David Wallis

Professor, University of Cardiff and Cambridge

Presentation Title: Future Manufacturing challenges for GaN devices

Professor Wallis received his PhD from the University of Cambridge in 1994 before taking up a post-doctoral position at Oak Ridge National Laboratory, USA. He returned to the UK in 1996, joining the Defence Evaluation and Research Agency (DERA) where he performed research on the growth and characterisation of a wide range of semiconductors including SiGe, GaAs, InSb and GaN. Following the privatisation of DERA to become QinetiQ Plc in 2001, he was appointed technical lead for the Advanced Analytics unit and also GaN growth by MOCVD. During this time he was involved in a wide range of research projects including the development of high speed, low power transistors for Intel and "Korrigan", an EDA funded project that demonstrated a complete European supply chain for GaN MMICs. After leaving QinetiQ he joined Plessey Semiconductors in 2012 where he lead the transfer of GaN on Si growth technology form the University of Cambridge to Plessey's manufacturing facility in Plymouth UK. This led to the successful launch of the first commercial GaN LEDs on 6" Si substrates in 2014. In 2016 he was awarded an EPSRC Manufacturing fellowship and currently holds a joint Chair in Compound Semiconductors at the Universities of Cardiff and Cambridge.