EUROPEAN MICROWAVE ASSOCIATION

Pioneer Award



Professor Paul Tasker is one of the most prominent members of the microwave domain. His con-tributions display the deepest understanding, include profound theoretical contributions and at the same time are remarkably useful. As such, this represents microwave engineering at its best.

Paul J. Tasker was born on 5th July 1958 in Douglas, Isle of Man - Tynwald Day, the national day of the Isle of Man, making his birthday a public holiday on the island. His career in high-frequency compound semiconductor microwave and millimetre-wave devices and circuits started in 1979 when he graduated with a First Class BSc in Electronics and Physics from the University of Leeds and spans close to five decades.

He pursued his doctoral research with Professors D. Vernon Morgan and M. J. Howes, completing a PhD in 1984 on the topic of ‘GaAs Ion Implanted Hyperabrupt Varactor Diodes’. Subsequently, he joined Professor Lester Eastman’s renowned group at Cornell University, USA; their collective achievements contributed to the establishment of III-V HFET as the transistor of choice for low-noise receivers and for millimetre-wave applications, pushing the current gain transition frequency beyond 100 GHz for the first time.

In 1990 he moved to the Fraunhofer Institute for Applied Solid State Physics (IAF) in Freiburg, Germany, to lead the development of GaAs millimetre-wave HFET (pHEMT) monolithic micro-wave integrated circuits (MMICs). During this period the IAF established itself as a centre of international expertise in this field.

In 1995 he was appointed Professor in the School of Engineering at Cardiff University, and in 1996 established the Cardiff University Centre for High Frequency Engineering. The Centre has

earned an international reputation for a broad range of pioneering contributions along with their application to large signal circuit design at microwave and millimetre wave frequencies. In 2008, he co-founded Mesuro Ltd,, which became a recognised leader in active load-pull and waveform-based device characterisation, before being acquired by Focus Microwaves of Montreal, Canada.

His honours and distinctions include election as Fellow of the IET (2007); IEEE Distinguished Microwave Lecturer (2008–2010), election as Fellow of the Learned Society of Wales (2013) and,in recognition of his contributions to microwave measurements and their application to transistor modelling he was elected Fellow of the IEEE (2014). He has contributed to over 350 journaland conference publications and workshop presentations and has supervised 55 PhD students to successful graduation.

It is with gratitude that the EuMA Pioneer Award is awarded to Prof. Paul J. Tasker for his profound contributions to measurement, modelling and application of compound semiconductor microwave and millimetre-wave devices and circuits.