

# THIS WEEK IN CHEMISTRY

12<sup>TH</sup> MARCH 2017 – 18<sup>TH</sup> MARCH 2017

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



## FIRST FLUORESCENT FROGS DISCOVERED IN SOUTH AMERICA

Polka-dot tree frogs in South America have been discovered to be the first known fluorescent frogs. A fluorescent molecule in their skin gives them a blue-green glow under UV light. It's speculated that the frogs might use the fluorescence to communicate.



## DATABASE OF HAZARDOUS CHEMICAL REACTIONS LAUNCHED

A non-profit group has released a database called the Chemical Safety Library which aims to catalogue safety information for a range of reactions. It is hoped it will be a useful resource for chemists carrying out hazard and risk assessments for experiments.



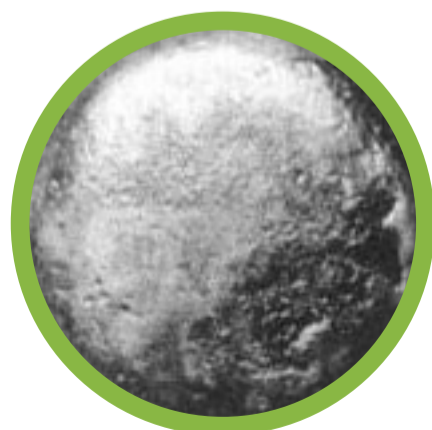
## UNIQUE PROTEINS HELP WATER BEARS SURVIVE DRYING OUT

Tardigrades, also known as water bears, can survive drying out for decades, but how they do so was unclear. New research has identified a group of proteins they express when drying out which form glass-like solids and allow them to survive.



## PAPER STRIP TEST DETERMINES BLOOD TYPE IN 30 SECONDS

A new paper strip test uses antigens in blood to determine a person's blood type. When a drop of blood is applied to the test paper, it spreads across the strip and reacts with antibodies embedded in it. In trials the test was 99.9% accurate, and only took 30 seconds.



## PLUTONIUM'S +2 OXIDATION STATE OBSERVED FOR FIRST TIME

Almost all lanthanides and actinides have a +2 oxidation state. Up until now, this oxidation state had not been observed for plutonium. US researchers have now succeeded in isolating plutonium's +2 oxidation state for the first time by trapping it in a cage of organic ligands.

