

New research centre promises bright future for web technology



Faster, more reliable internet connections will move a step closer to reality with the opening of a new research centre at the University of Edinburgh.

A new generation of high-speed internet technology which is more secure and versatile than Wi-Fi, will be developed at the research facility.

This light-based communication technology, also known as Li-Fi – which is transmitted using light waves instead of existing radio technology – is seen as the successor to the latest 4G wireless internet systems which came on stream in the UK in 2012.

Demand for wireless internet access from the revolution in smartphone technology is in danger of overloading the amount that can currently be supplied by Wi-Fi. Researchers say that Li-Fi has no such limitations and could enable this potential capacity crisis to be overcome.

Using light to deliver wireless internet will also allow connectivity in environments that do not currently support Wi-Fi, such as aircraft cabins and hospitals.

The new Li-Fi R&D Centre in Edinburgh will encourage collaboration between world-leading experts from the University and other key research institutes around the world.

A key player in the new centre will be Professor Harald Haas,

who is widely recognised as the “father of Li-Fi.” Professor Haas is Chair of Mobile Communications at the University of Edinburgh and co-founder of a spin-out company, pureLiFi.

Professor Haas will outline the objectives of the new centre when he speaks at the Global Leaders Forum 2013, which takes place in Seoul, South Korea, today.

Researchers at the Centre are keen to identify new industrial partners and to collaborate more widely with major international electronics companies to further develop Li-Fi technology.

Professor Haas said: “This internationally leading UK centre will accelerate the adoption of Li-Fi and emerging wireless technology through engagement with major industrial partners, to fully harness the commercial and innovative potential of Li-Fi, and establish a major new \$6billion Li-Fi industry.”

Professor Lesley Yellowlees, Head of the University of Edinburgh’s College of Science and Engineering, said: “The University of Edinburgh has a strong track record in communications research and providing industry solutions to this sector. This new R&D centre in Edinburgh is a unique opportunity for the UK to lead the global development of Li-Fi technology.”