Curriculum Vitae Dr Marc Beale

Name: Dr Marc Beale

Employment: Director of Malvern Scientific Solutions Ltd www.malvernscientific.com

Director of Assistive Control Ltd www.assistivecontrol.com

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Education & Qualifications

1972-1975 BSc (Hons) 1st class. Applied Physics University of Durham.

1980-1983 D.Phil. Dept of Metallurgy and Science of Materials. University of Oxford.

1990 Chartered Physicist.

Chartered Engineer.

Current employment

On leaving the scientific Civil Service in 1998, I set up Malvern Scientific Solutions Ltd. The company specialised in the development of IT-based Assistive Technology hardware and software, and in the provision of AT expert witness services.

With my team of engineers, I developed both hardware and software for individuals with disabilities – enabling them to benefit from the advances in IT. I set up Assistive Control Ltd, to handle the sale of assistive technology hardware, software and support. However, I no longer have any involvement in the provision of assistive technology systems, and my focus is now entirely on my expert witness work.

I have worked as an Assistive Technology expert witness for over 20 years, and have provided over 750 Assistive Technology Needs Reports, to both claimants, defendants and as a joint expert; throughout England, Scotland, Wales and Ireland. This experience, combined with my technical background, has given me a unique understanding of the needs of individuals with disabilities, and of how to meet those needs in a practical and cost-effective manner.

I have also been instrumental in raising the profile of AT as a head of damages in litigation cases throughout the UK and Ireland. I have developed rigorous assessment and reporting procedures which aim to demonstrate to the Court what AT is required by a client and how it should impact his or her quality of life.

Employment History

1998 to date - Director of Malvern Scientific Solutions Ltd and Assistive Control Ltd

I set up Malvern Scientific Solutions Ltd in 1998 with support and assistance from DERA to apply my problem-solving skills to the development of human-machine interfaces and software for people with physical and cognitive disabilities.

I set up Assistive Control Ltd in 2009 to handle the sale of AT systems. The company is no longer active in this area, and I no longer have any involvement in the sale of AT systems.

1993 to 1998 - Commercial applications scientist. DERA

I moved from academic research to Commercial Problem Solving and IP generation. I played a pioneering role in DERA's diversification into non-defence markets. Customers included the Bank of England Printing Works, a leading company in the automotive industry, a large perfume manufacturer and a major company in the wines and spirits industry.

1983 to 1992 - Research Scientist in the Ministry of Defence

1992: Porous silicon for electroluminescent devices

1991: Optical pattern recognition

1991: Magnetic data visualisation techniques

1990: Dispersive imaging systems

1987: ZnS electroluminescent devices

1985: Focused Ion beam lithography

1984 Porous silicon for silicon-on-insulator devices

1983: Silicides for VLSI

1975 to 1983 - Research Scientist: Harwell UK Atomic Energy Authority

1983: D.Phil. on Ion implanted silicon for VLSI

1980: Research on silicon radiation detectors

1975: Research on Ultrasonic Holography

Background and skills

Research scientist: After obtaining a D.Phil. in Science of Materials from Oxford University, I worked as a research scientist in many areas within Applied Physics, initially at Harwell Atomic Energy Research Establishment, and then at the Royal Signals and Radar Establishment in Malvern. The organisation was subsequently renamed DERA and more recently QinetiQ.

Inventor and problem solver: In 1993 I joined DERA's Defence Diversification programme; a significant change of career, becoming an inventor and problem solver. I provided technically advanced, but practical solutions to a broad range of commercial and industrial problems and generated a large number of invention reports and a number of patents.

As part of this work I was exposed to the needs of people with disabilities. I was appalled at the poor quality of the Assistive Technology available and at the low aspirations as to what could be achieved with IT for people unable to use a PC with a mouse and keyboard.

Assistive Technology expert: My academic research and development background has given me the skills, expertise and experience to make major improvements in the capabilities of Assistive Technology, and thereby improving the quality of life of people with disabilities. The skills that I bring to my AT Expert Witness services include:

A track record in innovation and practical problem solving

Experience in the development of Human Computer Interfaces

The physics and engineering qualifications needed to advance Assistive Technology

A broad understanding of optics, vision, hearing and cognitive processes

Malvern Scientific Solutions: I set up my own company, Malvern Scientific Solutions Ltd in 1998, with the aim of advancing Assistive Technology and mainstream human-machine interfaces. We have developed a range of new access devices, and software, and also new approaches to helping people with severe disabilities.

Assistive Control: I set up Assistive Control Ltd in 2009 to handle AT systems sales.

Expert witness experience: I provide one of the leading AT expert witness services in the UK and Ireland. I have assessed and provided detailed medico-legal reports for over 750 clients throughout England, Scotland and Ireland.