

# THIS WEEK IN CHEMISTRY

24<sup>TH</sup> SEPTEMBER 2017 — 30<sup>TH</sup> SEPTEMBER 2017

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



## TATTOO INK NANOPARTICLES END UP IN LYMPH NODES

A new study shows nanoparticles from tattoo inks can end up in lymph nodes. Lymph node tissue from tattooed individuals was coloured by the same organic pigments as in their tattoos. Further work will investigate whether there are negative health effects.



## SCORPION TWEAKS ITS VENOM TO DETER PREDATORS

New research has shown that, after being exposed to predators, the Australian rainforest scorpion tweaks the chemical make-up of its venom to increase the production of toxins that target mammalian cells. The changes took place over a five week period.



## SYNTHETIC RECEPTOR QUICKLY SPOTS AMPHETAMINES IN URINE

A cucurbituril-based synthetic receptor detects amphetamines at nanomolar concentrations in urine. Combined with a portable circuit board it can send results to a phone. It can't distinguish between different amphetamines but this may eventually be possible.



## HURRICANE HARVEY CAUSES DIOXIN LEAK FROM WASTE PITS

The EPA has confirmed that an unknown amount of dioxin may have been washed from a waste pit near Houston when Hurricane Harvey hit. Dioxins are produced as waste products from a number of processes, and have been linked with cancer and birth defects.



## NINE NEW MATERIALS ADDED TO EU SUPPLY RISK LIST

The EU has added nine new materials to its list of critical raw materials for European industry. Helium, bismuth, phosphorus, vanadium, and natural rubber are amongst the materials added to the list. Meanwhile, chromium and magnesite were removed from the list.

