CWSF 2014 - Windsor, Ontario

Kathleen Myatt

iScan

Challenge: Innovation
Category: Junior
Region: Bluewater
City: Hanover, ON
School: Immaculate Conception
Abstract: This project devised a new and innovative method for detecting fingerprints on low contrast surfaces. It investigated and tested unique ways to effectively utilize optics to optimize the contrast between the dusting powder and the surface. An iPhone camera with black and white live feed video was used. The results clearly demonstrated that this method dramatically increased the contrast and the visibility of the fingerprints.

Biography
Kathleen Myatt attends Immaculate Conception Separate School in Formosa ON. She is in grade 8 french immersion and a member of her school's student council. She enjoys playing the flute in her school band. Kathleen enjoys participating in competitive gymnastics, hiking, canoeing and playing the violin in her free time. Kathleen got the idea for her project when she was speaking to a forensic officer, and he informed her that a significant problem for forensic officers everywhere is attempting to find fingerprints on low contrast surfaces. Kathleen thought that she would be able to use her knowledge of optics to attempt to solve the problem. The results of her project indicate that with black and white photography, and the proper coloured filter, that fingerprints, can become noticeably more visible. Kathleen has participated in every regional science fair since she was in grade 4. This is her second time competing in the senior devision at her regional science fair, and her second time competing at the Canada Wide Science fair. She is currently interested in pursuing a carrier in health sciences.

Awards	Value
Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	$300
Western University Scholarship Silver Medallist - $2000 Entrance Scholarship Sponsor: Western University	$2 000
Total	$2 300

Youth Science Canada
PO Box 297
Pickering ON L1V 2R4
www.youthscience.ca / info@youthscience.ca
416-341-0040