

THIS WEEK IN CHEMISTRY

30TH JULY 2017 – 5TH AUGUST 2017

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



FRIED CHICKEN SULFUR COMPOUNDS ACT AS LEMON FLAVOURING

A team investigating the flavour profile of fried chicken found several lemon-scented thiophene compounds which could replace citral. Citral is commonly used for lemon flavourings but is easily broken down in acidic conditions and at high temperature.



DNA MATERIAL ABSORBS UV LIGHT BETTER THE MORE IT'S EXPOSED

A new DNA film-based coating becomes better at absorbing ultraviolet radiation the longer it is exposed to it. It could be used to protect skin from sunburn, particularly when the skin is damaged. In its current form it couldn't be added to sunscreens, however.



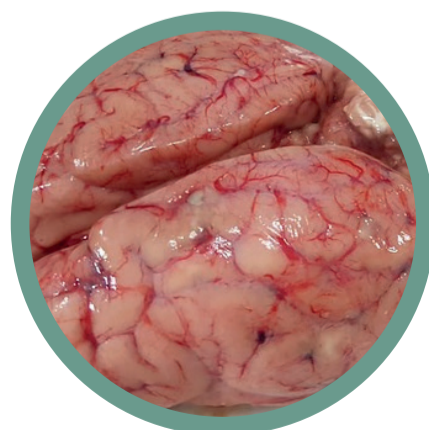
SUNSCREEN REDUCES MULTIPLE SCLEROSIS SYMPTOMS IN MICE

Salicylic acid derivatives in certain sunscreens have been shown to reduce multiple sclerosis symptoms in mice. The mechanism by which this occurs has yet to be identified, but future findings could make multiple sclerosis disease pathways clearer.



TRACKING LITHIUM ION MOVEMENT IN BATTERIES

Lithium ion batteries in phones and laptops have to be charged more frequently with time, and can sometimes fail. New fluorescent imaging agents which bind to lithium ions allow their movement in batteries to be monitored, potentially helping understand and prevent problems.



SELF-PROPELLING VESICLES CAN CROSS THE BLOOD-BRAIN BARRIER

Vesicles made of two types of co-polymers use enzymatic reactions to take advantage of a glucose concentration gradient and cross the blood-brain barrier, which could allow them to be used to deliver drugs. 20% of the vesicles ended up in the brain in tests in mice.

