

CWSF 2011 - Toronto, Ontario



Sarah Battat

Hysteresis: A Lasting Memory

Challenge: Discovery

Category: Intermediate

Region: Montreal

City: Westmount, QC

School: The Study

Abstract: The purpose of this project was to determine the relation between the hysteresis of a Ferrofluid or a Magneto-Rheological Fluid (MRF) and the fluctuation in surrounding temperature. The experimental findings demonstrated that the hysteretic properties of the substances changed as a function of temperature and differed from one another.

Biography

Sarah Battat has been captivated by science every since a young age. Sarah attends The Study (Montreal). Sarah has participated in the "Quebec Expo-sciences" thrice and is privileged to attend the Canada-Wide Science Fair for the second consecutive year. At the regional Science Fairs, Sarah was awarded prizes from McGill, Concordia, and Laval University, amongst others, and the Bell First Place Prize, in 2009. Sarah has participated in a scientific colloquium hosted by a McGill graduate student, the All Science Challenge, and Toy Challenge. Sarah is an active member of her school's Robotics Club and has successfully participated in RoboCup (in Graz, Austria), First Lego League, and the Canadian Robotics Competition. She hopes to attend the Massachusetts Institute of Technology, to someday become an engineer or physicist. This summer, Sarah will be participating in the TOPS Physics Workshop at MIT. Sarah is a nationally and provincially ranked debater as well as the Debate Captain of her school. She is also a sports amateur, having participated in her school's volleyball and track and field teams. Sarah enjoys spending her free time with her family, savoring international cuisine, learning languages, and painting. Sarah mentors and peer tutors at her school.

Awards

Value

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| Excellence Award - Intermediate - Gold Medal Sponsor: Youth Science Canada | \$1 500 |
| The University of Western Ontario Scholarship Gold Medallist - \$4000 Entrance Scholarship Sponsor: University of Western Ontario | \$4 000 |
| Total | \$5 500 |