

FACT BOX2: Future Compound Semiconductor Manufacturing Hub (CSHub)

The CSHub will be led by Cardiff University with partners The University of Manchester, UCL ([University College London](#)) and the [University of Sheffield](#). A further 26 initial companies and organisations allied to the Hub will play a critical role to capitalise on the newly announced £50million Innovate UK [CS Applications Catapult](#).

Silicon once supported the information society, but the technology is reaching fundamental limits in the 21st Century. Applying compound semiconductors knowhow to silicon manufacturing techniques will form the central focus for the new venture.

Professor Mo Missous, CSHub Deputy-Director at Manchester, said “The CSHub will provide unique capabilities in integrated CS electronics spanning the highly advantageous electrical, optical and magnetic properties of CS devices enabling research into large-scale CS growth and device fabrication.”

At Manchester, Professor Missous, from the [School of Electrical and Electronic Engineering](#), and colleague Dr Max Migliorato will concentrate on researching manufacturability on large scale of novel, highly integrated 2D magnetic Quantum Well Hall Effect sensors for Non-Destructive Testing and Ultra high frequency RF circuits for emerging applications such as 5G wireless mobile communications, as well as ultra-high speed optical devices for upcoming 10G fibre to the home. A total of £2million has been earmarked for this research as part of the overall £10million investment package.

The Hub’s goal is to grow long-term future partnerships with UK and international companies and academics in CS technology.