

CWSF 2016 - Montreal, Quebec



Phyllis Lesnikov

The Remediation of Britannia Mine through Phytoremediation and Chemical Washing

Challenge: Environment

Category: Intermediate

Region: Greater Vancouver

City: Burnaby, BC

School: Stratford Hall

Abstract: Phytoremediation and chemical washing are two emerging methods of environmental remediation that use hyperaccumulator plants and chelating agents to remediate ecosystems contaminated with heavy metal contamination. This project was specifically focused on the remediation of Britannia Mine, the second most contaminated site in North America. The results imply that both methods could be used to remediate various concentrations of metal.

Biography

Phyllis Lesnikov is a grade 10 student at Stratford Hall IB World School in Vancouver, BC. She is an aspiring scientist, activist, and avid lover of debate, MUN, and public speaking. She has been involved with MUN for close to 5 years, and in past accomplishments, has received a 3rd place medal at the Provincial French Public Speaking Competition of BC (Concours D'Art Oratoire). Additionally, she is on the board of a number of non-profit organizations, and understands the importance of youth leadership. She believes in the contribution that young adult's perspective may have to solving the issues that are a part of today's world; it was this belief that led her to an experiment related to environmental topics, specifically the remediation of vastly contaminated mine sites. Phyllis is interested in investigating the potential and ability of other remediation methods besides the ones she investigated, and in the future, would like to research the implication of chemistry and genetic sciences in the environmental field. This novel and emerging field is one that Phyllis believes could be truly influential in reducing the damage that heavy metal contamination has had on many ecosystems.

Awards

Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 000