CWSF 2009 - Winnipeg, Manitoba

Daniel Papineau

Magnet Generator

Division: Health Sciences / None
Category: Junior
Region: Windsor
City: Belle River, ON
School: St. John the Baptist
Abstract: This project develops a bicycle-based electric-pulse generator. The generator comprises a neodymium (rare earth) spherical magnet encased in a stationary wire coil. The magnet is rotated by a wheel-mounted trigger magnet, inducing a voltage. The generator can be used to charge a battery, or to power safety lights, and avoids the use of toxic disposable batteries.

Biography

My name is Daniel Papineau, I'm thirteen years old. As a student of the WECDSB at St. John the Baptist school, I was one of four students chosen to represent our school at the Windsor Regional Science, Technology and Engineering Fair of 2009. I was proud to receive a gold metal in the Engineering and Computing Sciences division. I was also selected to receive the University of Ontario Institute of Technology Innovation award. My project "Magnet Generator" was one of three chosen to participate in the 2009 Canada Wide Science Fair in Winnipeg. Many of my hobbies include trying to building and designing different electrical and mechanical experiments. I also enjoy outdoor activities such as soccer, baseball, biking, fishing and since September 2008 a hunter and a member of the Ontario Federation of Anglers and Hunters. Since age ten I've been playing the guitar with by grandfather and frequently jam with my friends. Next year I will be attending Belle River High School, studying in the fields of engineering-technology and may other subjects.