





Debbie - England: Head of ISIS Instrumentation Div About My Career About Me

Interview with Debbie - Head of ISIS Instrumentation Division: England

What do you do?

I work at a large scale scientific facility called ISIS. I lead a Division which designs, develops, assembles, installs, tests and maintains all of the neutron detectors and their associated electronics, controls and software for all of the instruments on ISIS.

The scientists who run the instruments would like to have higher resolution, faster detectors to get better pictures of the molecular structures of the samples they want to study, this leads to increasing demands on the electronics, the signal processing and the software which analyses the data.

My team consists of about 35 engineers and scientists of varying disciplines. They include physicists, who develop new ideas for neutron detectors, mechanical and electrical engineers to develop, assemble and maintain the detectors, electronic design engineers to design the new board layouts, software engineers to code the programs to control the moving parts and computing support staff.

What is a Typical Day like?

The main part of my role is leadership of my Division.

A typical day will include dealing with emails, preparing documents, attending project meetings, chairing management and other meetings, sorting out difficult issues to do with people management, technical problems or project issues.

Most of my staff know much more about the technical areas than I do. However, I have a broad experience of similar areas and can often bring a fresh view to a problem.

Challenges?

The main challenges of the job are getting the right people together to make decisions in difficult technical areas.

Tell us more about ISIS

The ISIS pulsed neutron and muon source (http://www.isis.rl.ac.uk/) at the Rutherford Appleton Laboratory (RAL) (http://www.scitech.ac.uk/) in Oxfordshire, England, is a world-leading centre for research in the physical and life sciences.

ISIS produces beams of neutrons that allow scientists to study materials at the atomic level using a suite of instruments, often described as 'super-microscopes'. It supports a national and international community of more than 2000 scientists who use neutrons for research in physics, chemistry, materials science, geology, engineering and biology.

What is it like being a woman in this fascinating field?

Being a woman in a traditionally male dominated field makes it is easier to stand out from the crowd. I love the fact that my job needs a combination of technical, leadership and organisational skills – I would be bored if I wasn't using the whole range of my abilities.

Continued interview with Debbie - Head of ISIS Instrumentation Division: England

How long have you been here?

I have worked at the Rutherford Appleton Laboratory for over 20 years now but have moved around doing different roles in different areas.

Have you had other jobs?

One of the most exciting roles before I moved to ISIS was when I was a Project Engineer on the ATLAS experiment. This is part of the LHC (or Big Bang machine) at CERN.

(http://atlas.ch/)

ATLAS will help us learn about the basic forces that have shaped our universe since the beginning of time and that will determine its fate. The data rate generated by ATLAS is equivalent to 50 billion simultaneous telephone calls.

What has been your BEST experience?

The best experience in my job was on Sunday 3rd August at 13:08 when the first neutrons were detected on the first instrument on the ISIS Second Target Station (http://ts-2.isis.rl.ac.uk/). This was the result of years of work by large teams of engineers and scientists all working together to a common goal. All the detectors, electronics and software that were the responsibility of my groups worked really well and I was very proud of all my staff who had contributed. No-one was forced to come in to work that weekend but everyone wanted to be part of the success. It was a fantastic feeling as we cracked open a bottle of champagne to celebrate.

The £145 million ISIS Second Target Station is the largest science project currently in construction in the UK.

The ISIS Second Target Station will allow the Science and Technology Facilities Council (council that owns and operates ISIS) to deliver major science projects that will underpin the long-term future of science and innovation in the UK.

Do you travel much?

The amount of travelling has varied depending upon the role. When I worked on ATLAS I travelled to Europe 2-3 times a month. Previous work on standards for engineering data exchange took me to the USA, Japan as well as to various places in Europe. I am not travelling as much now but do need to visit other neutron facilities such as the ILL in Grenoble, France and SNS at Oakridge, Tennessee, USA.

Do you plan to stay with this career?

I have only recently moved onto ISIS but am really enjoying the challenges. Having moved around a lot I think I may have found a home where I will be happy for some time to come.

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About Me interview with Debbie - Head of ISIS Instrumentation Division: England

What are 3 words that describe you?
Practical, Dedicated and a Good leader

What motivates you?

