

# THIS WEEK IN CHEMISTRY

7<sup>TH</sup> JULY 2016 – 13<sup>TH</sup> AUGUST 2016

Links to articles & studies for the featured stories are provided at: <http://goo.gl/hrf8fl>



## SHRIMP SHELL PRESERVATIVES KEEP WINE FRESH

Sulfites are used to keep wine fresh, but can cause environmental problems and even allergic reactions in some. A new preservative made from chitosan derived from shrimp shells is thought to remove traces of iron and copper, impairing bacterial growth and oxidation.



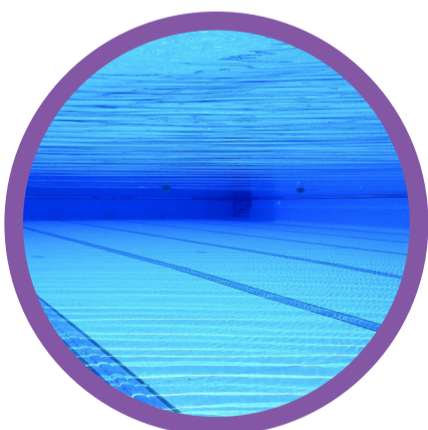
## NON-INDUSTRIAL PERFLUORINATED CHEMICAL CONTAMINATION

Drinking water contamination with perfluorinated chemicals from sites where they are produced is a health concern. A new study has shown that other sources, such as airports and military fire training areas, could also be contributing to the problem.



## SQUID PROTEINS ENABLE SELF-REPAIRING FABRIC

A new fabric incorporating proteins from squid ring teeth (isolated from the suction caps of squid) allows rips in the fabric to be easily repaired. The fabric also contains urease and polystyrenesulfonate. Torn pieces of the fabric reattach when pressed together in water.



## POOL CHEMISTRY PROBLEMS STRIKE THE RIO OLYMPICS

This week Olympic pools turned a murky green. Suggested reasons included algal growth or the presence of copper salts. The latest explanation is that 160 litres of hydrogen peroxide were dumped in the pools, affecting chlorine's ability to prevent algal growth.



## RADIOCARBON DATING IDENTIFIES LONGEST LIVED VERTEBRATE

Radiocarbon dating of a Greenland shark has identified it as the longest lived vertebrate, between 272-512 years. The eye lens nuclei contain proteins that form before birth and remain unchanged; the radioactive carbon-14 they contain to be used to determine their age.



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