

# THIS WEEK IN CHEMISTRY

14<sup>TH</sup> MAY 2017 – 20<sup>TH</sup> MAY 2017

Links to articles & studies for the featured stories are provided at: <https://goo.gl/DGy2cl>



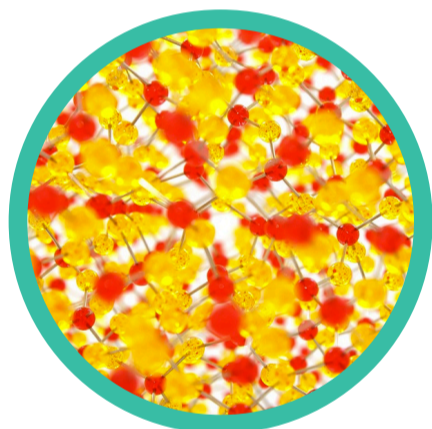
## PLANT MOLECULES THAT CAN ACT AS CONTRACEPTIVES

The plant chemicals lupeol (dandelion root and aloe vera) and pristimerin (tripterygium wilfordii plant) inhibited sperm cells' forceful swimming in lab tests, stopping them fertilising egg cells. However they are at low levels in plants and expensive to extract.



## CHEMICALS ORCHIDS USE TO ATTRACT WASPS IDENTIFIED

Spider orchids use an unusual set of sulfur-based compounds to attract wasp pollinators according to new research. It's the first time that sulfur pheromones have been identified in wasps, and unusual as plants rarely produce sulfur-containing volatile compounds.



## MEASURING THE ELECTRONEGATIVITY OF SINGLE ATOMS

Japanese researchers used atomic force microscopy (AFM) to measure the electronegativity of single atoms for the first time. They measured the electronegativities of atoms of several elements, and found their results closely agreed with Pauling electronegativities.



## NEW PROTEIN SOLUBILISING ROLE SUGGESTED FOR ATP IN CELLS

Adenosine triphosphate (ATP) has several jobs in cells, including acting as an energy carrier, but cells contain far more ATP than its roles require. A new study suggests this is because it helps stop proteins clumping together in cells when they are at high concentrations.



## GRAPHENE AEROGEL USES SUNLIGHT TO PRODUCE WATER VAPOUR

A new floating graphene aerogel film can produce water vapour at room temperature using only sunlight. It speeds up evaporation by heating only a small section of the water. It could find use in desalination, but first its toughness needs to be improved.

