

# THIS WEEK IN CHEMISTRY

22<sup>ND</sup> NOVEMBER - 28<sup>TH</sup> NOVEMBER 2015

## 'SUPERBALLS' COULD HELP PREVENT EBOLA INFECTION

Molecular 'superballs', based on carbon fullerenes, have had some promising results in preventing the infection of cells by the Ebola virus in laboratory tests. The 'superballs' mimic the shape of the virus, and help prevent it from binding to cell receptors.



## SEMI-CONDUCTIVE POLYMERS CREATE 'ELECTRONIC PLANTS'

Roses can be transformed into living circuits with semi-conductive polymers. Plants send signals with ions, which the research takes advantage of. A primitive colour-changing display could be formed in the leaves using the polymer then applying a voltage.



## SUGAR WATER MAY BE BETTER THAN SOME SPORTS DRINKS

Drinks containing sucrose (in the form of table sugar) could have a greater impact on athlete performance than some glucose-containing sports drinks. The research found cyclists found exercise easier and had less gut discomfort with sucrose-containing drinks.



## DISINFECTION BYPRODUCTS FORM IN TEA & COFFEE

New research found that residual amounts of chlorine present in tap water to prevent microbial growth can react with compounds in tea and coffee to produce disinfection by-products. These products are still well within the limits judged to be safe.



## IDENTIFYING PROHIBITED TYRE AGENTS IN MOTOR RACING

A number of tyre-softening agents are prohibited in motor-racing, as they can give unfair advantages, as well as creating weak spots. However, they have often been undetectable. Now, a new solid phase micro-extraction technique allows them to be identified.



CREATED BY COMPOUND INTEREST  #TWIChem

Twitter: @compoundchem | Facebook: [www.facebook.com/compoundchem](http://www.facebook.com/compoundchem)

Links to articles & research papers: <http://goo.gl/Tt21g8>

