COPPER HELPS US DETECT BAD-SMELLING SULFUR COMPOUNDS
Humans can smell sulfur-containing thiol compounds, present in the smell of rotting eggs and skunk spray, at very low concentrations. New research shows this is because they bind to a copper-containing receptor in our noses, which is unique for odour receptors.

BLOOMING FLOWER MADE FROM PROGRAMMABLE POLYMER
A programmable, shape-changing hydrogel has been used to make a flower which opens over two hours. Covalent crosslinks store elastic energy, and temporary hydrogen bonds help slowly release it. It could have a range of engineering and biomedical applications.

MOF FOOD PACKAGING KEEPS FOOD FRESHER FOR LONGER
The first commercial product utilising a metal organic framework (MOF) was announced this week. The product is food packaging, which uses an unspecified MOF to release 1-methylcyclopropene inside the packaging, slowing down ripening of fruits and vegetables.

GLOWING POLYMER REVEALS MERCURY IONS IN FISH
Combining a sulfur-containing fluorescent material with a polymer allowed Spanish scientists to create a portable detector for mercury in fish. When UV light is shone on the material, it emits light proportional to the concentration of mercury(II) ions.

ANTIOXIDANT COATING COULD REDUCE BOAT BIOFOULING
Mussels and other marine organisms can attach themselves to boats, increasing drag and fuel consumption. Researchers found anisole-based coatings reduced adhesion of mussels to a painted surface. Further research will test the coating in open water conditions.