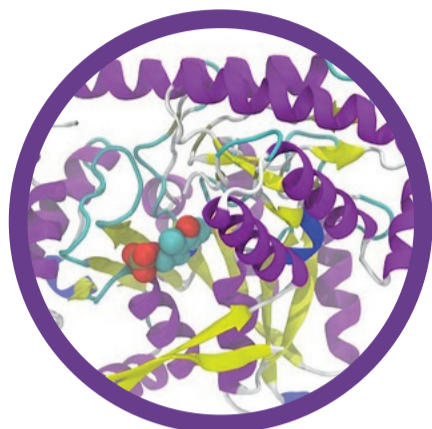


# THIS WEEK IN CHEMISTRY

16<sup>TH</sup> OCTOBER 2016 – 22<sup>ND</sup> OCTOBER 2016

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



## UNUSUAL HYDROGEN BOND HAS ROLE IN PROTEIN STABILITY

New research shows that the hydrogen bond that can form between the amide hydrogen and carbonyl oxygen in an amino acid is more important to the stability of some proteins than realised. It may be involved in stabilising proteins involved in Alzheimer's disease.



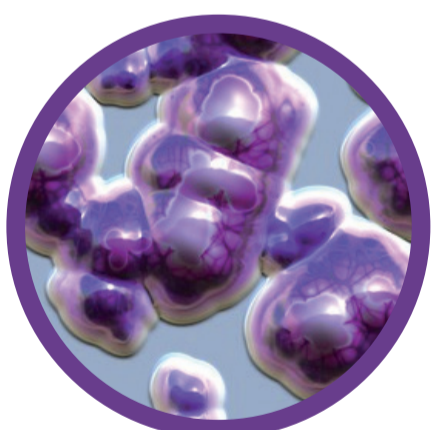
## NOBEL WINNER SPEEDS UP MOLECULAR MOTORS WITH METALS

Ben Feringa, one of those who won the prize jointly for their work on molecular motors, has shown how the speed of the motors can be altered by adding zinc, palladium, or platinum. Up until now different speeds were only achievable by making different molecular motors.



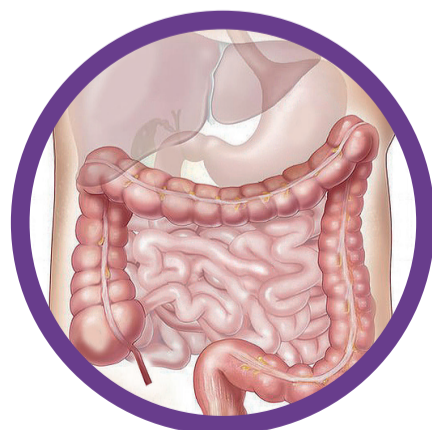
## ALGORITHM LEARNS ORGANIC CHEMISTRY THEN PASSES TEST

Chemists taught an algorithm two units of organic chemistry – the reactivity of alkenes and of alkyl halides – then put its new-found knowledge to the test by giving it two problems from the Wade's Organic Chemistry textbook. The algorithm scored 80%!



## NITRATE-REDUCING BACTERIA CORRELATE WITH MIGRAINES

A new study discovered that higher levels of nitrate-reducing bacteria were present in the mouths of those who suffer from migraines compared to those who don't. A causative relationship is yet to be established; further research on larger groups is planned.



## SELF-PROPELLING MICROMOTORS CARRY CARGO TO THE GUT

Micrometre cylinders filled with magnesium particles and a fluorescent dye were coated with a methacrylate polymer. The coating gets through the stomach, but dissolves in the intestines. The magnesium reacting then propels the cylinders. It's hoped they could deliver drugs.

