

# THIS WEEK IN CHEMISTRY

20<sup>TH</sup> MARCH 2016 – 26<sup>TH</sup> MARCH 2016

Links to articles & studies for the featured stories are provided at: <http://goo.gl/kNuH0f>



## PHONE APP USES COLOUR CHANGE TO SPOT STALE BEER

A colour-changing polymer film can help detect stale beer. The film changes colour when it reacts with the compound furfural, the concentration of which rises as beer ages. An Android phone app can then use a photo to determine the furfural concentration.



## MINI DRUG FACTORY MAKES DOSES OF FOUR DIFFERENT DRUGS

Researchers have designed a fridge-sized machine that can synthesise liquid or topical doses of four different drugs: Benadryl, Vallium, Prozac, and lidocaine. The machine's creators plan to both develop it to be able to synthesise more drugs, and commercialise it.



## SILVER NANOPARTICLES IN CLOTHING LOST DURING FIRST WASH

The antimicrobial properties of silver nanoparticles mean they're often adding to clothing (e.g. socks). However, a new study shows most of these particles are lost during the first wash. This could have environmental effects, as silver ions are toxic to aquatic organisms.



## TRANSPARENT WOOD AS A GLASS WINDOW ALTERNATIVE

By removing the polymeric material lignin from wood, and adding in acrylic in its place, researchers have created transparent wood that lets through 85% of light. It could be used as a low-cost building material, or as a replacement for glass in solar cell windows.



## NEW EPIGENETIC MARK FOUND IN THE DNA OF MAMMALS

Scientists have discovered that adenine, one of the bases in DNA, can be methylated (have a CH<sub>3</sub> group attached) in mammals. It was known in single-celled organisms, but not in multicellular organisms until now. Epigenetic marks tell cells whether and how to read genes in DNA.