I am strongly motivated by success. It is fantastic to see my staff achieving fantastic results and to know that this is due partly to my support.

What studies have you completed?

I completed a first degree in Mechanical Engineering from Reading University. I became a Chartered Engineer a few years after joining RAL and recently was successful in applying to become a Fellow of the Institution of Mechanical Engineers.

What qualities do you have that make you good at what you do?

I think I am good at motivating my staff and at getting people to communicate more and work well together. I enjoy enabling others to do their jobs better. I have a technical background and can understand the challenges but I combine this with good leadership skills. I am not afraid to make a decision.

What hobbies do you have?

My hobbies are ringing church bells and playing tenor sax and clarinet in a local traditional jazz band (http://www.baggs-tree.com/).

Have you had any previous jobs, what were they?

Prior to moving to RAL, I did what is termed a 'graduate apprenticeship' with a company called Lucas Aerospace who used to design fuel control systems for aero engines.

This apprenticeship involved moving around the company experiencing different aspects of engineering conceptual design, development, detail design, manufacture, testing and some more commercial aspects such as buying as well. This was a very good experience that took my degree and showed me how to use it in the real world.

What is your advice for other women about a technology career?

Just do it! Technology is such a broad area that there is room for many types of women with a variety of different skills. There are jobs that need organisational skills, technical skills; jobs that need people who see the bigger picture and those that like detail, those with mathematical skills and those who are creative.

Learn More

ISIS

ISIS produces beams of neutrons and muons that allow scientists to study materials at the atomic level using a suite of instruments, often described as 'super-microscopes'. It supports a national and international community of more than 2000 scientists who use neutrons and muons for research in physics, chemistry, materials science, geology, engineering and biology. It is the most productive research centre of its type in the world.

Neutrons play a definitive role in understanding the material world. They can show where atoms are and what atoms do. Neutron scattering is a unique research and analysis technique for exploring the structure and dynamics of materials at the nanoscale. The process of neutron scattering is non-destructive and produces results that cannot be achieved by other techniques.

Neutrons are used to study the dynamics of chemical reactions at interfaces for chemical and biochemical engineering, food sciences, drug synthesis and molecular biology.

Neutrons can probe deep into solid objects such as turbine blades, gas pipelines and welds to give a unique microscopic insight into the strains and stresses that affect the operational lifetimes of these crucial engineering components.

Neutron studies of nano-particles, low-dimensional systems and magnetism impact upon next generation computer technology (quantum devices), data storage, sensors and superconducting materials.

ISIS is strongly placed to help provide solutions to major sociological and technological problems of the 21st Century. ISIS plays a vital role in the portfolio of analysis techniques used by researchers for areas as varied as energy, nanotechnology, materials processing, drug design and pharmaceuticals, bio-technology and green technology for a clean environment. Examples include studies of:

- hydrogen absorption in new materials designed for hydrogen storage and clean energy;
- the structure of chemical polymorphs in pharmaceutical compounds;
- · the breakdown of environmental contamination by natural enzymes;
- disordered materials, glasses and liquids central to optical communication;
- bio-compatible materials for healthcare;
- waste storage and management.

Lean more about ISIS



Gillian - England: Software Developer About My Career About Me



Interview with Gillian - Managing Director: England

What do you do?

I am the Managing Director of a software company which provides integrated HR and Payroll solutions. I worked at this company for a number of years starting as a Sales Administrator and then was the Sales Director when I formed an MBO (Management Buy Out) in 2002.

Any challenges?

We provide software which pays a large number of people in the UK so we have to provide accurate software and timely support. This can keep me awake at night if I think too hard about it.

What do you enjoy the most?

I very much enjoy travelling around the UK and visiting potential and existing customers.

We have a very diverse customer mix including very large organisations including health care and hotel groups through to manufacturing businesses and charities.

What is a typical day like?

A typical day at work usually involves a meeting with a new or existing customer. This could include an overview presentation at board level or an hand-on systems run though with a Payroll department.

If I am in the office I would be catching up on quotations and following up sales leads, discussing new release ideas and strategy with the programming team and chasing up any outstanding customer issues. My accountant prepares monthly management reports so I study those and look at our profit and loss and cash flow.

