PHILAE FINDS ORGANIC MOLECULES ON COMET 67P

Scientists running the Rosetta mission have confirmed that the Philae lander detected organic molecules. The significance of this is dependent on the particular molecules detected, which are yet to be revealed, but could give more insight into the origins of life.

NEW SILICON ALLOTROPE COULD IMPROVE SOLAR CELLS

A new silicon allotrope has been produced which could absorb light much more efficiently than other silicon allotropes. Currently, the manufacturing process is a long and expensive one, but the researchers are hoping to overcome this.

NEW METHOD TO PRODUCE COMPLEX DRUG MOLECULES

Researchers have developed a new method for natural chemical synthesis using cross-conjugated hydrocarbons as a starting point, significantly reducing the number of steps required. The method was tested by synthesising a scarce anti-inflammatory drug.

FIRST INHIBITOR FOR CANCER ENZYME DEVELOPED

The acid ceramidase enzyme has been earmarked as playing an important role in cancerous cells. Researchers have produced an inhibitor which reduces pro-aging/death signalling in the cells, and could in future be used to enhance anti-tumour drugs.

POLYETHENE DEGRADED BY PLASTIC-EATING WORMS

Although it is generally considered non-biodegradable, scientists have found evidence that waxworms are capable of eating and degrading polyethene. Bacteria isolated from their gut were placed on polyethene films for 28 days, and obvious damage was observed.