



Recipients of the J J Thomson Medal for Electronics

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| 2017 | Professor Mau-Chung Frank Chang, Wintek Distinguished Chair Professor in Electrical Engineering, UCLA Henry Samueli School of Engineering and Applied Science. Professor Chang realized MOCVD GaAs HBTs and CMOS Systems-on-Chip for RF-to-Terahertz radio, radar, imaging and interconnect applications. |
| 2016 | Professor Alan E Willner Phd for pioneering contributions to optical communications |
| 2015 | Dr A Madni BS MS CEng FIET for the development of MEMS Gyroscopes and sensors for automotive safety and aerospace applications. |
| 2014 | Professor S Ravi P Silva BA MA PhD CEng CPhys FIET FInstP FREng is the Director of the Advanced Technology Institute at the University of Surrey. He is the inventor of 25 patents, including a key patent on low temperature growth of carbon nanotubes, and fabrication of large area nanotube-organic solar cells. The research conducted has already resulted in two spin out companies backed by VC funding. |
| 2013 | Dr David F Welch, Co-Founder, Executive Vice President, Chief Strategy Officer and member of the Board, Infinera, USA. Dr Welch is a pioneer in the field of optical devices and optical networks. |
| 2012 | No award |
| 2011 | Prof Christofer Toumazou, of the Institute of Biomedical Engineering, Imperial College, UK, for his innovative applications of silicon technology and integrated circuit design and successful applications of semiconductor technology to biomedicine and the life-sciences, most recently to DNA analysis, leading to striking innovations in the fields of genetics and molecular biology. |
| 2010 | No award |
| 2009 | Professor Kam-Yin Lau |
| 2008 | Professor William I Milne |
| 2007 | Professor Julian Gardner |
| 2003 | Professor John O'Reilly |
| 2002 | No award |
| 2001 | Dr Ian K Proudler for his contribution to electronics. |
| 2000 | John Cioffi for his contribution to the electronics industry. |
| 1999 | Professor Dr-Ing Ulrich Reimers for his outstanding work in the field of digital television broadcasting. |

- 1998 Dr C T Elliott (DERA) for his outstanding work in the field of thermal imaging.
- 1997 Dr Leonardo Chiariglione for his outstanding work in the multimedia industry and his contribution to the development of MPEG.
- 1996 Professor K W Cattermole for his contribution to the development of telecommunications transmission in the UK and his innovative work on pulse code modulation.
- 1995 Professor Joseph Helszajn for his work in the important field of non-reciprocal microwave circuits and devices.
- 1994 Dr J G McWhirter for his work on the development of field signal processing using parallel electronic architectures.
- 1993 Dr K A Schouhamer Immink for his work on the design and development of channel-coding techniques for the compact disc.
- 1992 Dr G H B Thompson for his extensive work on semiconductor lasers and optical devices.
- 1991 Professor P N Robinson, of the University of Sheffield, for his leadership of one of the UK's foremost electronic materials and devices teams.
- 1990 Dr T E Curtis, of the Admiralty Research Establishment, Portland. The award is in recognition of Dr Curtis' major contribution to the theoretical and practical implementation of sonar signal processing.
- 1989 Professor P J B Clarricoats, DSc, FEng, head of the Department of Electrical and Electronic Engineering at Queen Mary and Westfield College, University of London. The award is in recognition of Professor Clarricoats's major contributions in the field of microwaves. His key work on reflector antennas has included innovations in reflector shaping, novel feed designs and array feeds for contoured beams.
- 1988 The development team at the Independent Broadcasting Authority who created the MAC (Multiplexed Analogue Component) television system, a technique which avoids cross-colour defects, and has many other important features, including multi-channel digital sound.
- 1987 Professor J E Midwinter, OBE, PhD, BSc, FEng, FRS for his distinguished contributions in the field of optics, including work on non-linear optics, optical materials and coupling mechanisms for thin-film optical waveguides. His personal contribution to low-loss and wide bandwidth optical fibre communications coupled with his research leadership at British Telecom Research laboratories have been major factors in establishing the currently strong UK position in this key technology.
- 1986 Dr Iann Barron for his major contribution to the electronics industry over many years and in particular his identification of the potential for the application of VLSI to parallel processing and his work in conceiving and producing the range of Transputer integrated circuits.
- 1985 A A Shepherd, CBE, PhD for substantial and sustained contributions to the status of semiconductor integrated circuit technology in the UK since 1954.
- 1984 Professor J D Rhodes, PhD, DSc for his major contributions in electronic theory, practice, development and manufacture – especially for his outstanding research in the field of microwave distributed network synthesis and his development of proprietary software packages which synthesize

- designs and provide an accurate performance assessment of manufactured devices.
- 1983 Professor J G L Rhodes, OBE for his work in the field of integrated circuit technology as applied to telecommunications.
- 1982 Professor W A Gambling, PhD, DSc, FEng for his work on low loss optical fibres and in particular on instrumentation techniques to characterise their performance.
- 1981 Professor C Hilsum, PhD, BSc, CEng for his recognition of the importance of Gallium Arsenide as a material for semiconductor devices, and his contribution to the theory and diagnostics of the behaviour of this material and the development of technology which lead to the preparation of some of the highest quality GaAs Crystals for semiconductor devices.
- 1980 T H Flowers, DSc, CEng for his pioneering work on the development of voice-frequency signalling, the application of electronics to computing during war time, and his outstanding contributions to the research and application of electronics switching systems for telephony.
- 1979 Professor E A Ash, PhD, DSc, FEng for his outstanding contribution to the study and application of the interaction between electrons, phonons and photons.
- 1978 D H Roberts, BSc, CEng for his outstanding contribution to electronics.
- 1977 W J Bray, CBE, MSc(Eng), CEng for his valued contribution to telecommunications research.
- 1976 (1st) C W Earp, OBE, BA, CEng for his lifetime's work on navigational aids.

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