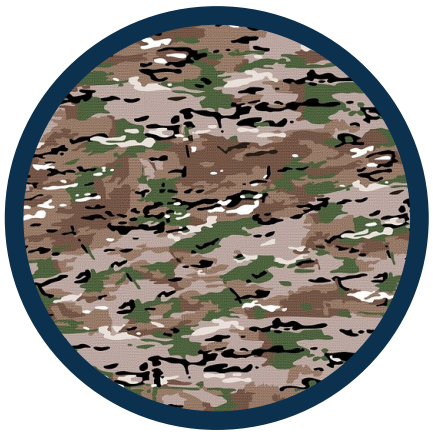
THIS WEEK IN CHEMISTRY

3RD APRIL 2016 – 9TH APRIL 2016

Links to articles & studies for the featured stories are provided at: http://goo.gl/01u3E2

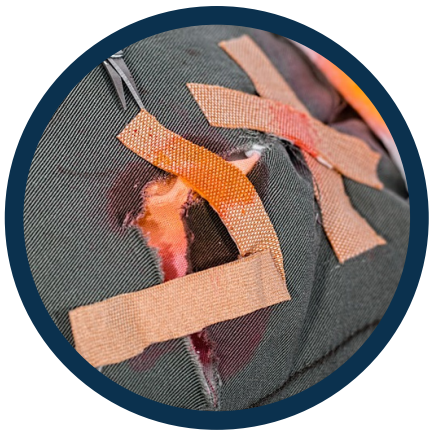
STRUCTURE OF ANTIDEPRESSANT TARGET PROTEIN SOLVED

Scientists have determined the structure of the protein targeted by serotonin reuptake inhibitors (SSRIs), allowing them to see the site at which two SSRI drugs bind. A better understanding of the structure could lead to more effective drugs to treat depression in the future.



POLYMER ALLOWS COLOUR-CHANGING CAMOUFLAGE CLOTHING

Chinese chemists designed a new polymer which changes colour from brown to green when a low voltage is applied. The change is reversible, and the polymer maintains its activity after 1000 repetitions. It could have applications in clothing, and has already been tested in fabrics.

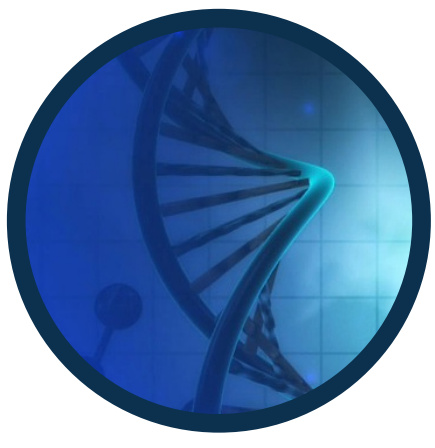


SELF-REPAIRING POLYMER COULD MODERNISE WOUND DRESSINGS

UK researchers have developed a polymer which self-repairs at body temperature. They hope the polyurethane material could be used in artificial skin, or wound dressings. It flows back together when cut, as this disrupts the network and lowers viscosity at the damaged area.

METAL FOAM TURNS BULLETS INTO DUST ON IMPACT

A new composite metal foam is capable of reducing armour-piercing bullets to dust on impact. The face of the material is made of boron carbide ceramic, with the metal foam, made from 2mm hollow steel spheres in a stainless steel matrix, encased within.



SCIENTISTS SUCCESSFULLY STORE & RETRIEVE IMAGES USING DNA

US scientists encoded image data from four images into the nucleotide sequences of DNA sections, and were then able to retrieve this data and reconstruct the images. This represents the first complete system to store, retrieve, and reconstruct data using DNA.