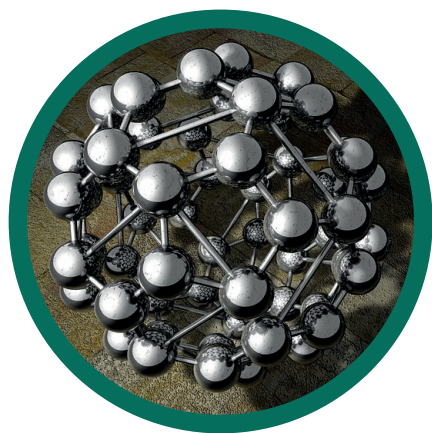


THIS WEEK IN CHEMISTRY

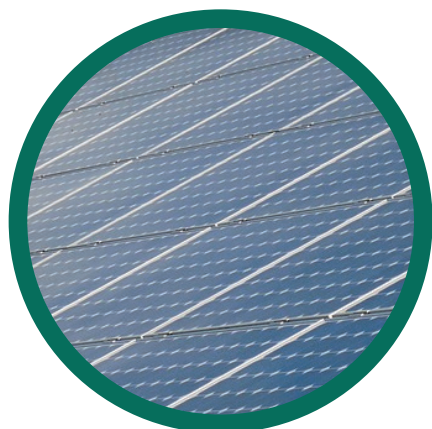
21ST MAY 2017 – 27TH MAY 2017

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



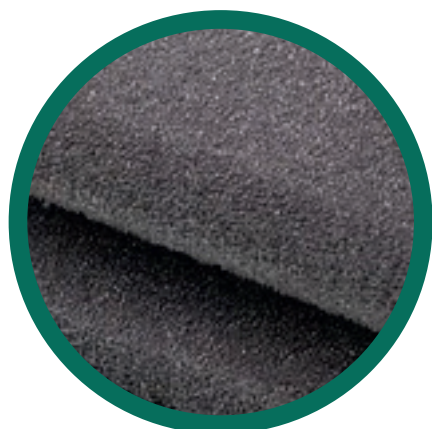
OBSERVING NITROGEN ATOMS IN FULLERENE NANOFASKS

Chemists have used fullerene nanoflasks, previously used to make a single molecule 'water bottle', to observe the behaviour of a single atom of nitrogen. The study represents progress towards eventually observing reactions between bigger molecules.



PROTECTING PEROVSKITES WITH IODIDE SALT COATINGS

Methylammonium lead halide perovskites are promising materials for solar cells, but degrade on exposure to oxygen and light. A new study uncovered the mechanism of the degradation, and also found an iodide salt coating kept the perovskite stable for three weeks.



POROUS NICKEL CATHODE BOOSTS LITHIUM-OXYGEN BATTERIES

Lithium-oxygen batteries have good energy density, but have low efficiencies and durability. A new study addresses this problem by replacing the carbon cathode with a spongy nickel-gold cathode. It boosts the battery's performance and resists cathode breakdown.



ARTIFICIAL MELANIN NANOPARTICLES PROTECT SKIN CELLS

Melanin is the pigment responsible for human skin and hair colour. A new study found that nanoparticles made with artificial melanin protected lab-grown skin cells from damage from ultraviolet radiation. The discovery may eventually lead to biomedical applications.



CHEMISTS SYNTHESISE MOLECULAR 'PRETZELS'

Chemists have made quasi[1]catenanes, pretzel-like molecules which consist of two rings interlocking at a central carbon atom, for the first time. It is a step towards the synthesis of lasso peptides, common bacteria molecules which could have antibacterial applications.