Until 2006, I had heavy deferred consideration payments to meet each month as well as managing salaries and our cash flow. We have a staff of 20 so I have to make sure I make time to manage them and ensure that they are using the time effectively for the business.

What was your first day at work like?

My first day at work was working in a scientific stores. I was 18 and had very new contact lenses and I was put in charge of the PC. This was in 1983 and the computer was very novel and very new. I actually dropped one of my contact lenses in the keyboard. As it was my first day and I was very shy then, I tried for a very long time to retrieve the lens from the keyboard without drawing attention to my plight. In the end the cost of the contact lens and the thought of having to explain its loss to my mother won and I had to ask for help. My new boss managed to retrieve it.

Continued Interview with Gillian - Managing Director: England

What are 3 words that describe you?

Hard-working, Fun, Optimistic. And that's what makes me good at what I do.

What has been your BEST experience?

One of my best experiences was signing the sale agreement for my business. It was the result of many months negotiation and organisation. I have also had the privilege to meet and work with some fantastic people both as colleagues and customers.

What have been your most significant achievements?

Most significant achievements to date include leading the MBO of my business. I had to knock on doors at the bank and accountancy practices to help me. I had nothing but full support from anyone I encountered.

What is your advice to other women?

There are a wide number of careers in technology which do not necessarily include the traditional view of being a programmer. Technical support, business analysis, sales and training are technology careers where I have always known women to excel as well as in programming.

You must have some amusing stories to tell?

A few years ago I was given my first laptop. At the time they were very very expensive and it was a major coup for me to be assigned the very

first laptop in the company that I worked for. I was very cautious taking it out for the first time and I went to a meeting with it in

London. The meeting went very well and I went with a colleague to a pizza house in Covent Garden for lunch. I was so obsessed with taking

care of the laptop that I tucked the bag at the back of the table out of sight from everyone.

I then proceeded to have my lunch and a glass of wine. We then decided to get a taxi to the station home and so we came out and hailed a cab. About a mile into our journey I had a sudden thought and whispered to my colleague - 'Where is the laptop?' I then went into panic mode and screamed at the top of my voice WHERE IS THE LAPTOP? I had hidden the bag so well I had completely forgotten that I had it with me.

The taxi driver turned back and it was a very tense journey in heavy traffic back to the pizza house. We were within about 1000yards of it when I jumped out of the taxi and run along the London street in my business suit and high heels. The next my colleague knew was I came back out of the pizza house with the laptop bag high above my head in triumph. As I had hidden the bag so well - the next group at the table hadn't even noticed it was there until I turned up and started scrabbling around amongst their feet! I can still feel the panic as I write this!

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About My Career About Me



Margaret England:
IT Consultant
& Director

Interview with Margaret-Managing Director: England

What do you do?

I work with SMEs, NGOs and Public sector organisation to help them to optimise and use technology in a most efficient and effective manner in their business. I try to understand what the business short to long term business goals are and see how technology can support them in achieving their goals.

I educate businesses in particular women owned or women manager in using technology and this has had a far reaching impact because the clients that I have worked with are now more confident around technology and see the benefits of embracing it and making it work for them.

My day varies as I work for myself, It ranges from working on a client site providing IT consultancy of some sort to IT training, to having meeting with clients/potential clients or doing administrative work for my company.

How did you get started?

I have wanted to start my business a long time but kept putting it off until when my last company where going through restructuring and I was laid off, I took the plunge then and started my IT consultancy business Obatec in 2005 and I have never looked back, I am really excited about the future of Obatec

What do you enjoy the most?

I really enjoy everything I do as I get to work on a variety of projects from consultancy to training, networking with other like-minded people and the independence of being my own boss

Any challenges?

The challenge is when clients do not pay on time or looking for new (long-term) projects to work on but these are welcome challenges as you get on and deal with it.

What was your first day like?

My first day at work, after starting my business was apprehensive and exciting at the same time, it was a new chapter in my life

What has been your BEST experience?

My best experience is when I am recommended to other clients by a client for work well done and meeting people who truly believe in me and what I do.

What have been your most significant achievements?

