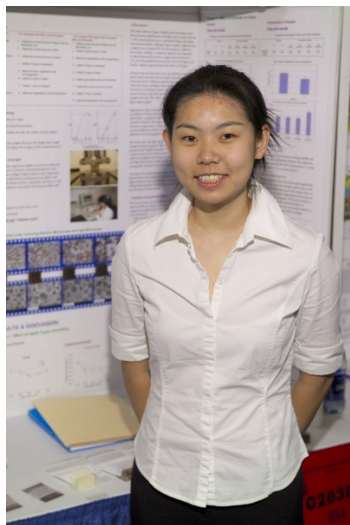


# CWSF 2005 - Vancouver, British Columbia



## Tiffany Lu

### Biopolyurethane Rigid Foams Based on Isolated Lignins

**Division:** Earth & Environmental Sciences

**Category:** Senior

**Region:** Greater Vancouver

**City:** Richmond, BC

**School:** Sir Winston Churchill Secondary School

**Abstract:** This study focuses on utilizing one of the natural polymer resources, lignin to replace the synthetic polyol in producing biodegradable polyurethane rigid foams. Different experiments were conducted to test factors, including density and compressive strength, which affect the practical application of rigid foams.

Awards	Value
Chemical Education Fund Award - Senior Sponsor: Chemical Institute of Canada	\$500
Environment and Plastics Industry Council Award - Senior Sponsor: Environment and Plastics Industry Council	\$750
Pulp & Paper Technical Association of Canada Award Sponsor: Pulp & Paper Technical Association of Canada	\$500
UBC Science (Vancouver) Entrance Award Senior Gold Medallist - \$4000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$4 000
The University of Western Ontario Scholarship Gold Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
Gold Medal - Earth & Environmental Sciences - Senior Sponsor: Petro-Canada	\$1 500
Total	\$9 250