

CWSF 2014 - Windsor, Ontario



Twisted Carbon Fibre Aerogel: A Cellulose Based Hydrophobic Superabsorbent

Challenge: Innovation

Category: Senior

Region:

City: ,

School:

Abstract: In this experiment I set out to determine whether twisted carbon fibre aerogels could be used as a replacement for hydrocarbon based sorbents to clean up oil spills. The material was synthesized from cellulose sources and then tested. It was found that, with some optimizations, the twisted carbon fibre aerogel synthesized from cotton absorbed three times as much oil as the hydrocarbon (polypropylene) based sorbent.