



Prof Sir David N. Payne

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Professor Sir David Neil Payne CBE FRS FREng is a leading Professor at the University of Southampton and Director of the Optoelectronics Research Centre. A world class pioneer of technology, his work has had a great impact on telecommunications and laser technology over the last forty years. The vast transmission capacity of today's internet results directly from the erbium-doped fibre amplifier (EDFA) invented by David and his team in the 1980s. His pioneering work in fibre fabrication in the 70s resulted in almost all of the special fibres in use

today including fibre lasers which are currently undergoing rapid growth for application in manufacturing and defence. David has made numerous leading contributions to many diverse fields of photonics and is widely acknowledged as an inventor of key components. Currently, his main research interest is high-power fibre lasers. With US funding, he led the team that broke the kilowatt barrier for fibre laser output to international acclaim and now holds many other fibre laser performance records. An original member of the Highly Cited Researchers (USA) he is honoured as one of the most referenced, influential researchers in the world. He has published over 650 Conference and Journal papers and is a frequent plenary and invited speaker at major international optics conferences. As an entrepreneur David's activities have led to a cluster of 11 photonics spin out companies in and around Southampton - helping to boost the local economy. He founded SPI Lasers PLC, which has recently been purchased by the Trumpf Corporation of Germany for \$40M. Recently elected Chairman of the Marconi Society and to the Russian Academy of Sciences, David is a fellow of the Royal Society and the Royal Academy of Engineering. He became a Commander of the British Empire in the 2007 New Years Honours list. In addition he has been awarded the top American, European and Japanese prizes in photonics. Recent awards include the Marconi Prize in 2008 and the 2007 IEE Photonics Award the first to be awarded to a person outside the USA. Most recently, in 2010, David received the AILU (Association of Laser Users) Award for his pioneering work with fibre lasers.