Setting up my own IT Consultancy company in 2005 called Obatec, service offering include consultancy, project management, network management & support, training and procurement

About Me Interview with Margaret - Managing Director: England

What are 3 words that describe you?

Motivated, Enthusiastic, Persistent

What qualities do you have that make you good at what you do?

I am proactive and have a can do approach to things I do, this does make a difference with clients to ensure their satisfaction I am client focused and results driven, I am a problem solver, I like to lead by example and am persistent but also adaptable to various working conditions.

What has been a funny experience?

When I tell some people I own an IT consultancy company and they seem surprise that I don't just advise clients on technology but also implement IT solution such as network systems and help support it.

What motivates you? What hobbies?

My relationship with God is what motivates me. I love music, theatre, travelling, adventure sports, currently training for the UK Iron Man in September

Will you stay in

technology?

Yes, as I enjoy what I do, having the business offers me a variety of roles to play and different types of challenges to deal with.

What previous jobs have you had?

I have worked in a variety of roles for over 10 years across all business sectors from working as Admin officer to Project Management Consultant to an IT Manager /IT consultant

What studies have you done?

- BEng (Hons) Mechanical Engineering (2:1)
- MSc (Eng.) Manufacturing Engineering and Management
- MSc(Eng.) Information System Engineering,
- Other professional qualification

What is your advice to other women?

If you truly believe that this is the career path you want to undertake, then go for it, or if you are considering it but not sure what to do, carry out research on the different options available to you, speak to women or men already in the field doing something similar to what you want to do. For example I am a council member of the Women Engineering Society (WES) www.wes.org.uk, the society is made up of women with a wealth of knowledge.

Just don't give up on the first hurdle you encounter. Technology career although sometimes hard work can be fun at the same time.

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Beti - Wales: Director About My Career About Me



Interview with Beti – Director: Wales

What do you do?

I am the Director of ITWales, a collaborative academic/business network based in the Swansea and Bangor Universities.

My main aim is to ensure that ITWales continues to be at the forefront of technology as well as developing programmes to facilitate the transfer of computing and ICT knowledge to businesses in Wales.

Do you run outreach programs?

ITWales also has an outreach programme for schools to encourage more pupils to study computing, science and engineering.

How did you start?

I set up ITWales in 1994 recognising the economic need to encourage more computing graduates to develop their careers with Welsh business.

It's been a big success?

The ITWales programme, including its Business Club, Software Developers Group and the festival ICT Forum Wales is a major feature of the business calendar in Wales.

Its online magazine itwales.com has a readership of 1,500 unique visitors a day.

About Me interview with Beti – Director: Wales

What are some words that describe you?

I am unpretentious, but have a determined will to succeed

Tell us about your joint Wales and technology passions

Wales was the first industrial nation. My task is to support the transformation of Wales from a society and economy rooted in heavy industry to one based on knowledge and innovation.

Information technology is the oxygen that fuels this transformation. IT provides an infinite variety of useful tools, and offers flexible working, a good work/life balance and allows women to be at the forefront in the exciting, fast moving developments that are modernising our world.

What do you do to relax?

To counter my busy and challenging job, I relax by taking my dog for long walks over the cliffs of Gower

I am also learning to play the saxophone.

You won a prestigious blackberry award?

Yes I was proud and delighted to be receive the Best Woman in Technology in Academia and the Public Sector 2006 Blackberry Award, and being invited on the judging panel in 2008.

What is your advice to other women?

When I started ITWales I was told that women make brilliant programmers and over the years the girls I have seen graduating and taking up programming careers have reinforced this. But there are many more careers in technology e.g systems analysts, business analysts, graphic design, web development. training which are also attractive to women. They all need organisational and people skills, skills at which we women excel. Modern technology offers flexibility and home working with opportunities for work life balance giving us the best of both worlds.

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About My Career About Me



Ali - Northern Ireland: Bill of Material and Configuration Engineer

Interview with Ali - Bill of Material and Configuration Engineer: Northern Ireland

What do you do?

My typical day at work involves mostly working at a computer at my desk interpreting engineering drawings and translating them into a bill of material (a list of components) for the database SAP system (Systems Applications and Products). I write the object dependencies (this is rule that calls in the correct parts according to the customer order). This information is forwarded to the shop floor where it is used to build a genset (a generator set).

