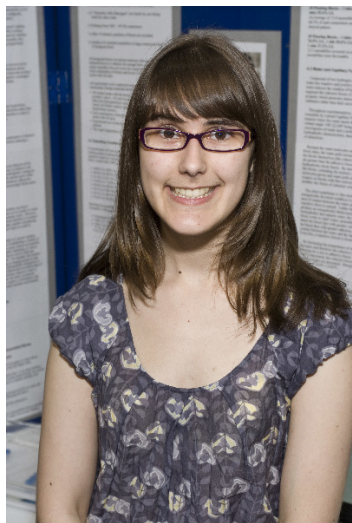# CWSF 2010 - Peterborough, Ontario

Laurel Stothers

From the Bottom Up: Self-Assembly by Lateral Capillary Forces II

Division: Physical & Mathematical Sciences
Category: Senior
Region: South Fraser
City: Surrey, BC
School: Lord Tweedsmuir Secondary

Abstract: The project devises a method of self-assembly which utilizes a liquid-object meniscus gradient. Because like-menisci, either positive or negative, will provoke an attraction between objects, this investigation discovers the point at which meniscus differences cause repulsion rather than attraction. The smaller the discrepancy, the more combinations of object pairings are possible, leading to greater possibilities regarding self-assembled pattern intricacy.

Biography
Throughout my high school career I have openly searched for and strived to reach as many opportunities as possible. My passion for science has led me to the Canada Wide Science Fair, as well as to other fantastic theoretical physics/molecular biology endeavours that I have thoroughly learned from. I voluntarily tutor math and English to students grades 8 through 12 and I train in Shotokan Karate 3 times a week. I hope to learn new languages and continue to enrich my life both through culture and knowledge as I continue my studies at McGill University.

Awards	Value
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - $2000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	$2 000
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - $2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	$2 000
University of Ottawa Entrance Scholarship Senior Silver Medallist - $3000 Entrance Scholarship Sponsor: University of Ottawa	$3 000
The University of Western Ontario Scholarship Silver Medallist - $2000 Entrance Scholarship Sponsor: University of Western Ontario	$2 000
Silver Medal - Physical & Mathematical Sciences - Senior Sponsor: Encana Corporation	$700
Total	$9 700