is where I got the inspiration for my innovation project. I volunteer for many things in my community; at VBS I am a Station leader and I help run the Kids Corner at our town Peach Festival! I was a Canada Wide Bronze Medalist in 2015 and loved the experience of meeting so many science enthusiasts and people like me that this year I thought I'd try again and here I am. My advice to others is find your passion, ask questions and find the solutions, and have fun while learning through the process! Attending the CWSF is such an honour! I would like to thank my home team NRSEF for providing this opportunity and to the organizers and volunteers in Regina for the 2017 CWSF THANK YOU! Good luck to everyone!!

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