

## Aerospace performance set to soar thanks to University of Bristol New Enterprise Competition winner

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The aerospace, automobile and sports industries could dramatically reduce the cost and time of designing new products, thanks to a breakthrough new technology.

Eclat Solution Ltd, winners of the University of Bristol's 2008 New Enterprise Competition have developed a new technology based on Computational Fluid Dynamics (CFD), which promises to increase efficiency while reducing costs.

CFD software allows the simulation of flows of gases and liquids, heat and mass transfer, moving bodies and chemical reaction, to name a few, through computer modelling. It enables engineers to virtually crawl inside their designs and see how it performs. Eclat's technology 'wraps around' and empowers existing CFD solutions

enabling large time and cost savings while at the same time providing a vastly superior performance.

The applications of this technology are huge, from being able to measure the effect of air velocity on aircraft wings, through to the effect of airflow on the performance of Formula 1 racing cars. The new technology will also reduce traditional product testing times.

Eclat's software can also be extended to other areas - imagine being able to gain insight into the effect of breathing different sized particles in a human airway. Or being able to measure the effect of flow over an elite swimmer gliding under water.

Lead by a team of researchers at the University's Department of Aerospace Engineering (Professor C. Allen, A. Morris and T. Rendall), Eclat Solutions were awarded first prize at the University's prestigious annual Enterprise Dinner last night. The prize included £10,000 plus 6 months managed office space at the Bristol SETsquared Business Acceleration Centre and free legal advice from Osborne Clarke.

Second prize was awarded to DocCom Solutions, who received £10,000 for their Junior Doctor Internet System. Dr Jonathan Bloor and Dr Jonathan Shaw founded DocCom (Doctor Communication Solutions Ltd) to solve the problems in communicating with and managing doctors across the NHS. Its founders are junior doctors working at United Bristol Healthcare NHS Trust (UBHT) and their experience led them to develop a web based communication and management system.

A third prize of £8,000 went to Vibratip, a device for monitoring vibrating sense developed by Professor Andy Levy, a member of staff in Clinical Sciences. Vibratip is a simple, disposable, key-fob sized device that uses a button battery-driven vibrator motor to deliver a uniform source of vibration to the skin. It is designed to supersede the use of a tuning fork to test vibration sense in routine clinical practice.

This year's competition entries were judged by a panel of experts from the sponsoring organisations including Bristol City Council, Edwards, Business Link, Deloitte, Fortis Bank, IP Group, Osborne Clarke, Sulis and the University Hospitals Bristol NHS Foundation Trust.

Part of the first prize included managed office space in the Bristol SETsquared Business Acceleration Centre. The SETsquared Business Acceleration Centre provides entrepreneurs business mentoring and guidance support to entrepreneurs and business professionals and office space.

Guests attending the prestigious award dinner, sponsored by SPark - the Bristol and Bath Science Park, saw each finalist present their entry as well as having the opportunity to network with key players in the local enterprise community.