DEAL TO CUT WORLDWIDE USE OF HFC REFRIGERANTS AGREED

170 countries agreed to limit use of HFCs (hydrofluorocarbons) as refrigerants, beginning in 2019. HFCs have a greater global warming potential than carbon dioxide per molecule; it’s hoped that cutting their use will cut warming by 0.5°C by the end of the century.

MOLECULES BEHIND THE SMELL OF FRANKINCENSE IDENTIFIED

Molecules have previously been linked to the smell of frankincense, but lack its characteristic smell. Using chromatography-olfactometry, which allows researchers to smell compounds as they are isolated, a new study identified isomers of olibanic acid as being responsible.

MICROBES THAT CONVERT COAL COMPOUNDS INTO METHANE

It’s long been known that seams of coal underground can produce methane, but exactly how has been unclear. Scientists have now discovered two microbe strains that are capable of converting methoxylated aromatic compounds (MACs) to methane.

ORGANIC DYE MOLECULES MIMIC ANTIFREEZE PROTEINS

Researchers have discovered that the synthetic dye safranin, used to stain cell nuclei, can also mimic the antifreeze proteins used by fish. The dyes reversibly self-assemble into aggregates that prevent ice growth. The finding could prove useful for medicinal antifreezes.

MERCURY LEAKING FROM WWII SUBMARINE WRECK OFF NORWAY

Mercury being transported by a German sub sunk off Norway in WWII has been found to be contaminating nearby sediment. However, the marine food web is not endangered, as due to a lack of organic matter in the sediment little has been converted into toxic methylmercury.