

2013 Award, United Kingdom

OrganOx metra™
by OrganOx



Theme Intelligent systems

Altran UK sponsors the 'Intelligent Systems' category of the IET Innovation Awards, which celebrate the very best innovations in science, technology and engineering.

This award recognises innovation in systems and technologies that are designed to meet a commercial need in automating and enhancing the execution of complex and demanding tasks, deriving new value from connectivity, and enabling and assuring the safe, secure and dependable operation of systems and enterprises.

Entries for the 'Intelligent Systems' category of the IET Innovation Awards that promote the common good also qualified for entry into the 2013 Altran Foundation UK Award programme.

Laureate

OrganOx metra™

The OrganOx™ metra™ has won the Altran Foundation for Innovation 2013 international award. The OrganOx metra system is a revolutionary device which has been designed to keep livers in a physiological state for up to 24 hours. This is a major improvement over the conventional cold process currently used to preserve organs.

The system offers a solution which keeps donated livers "alive" by recreating the vital functions of the human body. This involves regulating blood flow and the biochemical composition of the organ, while controlling other parameters such as temperature, pressure, pH and oxygen concentrations. The device also maintains the constant circulation of fluids and monitors the production of bile, regarded as a key indicator of good liver function.

The system is also designed to take into account transportation constraints, in terms of speed of reaction to changes in environmental conditions and transportation movement, while ensuring that the highly demanding reliability requirements are respected. The device is also equipped with an autonomous battery-powered energy system and multiple recharging solutions which support the device during transportation to the transplant centre.

The OrganOx metra™ is fully protected and patented. It is currently going through extensive clinical trials and is expected to be commercially available in 2014.

Jury

Altran UK has a partnership with the IET (Institution of Engineering and Technology) organisation, which promotes innovative projects every year. Sharing and advancing knowledge, the IET and its members seek to enhance people's lives around the world.

In 2013, the Foundation jury was the one who elected the IET's Laureate.