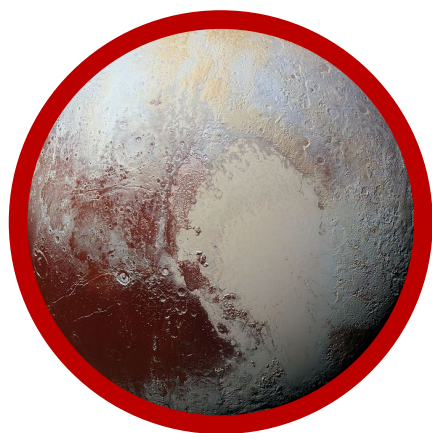


# THIS WEEK IN CHEMISTRY

29<sup>TH</sup> MAY 2016 – 4<sup>TH</sup> JUNE 2016

Links to articles & studies for the featured stories are provided at: <http://goo.gl/WaOj2a>



## CHURNING NITROGEN ICE CAUSES STRANGE PLUTO PATTERNS

Researchers have attributed the strange polygonal shapes seen on Pluto's surface to convection currents in nitrogen ice. Heat from Pluto's interior causes these currents, which are possible due to the nitrogen ice's fluidity even at Pluto's low temperatures.



## PAPER CARRIES SECRET MESSAGES USING COUMARIN & UV LIGHT

French researchers have developed paper embedded with coumarin molecules which allows messages to be written on it with UV light. The light causes the formation of cyclobutane dimers. These fluoresce under UV light, and can be erased using a different wavelength.



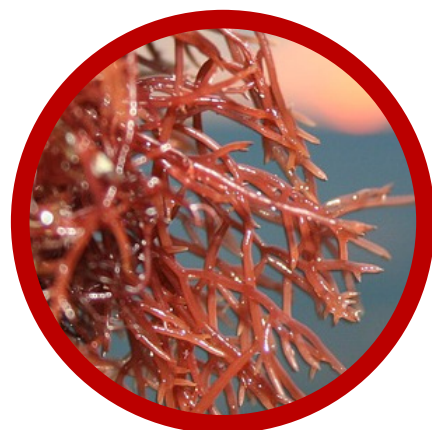
## ANCIENT EGYPTIAN PIGMENT FINDS USE IN FINGERPRINT DUSTING

An Ancient Egyptian pigment used to paint artefacts has found a new potential use as a luminescent fingerprint dusting powder. The pigment absorbs white light and emits in the near-infrared part of the spectrum, which can be detected using a modified digital camera.



## HIGH MICROPLASTIC LEVELS IN WATER CAUSE PROBLEMS FOR FISH

Researchers have shown that microplastics, which can be found in consumer products or shear off larger pieces of plastic, can stunt growth and inhibit hatching of perch embryos and larvae. The concentrations of microplastics used fall within those in some coastal areas.



## ALGAE POLYSACCHARIDES REDUCE ALLERGY SYMPTOMS IN MICE

It's previously been suspected that polysaccharides in seaweeds could help treat allergy symptoms. A new study found mice given extracts of polysaccharides from a commercial red algae showed reduced allergy symptoms to a shellfish allergen than a control group.

