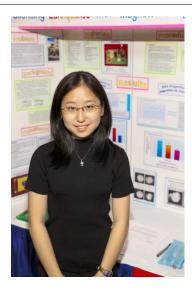




CWSF 2005 - Vancouver, British Columbia



Hanna Cho

Silencing Earthquakes with Magnetorheological Fluid

Division: Engineering & Computing Sciences

Category: Intermediate

Region: Greater Vancouver **City:** Vancouver, BC

School: Sir Winston Churchill Secondary School

Abstract: My project focused on enhancing stability in buildings experiencing

earthquakes by using a liquid called magnetorheological fluid (MRF), a substance made from iron ore and oil. I examined the efficiency of MRF, as well as the best ore-oil proportion to achieve maximum reduction in

vibration using a home-built earthquake generator.

| Awards | Value |
|--|---------|
| The University of Western Ontario Scholarship | \$1 500 |
| Silver Medallist - \$1500 Entrance Scholarship | |
| Sponsor: University of Western Ontario | |
| Silver Medal - Engineering - Intermediate | \$700 |
| Sponsor: Youth Science Foundation Canada | |
| Total | \$2 200 |



