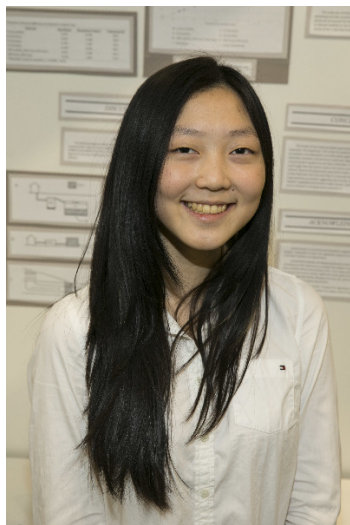


CWSF 2017 - Regina, Saskatchewan



Jenny Mei

Preventing Eutrophication: Phosphorus Management through Reactive Filtration

Challenge: Environment

Category: Intermediate

Region: South Fraser

City: Surrey, BC

School: Elgin Park Secondary

Abstract: Nutrient pollution is the leading cause of eutrophication, a widespread environmental issue that can lead to anoxic waters or "dead zones." This study examined the phosphorus removal capabilities of calcium hydroxide, hematite, and alpha-phase aluminum oxide to evaluate their potential as substrates in a reactive filter designed to remove excess phosphorus.

Biography

My name is Jenny Mei, and I'm a Grade 10 student at Elgin Park Secondary. The sciences - especially chemistry and physics - have always been my favorite subjects, in addition to math. As my interests may suggest, I intend to study engineering after graduating. Although most of my spare time is dedicated to cramming for and complaining about APs, I do spend time on more enjoyable things such as art, hanging out with my friends, and video games. The inspiration for my project actually came when I was studying AP Environmental Science, when I learnt of the widespread problem of eutrophication. I became interested in methods of reducing the effects of phosphorus pollution, which led to my development of a phosphate-sorbing filter.