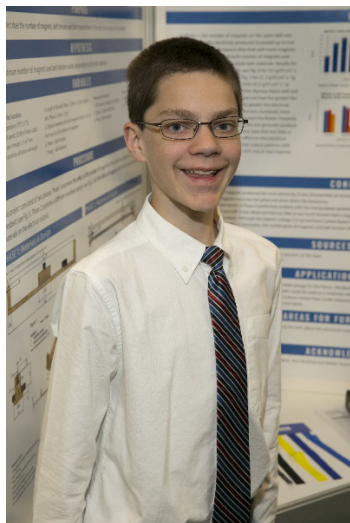


CWSF 2017 - Regina, Saskatchewan



Matthias Gasser

Not Just a Flutter in the Wind

Challenge: Energy

Category: Junior

Region: Canadian Rockies

City: Canmore, AB

School: Lawrence Grassi Middle School

Abstract: This experiment explores the effects of magnets, belt tensions and multiple belt materials on the electrical output of a homemade windbelt. It was carried out in two phases, each with its own windbelt design. It concludes that the optimum electrical output combination of magnets and belt tension varies depending on the belt and is that which allows for the greatest frequency of belt vibration.

Biography

My name is Matthias and I am in Grade 8 at Lawrence Grassi Middle School (LGMS) in Canmore, Alberta. I really enjoy creating hands-on projects. I also like to read, playing board games and tinkering with CAD programs. I have been to the regional science fair four times and this is my second opportunity to go to the CWSF. I am interested in renewable energy and my past 2 projects have explored microbial fuel cells (MFC) and creating electricity from algae. This year I've been researching and testing a windbelt, a way of creating electricity from wind without gears! The windbelt is smaller and cheaper than wind turbines and I think it is one of the coolest green energy sources yet! If I did this amazing project again I would look into testing the windbelt in the outdoors. Since doing a science fair project is a lot of work, my advice to students thinking about taking part is to choose a topic that really interests you. This will make your experience a lot more worthwhile no matter where it takes you.

Awards

Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000