TRUFFLES INSPIRE LITHIUM BATTERY IMPROVEMENTS

US scientists used layered chocolate truffles as an inspiration to produce a layered lithium-sulfur battery cathode. It consists of a sulfur-carbon centre, with multiple layers formed from polymers, on top, and ‘sprinkles’ of carbon nanospheres to improve conductivity.

COCKROACH GUT BACTERIA PRODUCE CHEMICAL ATTRACTANTS

Bacteria that live in the guts of cockroaches produce a range of volatile compounds. These compounds end up in the faeces of the cockroaches, and some of them can attract other cockroaches and cause them to swarm.

STRONGER BULLETPROOF VESTS FROM OLIVE OILS

A new method creates high performance polyethylene fibres from the natural fats found in oils from olives and peanuts. The new approach is more efficient than current methods, and produces fibres that are two times stronger than commercial fibres.

FATS BREAK DOWN SLOWER IN HUMANELY KILLED FISH

Fish killed by slow asphyxiation could go off quicker than those killed with a sharp blow to the head. A study found fatty acids break down in the former quicker than in the latter. Higher concentrations of hydroperoxides in the asphyxiated fish could be to blame.

MONITORING TOASTING FOR WHISKEY & WINE BARRELS

A new study used time-of-flight mass spectrometry to identify compounds released from oak boards in real time as they were toasted. It could improve the consistency of oak barrels, which could be useful for the whiskey and wine industries that use them.