Each morning I attend the manufacturing shop floor meeting to get an update and ensure a smooth build process and I get the information I need to resolve any outstanding issues. The genset builds take place in three assembly sites; Northern Ireland, China and North America, and any queries that arise will be directed back to me from these different parts of the world. For the local build I can speak face to face and physically see the issue but this is much more difficult for our two remote assembly sites. In addition to the time zone differences, communication is either via teleconference or email and is often with colleagues for whom English is an additional language. Although this can sometimes be challenging especially when working toward deadlines, I find this aspect rewarding when we get the issue resolved.

What do you enjoy the most?

Meeting and working with people from lots of different cultures. While sitting at computer might not sound like the most glamorous of jobs, getting to make friends with people from all over the world helps to make my work a bit more glam.

What was your first day like?

When I first started, the sheer size of the shop floor and office building (with 2600 employees) really overwhelmed me and I questioned whether it was for me and if I would fit in. I was petrified and excited all at the same time. Now that I am into my third year at the company however, I am feeling more confident and I have fitted in perfectly.

Your most significant achievements?

My most significant achievement to date would have to be successfully completing my degree. I took a year out between my second and third year at University and when I returned to studying I found it difficult to get back into the swing of things as my degree course was mainly theory based and as I had learned so much from my placement year and really enjoyed the whole experience (not to mention the money) I missed it very much.

When I started my role as a graduate in FG Wilson I had to start at the bottom to work my way up. Since then I have had so many opportunities to learn and develop my skills as an Engineer but more importantly as a person. As my department is linked with so many other departments throughout the company and also has the importance of ensuing the customer receives the genset they ordered I have so many chances to interact with all sorts or people from all sorts of cultures from around the world. This means that no day is ever the same which adds to the excitement and the enjoyment of my job.

Continued Interview with Ali - Bill of Material and Configuration Engineer: Northern Ireland

What previous jobs have you had?

I have had a few part time jobs and a couple of voluntary work experience weeks. I was a dishwasher in a restaurant, a Sales Consultant for Next plc and a Sales Professional for O2 Ltd. I worked in Harland and Wolff and Shorts Belfast for one week each that I organised during my summer holidays. I learned so much from each of these roles and enjoyed the experiences I had.

What has been your BEST experience?

I was really excited to be selected for a project run by Sentinus to encourage school and University students to collaborate with Engineers working in Industry on a live project. This gave me an opportunity to express my sociable side and really interact with enthusiastic young people.

How did you get started?

My degree course at University did not include a placement year, but I felt it would benefit me to gain industrial experience and build up contacts. I found it quite difficult to arrange a placement (I contacted 43 companies in Northern Ireland and only 6 responded) but once it was in place it provided me with really useful experience and a network of contacts.

After my successful interview with FG Wilson and I was working in the releasing department I asked the person that interviewed me for feedback. I got some great advice from this feedback session; I needed to have more examples prepared for interviews but my short work experience placements that I organised myself where key to me getting the job as it showed that I was interested and willing to work hard.

When I graduated, my placement year proved essential as I returned to the same company at the level that most graduates needed a Masters for. I really enjoy my job as an Engineer, and plan to continue in this area to develop my career. I am keen to progress to a more senior position and I am hoping to extend my education over the next few years.

Have you had any funny experiences?

In the male-dominated work place, I try hard to keep up a professional demeanour but sometimes things go pear shape. I started on the Graduate Development Program with 15 other Engineers and as part of our induction we all went to introduce ourselves to a very Senior Manager. We had to say our name, our engineering background and the department we had started to work in. My department is called Product Configuration and Data Management (which is a mouthful) and as it came closer to my time to speak I could feel the flush of embarrassment rush through me; I began to introduce myself and talk about my background and sighed as I relaxed back into my seat. Only to be asked 'and which department is it you work in?' – I could not remember my department – I was stuttering and panicking and starting to laugh nervously – one of the other graduates lucky helped me out. As the 16 of us left the room we laughed uncontrollably at my blunder and it is still quoted to me. The same manager has never forgotten my name – or my department!

