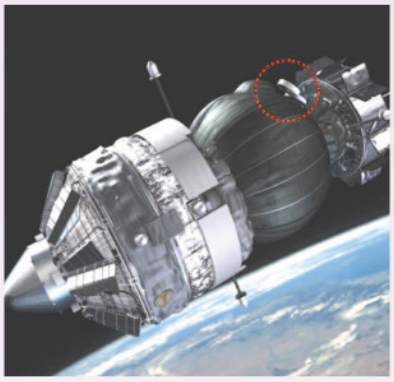
About Cranfield continued...

IS THERE LIFE ON MARS?

Drawing on our leading-edge research on biosensors for the medical sector, Cranfield has developed an instrument which could detect life on Mars. The device has already been launched into Earth's orbit as part of a 12-day test. The technology may be used on the European Space Agency's multi-million euro ExoMars Rover mission planned for launch in 2013.



Inside the new Cranfield Health building

HIGH PRODUCTIVITY PIPELINE WELDING

New welding processes using arcs and high power lasers have been developed at Cranfield for welding high strength pipelines, to increase productivity by 400%. These new processes have already been adopted by industry and will provide major cost savings, and a reduction in steel usage, on the proposed Trans-Alaska Gas Pipeline.

NEW LED TECHNOLOGY

Cranfield scientists have been awarded a patent for a potentially brighter and more efficient light emitting diode (LED) device. With 19% of the world's energy being used on lighting and light products, developing environmentally-friendly lighting solutions is critical. The new technology – which uses nanotechnology – has enormous potential for improving the efficiency of many applications from huge advertising displays to mobile phones, PC monitors and televisions.

COACH ROLLOVER PROTECTION

In the EU 30,000 bus or coach occupants are injured every year. Cranfield Impact Centre was instrumental in the formulation of ECE Regulation 66 (R66), and developed the first ever virtual testing method approved by the UK Government for coach rollover certification. The regulation has been adopted by the EU member states to improve safety by providing a safe zone within a vehicle during rollover.

TB BREATHALYSER

Cranfield experts are developing breath-test technology and new techniques for the rapid diagnosis of Tuberculosis (TB) in response to the spiralling rate of infection across Europe. Existing diagnostic methods sampling blood or urine have proven ineffective and time-consuming. Instead Dr Claire Turner believes a breath test will provide quicker and more accurate results, and may be able to be applied to other serious diseases.

For more information on Cranfield visit **www.cranfield.ac.uk**

Cranfield UNIVERSITY

DISCOVER MILTON KEYNES