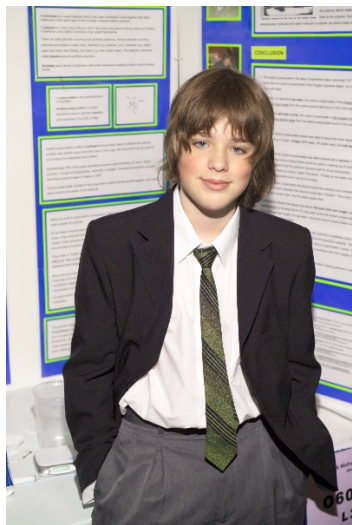


CWSF 2005 - Vancouver, British Columbia



Roland Troke Barriault

Sodium Polyacrylate: The Power of Polymers

Division: Physical & Mathematical Sciences

Category: Junior

Region: Annapolis Valley

City: Kingston, NS

School: Ecole Rose des Vents

Abstract: Sodium polyacrylate polymers, extracted from disposable diapers, were tested for their ability to absorb liquids. Sodium polyacrylate was found to absorb only water-based liquids. Water absorption is affected by salt content, due to ionic charges and the process of osmosis, and by cross-linking.