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About Me Interview with Ali - Bill of Material and Configuration Engineer: Northern Ireland

What are 3 words that describe you?

Personable, Pragmatic and Dynamic

What qualities do you have that make you good at what you do?

I am a very logical person and I don't give up easily. I take a positive approach to my work and usually assume that I will get the task completed within the given timeframe. Some of my best work happens when the timeframes are tight and I need to work with the team to get the project completed. These are great qualities for my role as it is required precision, patience and communication within and between departments.

What motivates you?

My motivation comes from achieving a good rate of pay for a good rate of work in a worthwhile job. Working with a well-motivated team encourages me to work to the best of my ability. When I reflect on my personal successes, I find I can really direct my energy into doing the best I can.

Do you have hobbies?

I play the piano and French horn and practice weekly in a community band and teach the piano at the weekends. I make beaded jewellery for presents for my family and friends.

What studies have you done?

I have 9 GCSE's and 3 A-Level's (Maths - C, Music - C and Physics - D) and a BEng in Electrical and Electronic Engineering – 2:2 from Queen's University Belfast.

Family?

I recently got married – I am really enjoying being married and we plan to start a family in the future. I am the youngest of 4 children and I see my siblings and parents regularly.

What is your advice to other women?

I would advise any women who is interested in a technology career to really go for it. Gain as much experience as you can with voluntary or paid placements and make as many contacts as possible. Use the internet to research local organisations that are aimed at Women in Technology roles. I have used UK resource centre for women in Science, Engineering and Technology http://www.ukrc4setwomen.org/ and as I am a committee for WISE I use this website regularly http://www.wisecampaign.org.uk/.

Images from Ali's work – generators at work.









About my Career About Me



Andrea-Republic of Ireland: Information Governance Guru

Interview with Andrea - Security Consultant - Ireland

What do you do?

I provide information governance related security for private and public sector clients. This can be a combination of advice over the telephone; responding to many, many emails; preparing audit reports having interviewed clients; creating policies, procedures, standards and guidelines to support the implementation of information security management systems (ISMS); writing articles, writing blog entries....all sorts – and I'm a butterfly so I flit from task to task! More information is available on my company web site www.simmonsprofessionalservices.co.uk

Tell us more

I also spend time each day in supporting a number of other industry professional organisations and in particular am currently the Consultant Security Forum Manager for the British Computer Society (www.bcs.org/security).

This has involved coordinating the views of the industry experts in the UK and ensuring that the Society is representing its members but also fulfilling its public service charter requirements to provide educative and informative appropriate material whenever possible.

What do you really enjoy?

The interaction with all sorts of different people is the most enjoyable part from me – and having to think on your feet and come up with different solutions to suit the differing working environments.

I like giving presentations and seeking to provide what can be very dry content in a more entertaining and positive manner so that people are engaged in what is being presented to them. Asking questions and receiving comments "from the floor" – whether positive or negative (!) has to be seen as interaction because at least it means that people have been listening.

Challenges?

Having to understand different organisations structures, cultures, mission and objectives can be challenging – as can be handling differing levels within an organisation and seeking to meet the requirements of board level explanation as well as management level descriptions and operational level assistance.

Operating "in a vacuum" often without any team support or colleagues to "bounce" ideas off is a constant challenge as I am a lone consultant although I operate associatively through a number of larger team based organisations. I am often having to mould and change my attitude to suit different company cultures and be mindful of levels of respect required.

You must visit interesting places?

I get to visit different places and experience different operating regimes and meet some fascinating individuals.

Most recently I visited a Weapons Agency which is one of the most secure locations I've ever been too – apart from the one where you got weighed on entry and exit to make sure you hadn't taken out anything extra that you shouldn't have (I guess apart from lunch in the canteen!).

Continued interview with Andrea - Security Consultant - Ireland

What has been your best experience?

Probably presenting at a seminar and providing sufficiently interesting content to be asked to write a chapter for a book.

But equally, ensuring that the largest police force in the UK outside of London suffered *no* year 2000 problems was a good feeling – even though the IT team didn't seem to appreciate that they had spent "the most boring weekend ever" because nothing went wrong....! That's the problem with security – you get no thanks as long as nothing is going wrong.

What has been a funny experience?

