



## Rebecca's current position:

Rebecca is the technical leader of a team of up to ten people conducting R & D (research and development) into new optical technology for the processing of images and signals. QinetiQ is Europe's largest science and technology organisation.

**Rebecca's work:** 'I work with a great bunch of people at QinetiQ. We are developing systems that can find and recognise objects or patterns in a split second. The immediate uses could be, for example, in identifying people in a crowd at a football match or at a busy airport, or speeding cars on a motorway. However, as with all inventions, it is often the uses that were less immediately obvious that turn out to benefit society most in the long run.'

'One of the satisfying parts of my work is taking a basic concept or idea, and bringing together different technologies to invent something new. It's incredibly rewarding when you see something actually work. The invention process does not only happen during the working day: I may get an idea at the weirdest times and places – even in the bath. Sometimes I build on existing knowledge; at other times the springboard is a problem that needs solving or I get a neat idea, and then work out how it could be used.'

**Her route to success:** Rebecca studied physics at the University of Birmingham: 'I really liked optics and my interest was increased by a fantastic course run by one of the few female lecturers.' This inspired her to go on to do an MSc in optoelectronics and then a PhD in optical computing technology at Heriot-Watt University in Edinburgh.

She joined DERA, the association that became QinetiQ, some ten years ago, and has progressed up the career ladder to her present leadership role.

**More about Rebecca:** Rebecca's hill walking and mountain climbing came to an abrupt halt last year when she had her first baby: 'Life is exhausting, but enjoyable'.

Her successful career was recognised by *Cosmopolitan* magazine and the House of Fraser when she received their Achievement Award for Science and Technology in 1998.

**What next?** 'Every researcher dreams of seeing an idea they have been developing come to life and making a real difference. I would love to see some of my laboratory bench demonstration programmes become real systems. However it can take 20 years for an original idea to go right through into the market place, although developments are happening faster all the time so one day I might see my dream fulfilled.'

