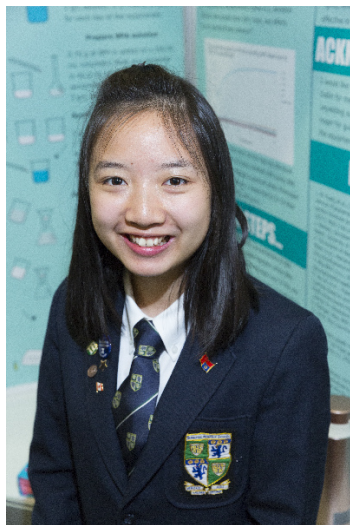


# CWSF 2018 - Ottawa, Ontario



## Melody Cheng

### Purifying Water: Using Beta-CD-CA Polymer to Remove Bisphenol A

**Challenge:** Environment

**Category:** Intermediate

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** Glenlyon Norfolk School

**Abstract:** I studied the polymer called beta-cyclodextrin cross-linked with citric acid in order to filter bisphenol A out of aqueous solutions. Research suggested bisphenol A is an endocrine-disrupting chemical that has the potential to cause chronic diseases, for instance, cancer, diabetes etc. There are currently no regulations in Canada to ban the use of bisphenol A in bottled water and usable plastic containers.

#### Biography

I wanted to expand my knowledge about water since there are still many things about water that are a mystery to us. I was inspired to do my project when I read about scientists that found evidence of a new phase of water (published in November 2016). I hope in the future we as human beings will have the opportunity to explore and understand the topic fully. In my opinion, the essential thing when it comes to doing a science project is an open, passionate heart towards the subject. There may be failures along the way but learning how to not let these burdens pull you down will lead to you an astonishing experience. In my spare time, I am a member of the Model United Nations team at my high school and I also run a TEDx club.

#### 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