Most recently, on a new assignment, in seeking to "put my best foot forward", I was in the middle of a conversation with the IT Director when the lights went out and the systems went dark..... my agency contact texted me to ask me to "put the plug back in and behave"! It wasn't my fault, honest ③ But it was a great example of how a combination of disaster recovery and business continuity planning can help keep an organisation functioning appropriately.

Have you had any previous jobs, what were they?

I've done pyramid selling; delivered newspapers; pulled pints in a pub and been a secretary and progressed to PA to MD/CEO level, prior to settling on the information security industry.

What was your first day like?

If you take "day one" as the date from which my IT based career was born, the IT Manager of the law firm I was PA to the CEO of, was "frog marched" out of the building for "inappropriate usage of client funds" and I was met with the statement "you seem to know a bit about IT"...

The net result of which was the task of implementing from scratch a document management system – from cabling the building, to ensuring all PCs on the desks were delivered, installed and ready for use, backed up appropriate document and print server support – all by myself, with no specific training..... fascinating times and a brilliant learning curve.

This was at a time when no-one in middle management had a PC on their desk and the change was going to be from everyone having a secretary that they dictated their letters to, to having to type their own documentation and manage their own client files.

Sadly, the end result was the requirement to make secretaries redundant – which was one of my very first tasks – again, a learning experience in people management terms. (At least as a woman you're more likely to have tissues at hand!).

The future?

I have had the great fortune to be involved in industry leading thought leadership activity in the areas of cyber trust and crime prevention and working with the best minds in the industry. It is hoped that eventually all the good work will be listened too as, sadly, at present, we seem to keep reinventing already built wheels $\ensuremath{\mathfrak{B}}$

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About Me interview with Andrea - Security Consultant: Ireland

Motiviation?

Money – let's be honest!
Seeking to be mortgage free is a huge goal.
However, more realistically, I have a character that wants to be respected, appreciated and to feel that I have achieved something of value and to have made a difference.
As I don't feel that I am at the end of that journey, I will keep on plugging until that gap is filled!

3 words that describe you? Tenacious, Assertive, Feisty.... ©

What qualities do you have that

make you good at what you do?

Psychoanalysis study and understanding makes me more empathetic and thus people tend to open up more to me – which is helpful for faster understanding of an organisation and its culture. I enjoy words, reading, analytical review – all of these are important skills required in order to be good at what I do – and an almost fanatical work ethic means that I can achieve a significant amount and refuse to stop til the job is done.

What studies have you completed?

I've completed a BA in Music & Philosophy, which led me into a Diploma in Hypnosis and Psychotherapy (see previous comments!). In order to bring myself up to appropriate speed in my industry now, I have completed the CISSP – Certified Information Systems Security Professional; the CISM – Certified Information Security Manager; and I have ensured my professional development has led me through to becoming a Certified IT Professional as a full member of the British Computer Society (MBCS CITP – www.bcs.org). I have also undertaken two Information Systems Examination Board (ISEB) Certificates – one in Data Protection and one in Information Security. I think the next qualification will be something privacy or audit based....!

What hobbies do you have?

Getting fit is the current hobby of choice – too many years spent huddled over a laptop focussing on keeping up to date and fuelling my career have been at the expense of my own physical fitness and well being which, given that I am my company's main asset – I need to take care of team "me"! So I'm enjoying badminton, have recently taken up tennis lessons, and I have a personal trainer who is too young and too enthusiastic for his own good – but he has been a treasure in spite of my lack of flexibility @ Over and above the fitness requirements, I still love reading – and not just the work related stuff! And watching TV and films – and classical music. When the mortgage-free goal is achieved, I'm hoping to get back to singing choral music and playing the piano.

Cyber security or writing??

In the main, now, I would probably like to be writing novels....but I'm not quite done with my current industry activity and feel that there is sufficient effort required in areas of information security awareness and internet governance to warrant hanging in there and continuing to contribute as effectively as I can.

Continued about Me interview with Andrea - Security Consultant: Ireland

What impact have you had?

By being someone positive, I have had the capability to encourage others to be as evangelical about information security and its role and placement in a number of organisations.

