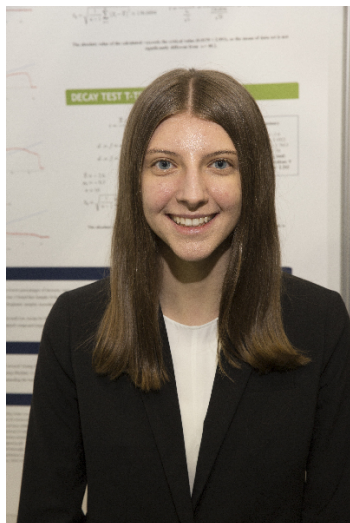


# CWSF 2019 - Fredericton, New Brunswick



## Catherine Diyakonov

### Developing Bioplastic Walls: Reducing Waste and Restoration Costs After Floods

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Greater Vancouver

**City:** Vancouver, BC

**School:** Lord Byng Secondary

**Abstract:** In Canada, about 40% of all home insurance claims result from water damage, the number one kind of loss for home insurance claims. With this in mind, I wanted to replace the commonly used gypsum drywall with bioplastic walls which have a low water absorbency rate, a high decay rate, the ability to withstand a given force, and anti-flammable properties.

#### Biography

My name is Catherine, and I am a 9th grade student in Vancouver, BC who will be attending CWSF for the second consecutive year. I have been participating in science fairs since I was in 6th grade and was eager to participate again this year! When I am not working on science fairs, I can be found debating on my school's debate team, participating in track and field meets, being a part of my school's student council, and volunteering in my community. I am a member of the Vancouver Quadra Constituency Youth Council with a Member of Parliament in which my peers and I discuss public policy issues and organize various community outreach events. My love for helping those around me on a local and global spectrum made way for my project, which not only helps homeowners on a local scale, but helps the environment on a much larger scale as well. I would like to develop my bioplastic walls further and perfect them to a quality which exceeds the one of the gypsum drywall used today. I am happy to be representing Team BC with likeminded, passionate individuals who, like me, want to make a difference in the world.

#### Awards

#### Value

S.M. Blair Family Foundation Award - Intermediate Sponsor: S.M. Blair Family Foundation	\$750
Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$1 750</b>