

THIS WEEK IN CHEMISTRY

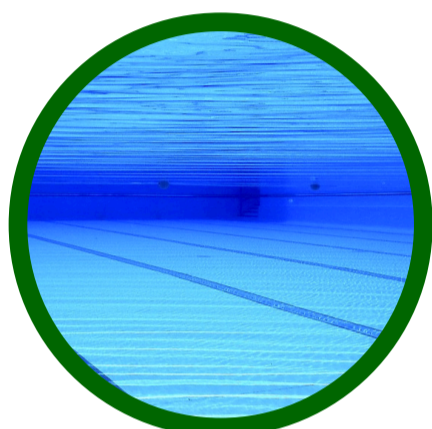
26TH FEBRUARY 2017 – 4TH MARCH 2017

Links to articles & studies for the featured stories are provided at: <https://goo.gl/yzU7SG>



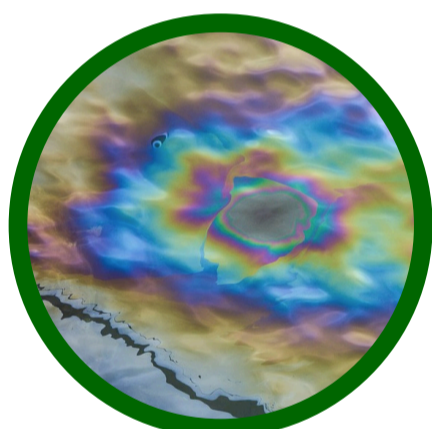
ADDITIVE ALLOWS COMMON PLASTICS TO BE RECYCLED TOGETHER

Some common plastic types cannot be recycled together, and must be sorted beforehand. A new additive allows two common plastics, polyethene and isotactic polypropylene, to be recycled together. The block copolymer can bridge and link the two plastics.



ARTIFICIAL SWEETENER HELPS DETECT PEE IN THE POOL

A method of detecting urine in pools works by detecting the widely-consumed artificial sweetener, acesulfame potassium, which passes unchanged into peoples' urine. They estimated that in a 110,000 gallon pool, swimmers had released over 7 gallons of urine.



FISH-INSPIRED MEMBRANES SEPARATE WATER AND OIL

A fish-inspired membrane collects oil from water without getting clogged. It has mesh sections with pores of gradually decreasing size, coated with hydrophilic nanosheets. Water moves through the membrane; the oil flows over the top and can be collected.



NEW METAL-ORGANIC COMPOUNDS FOUND IN METEORITES

Previously unknown metal-organic complexes, dihydroxymagnesium carboxylates, have been found in 61 meteorite samples of various ages. It's thought that the complexes are formed when magnesium released from minerals is trapped in organic compounds.



FLUORINATED OPIOID AVOIDS SIDE EFFECTS IN RATS

A new fluorinated version of the opioid fentanyl appears to relieve pain in rats without the usual side effects, which include opioid addiction. Adding fluorine makes the compound inactive unless it is in a high-acidity environment, such as that in injured or inflamed areas.

