

THIS WEEK IN CHEMISTRY

15TH OCTOBER 2017 – 21ST OCTOBER 2017

Links to articles & studies for the featured stories are provided at: <https://goo.gl/VsiLb9>



NEUTRON STAR MERGER REVEALS HEAVY ELEMENT SYNTHESIS

This week, LIGO scientists observed gravitational waves from a neutron star collision. Other electromagnetic signals they detected gave evidence for the process which scientists had previously theorised creates heavy elements like gold, platinum and uranium.



EXPERIMENT SHOWS THAT POLYMERS GROW IN 'SPURTS'

A new experiment is the first to allow the real-time growth of a single polymer chain to be seen. It showed that the chains don't grow steadily, but in spurts. This is due to polymer tangles forming as large numbers of monomers are added to the polymer chain.



TWO NEW TUBERCULOSIS DRUGS ENTER HUMAN TRIALS

Two new drugs to treat tuberculosis are being tested in humans. Tuberculosis kills around 1.8 million people every year worldwide. One drug blocks an enzyme that helps the TB bacteria build its cell wall, while the other is a more potent type of an existing antibiotic.



ENGINEERED BACTERIA BUILD GOLDEN MICROSTRUCTURES

Scientists engineered *E coli* bacteria cells to create a modified protein which self-assembles into domes. The domes can then bind gold nanoparticles, and can be used as simple pressure sensors. It represents further progress in programming cells to build structures.



PROZAC INCREASES 'RISKY' BEHAVIOUR OF CRABS

Exposing crabs to fluoxetine, the active compound in Prozac, changes their behaviour. They were less cautious about predators and fought more with other members of the species. It could have implications for seawater contaminated with fluoxetine near human settlements.