Understanding things in the way I do, means that I have been able to better explain them to others and hold them through a process to a more positive outcome.

Travel, Career and family?

Travel is a key part of any consultants job - depending on the stage of a project, you are wherever the client is. For me, career took precedence on family – this wasn't what I expected out of my life but now, in my 4th decade, I wouldn't change it for the world as I love what I do.

What about professional development?

I am hoping to be much more involved in the area of professional development in the future so I don't really feel that I have piqued just yet – I still have more to achieve and more to be recognised for. So far at least people are reading what I have written over the last 12 months and are engaging, in the main positively and communication channels remain open.

What is your advice to other women?

Hmmmm, to be honest – I'm not one for all this "women in IT" needing special interest groups and special support. I've spent over a decade in this industry and it has been, in the main, male dominated. I've never taken a stance of this being a problem – I only see it as an advantage. It's not about being tough/hard/more male. It's got to be about intellect, intelligence, knowledge and people skills.

Women care about people more and listen better – the whole Venus and Mars stuff is pretty much true so see "feminine guile" as a strength and never ever lose your sense of humour! We have a more ordered and structured, task oriented approach and can definitely multi-task so we are positive contributors to any team or project. The capability to lighten a mood with a wry comment is a good thing. Its tough out there but you've got to know shed loads of stuff and remain positive and above all love what you do. Karma is an important factor too - you've got to radiate good vibes – you get back what you give out.

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Learn More

ISIS is building a new £145m Second Target Station to increase scientific capability and capacity. It will enable the ISIS science programme to expand into the key research areas of soft matter, advanced materials and bio-science. There is capacity for a total of 18 instruments in the future at Target Station Two, adding to the 20 instruments already available at Target Station One. Seven new instruments for neutron scattering will be available when the 2nd target station opens for business. These will provide new opportunities in surface science, disordered materials, magnetic diffraction, small angle neutron scattering and slow dynamics.

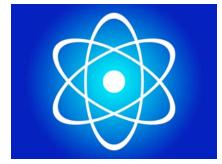
First neutrons at the ISIS Second Target Station

I had spent the whole weekend either at work or watching progress from home using my laptop to remotely view the signals from the neutron detectors. My dinner party guests on the Saturday evening were intrigued! On Friday evening the particle accelerator was turned on and fired protons into the tantalum target for the first time.

All went well and on Saturday morning the safety shutter (which prevents neutrons reaching the instrument when it is being worked on) was raised out of the way to allow the neutrons to reach the instrument. Unfortunately no neutrons were seen on computer screen.

Saturday was then a very tense day trying to work out what was going wrong. We didn't know whether it was the fault of the detectors, the electronics or the software processing the signals or whether there were just no neutrons there to be seen.

In the end we took a neutron source down inside the instrument and the scopes lit up – that proved that all the kit for which my Division is responsible was all working fine. Early on Sunday morning it was discovered that the safety shutter had been placed in the wrong position, it was moved and hey presto the screens lit up with thousands of neutrons.



Harwell Science and Innovation Campus

RAL is located at the Harwell Science and Innovation Campus which used to be the home of the Harwell atomic energy research laboratory. Today the atomic reactors are being decommissioned and the site is becoming an exciting campus where university groups and spin-out companies are clustering around the UK's premier scientific research facilities.

As well as ISIS, RAL is host to Diamond (synchrotron radiation), Vulcan (high powered laser), a large Space Science department and several other major facilities.

Each year the campus hosts a rounders (similar to baseball) tournament which is open to all the organisations on the site. Typically around 20 teams enter the competition which is hotly contested.

Merlin

This instrument has 3m long steel tubes with a single wire stretched from one end to the other inside. The tubes are filled with a rare and expensive isotope of Helium (He3) and a large electrical potential is applied to the ends of the wire.

When a neutron passes through the side of the tube it reacts with the Helium generating a tiny electric current. This passes into the wire and changes the potential at each end of the tube. The difference in potential is sensed by small electronic boards at each end of the tube and then sent on for further processing by electronic boards and then software.

Merlin is one of the most advanced instruments of its type in the world. It started operation on May 2008 and during its first month scientists used it to make discoveries which were reported in a paper in Nature, the most important publication for scientists.

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