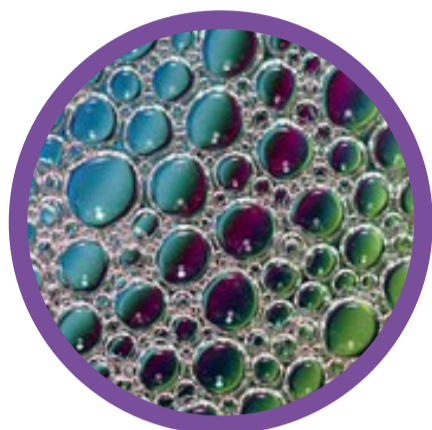


THIS WEEK IN CHEMISTRY

11TH SEPTEMBER 2016 – 17TH SEPTEMBER 2016

Links to articles & studies for the featured stories are provided at: <https://goo.gl/wPQ5ym>



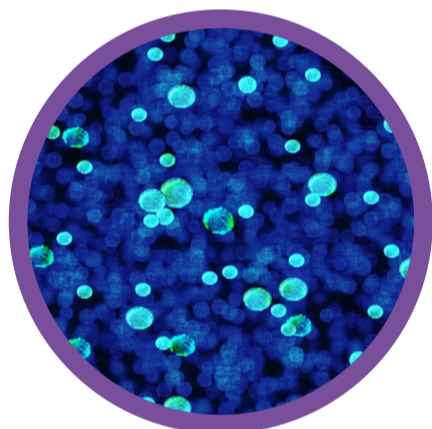
SOY-BASED ALTERNATIVE TO PLASTIC MICROBEADS IN SOAPS

Plastic microbeads currently used in some soaps are linked with environmental problems. Four students at Purdue University have produced soap with soy-based microbeads as an alternative. They are mixed with oil to help prevent water absorption.



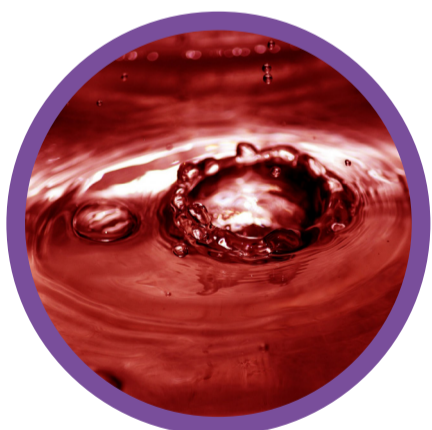
ISOTOPE ANALYSIS GIVES INSIGHT INTO THE MOON'S ORIGIN

The current view of the Moon's origin is that it was formed by Earth and a Mars-sized planet, Theia, colliding. Differences in potassium isotope abundances between moon rocks and the Earth suggest the moon was formed from Earth's vaporised mantle and all of Theia.



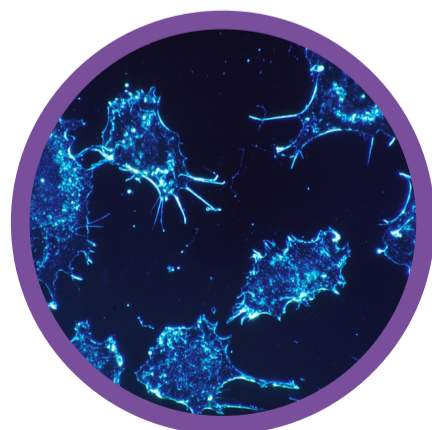
SWIMMING MICROROBOT LENSES PUSH LIMITS OF MICROSCOPY

Microscale spherical lenses allow the limit of light microscopy to be pushed to 50nm, meaning even smaller features can be directly observed. They use a platinum catalyst layer to propel themselves through a hydrogen peroxide solution, and can be magnetically guided.



METALLURGICAL WASTE TURNS RUSSIAN RIVER RED

The Daldykan river in northern Russia hit the news this week after turning bright red. Norilsk Nickel, one of the world's biggest producers of nickel, admitted one of its plants is responsible; the colouration is likely caused by iron-containing compounds such as iron oxide.



INCREASED POTASSIUM LEVELS HELP TUMOURS EVADE ATTACK

Researchers have discovered that high potassium ion concentrations in tumours stop T cell immune cells from attacking the cancerous cells. When they engineered T cells to cope with these high concentrations, they saw their ability to attack tumours in mice improve.

