



## Top 50 Influential Women in Engineering 2016



# Top 50 Influential Women in Engineering



Louise Hardy was the Infrastructure Director for the London 2012 Olympic Park and one of the first female Project Directors on High Speed 1.

She is now a Non Executive Board Director for public sector and FTSE250 building and construction companies and a passionate diversity champion.



# Louise Hardy

Civil Engineer







# Muffy Calder

## Computer Scientist

Muffy is Vice-Principal and Head of the College of Science and Engineering at University of Glasgow. Previously she was the Chief Scientific Adviser for Scotland.

Her research is in modelling complex sensor-based and biochemical systems.

She was awarded the OBE for services to Computer Science in 2011.

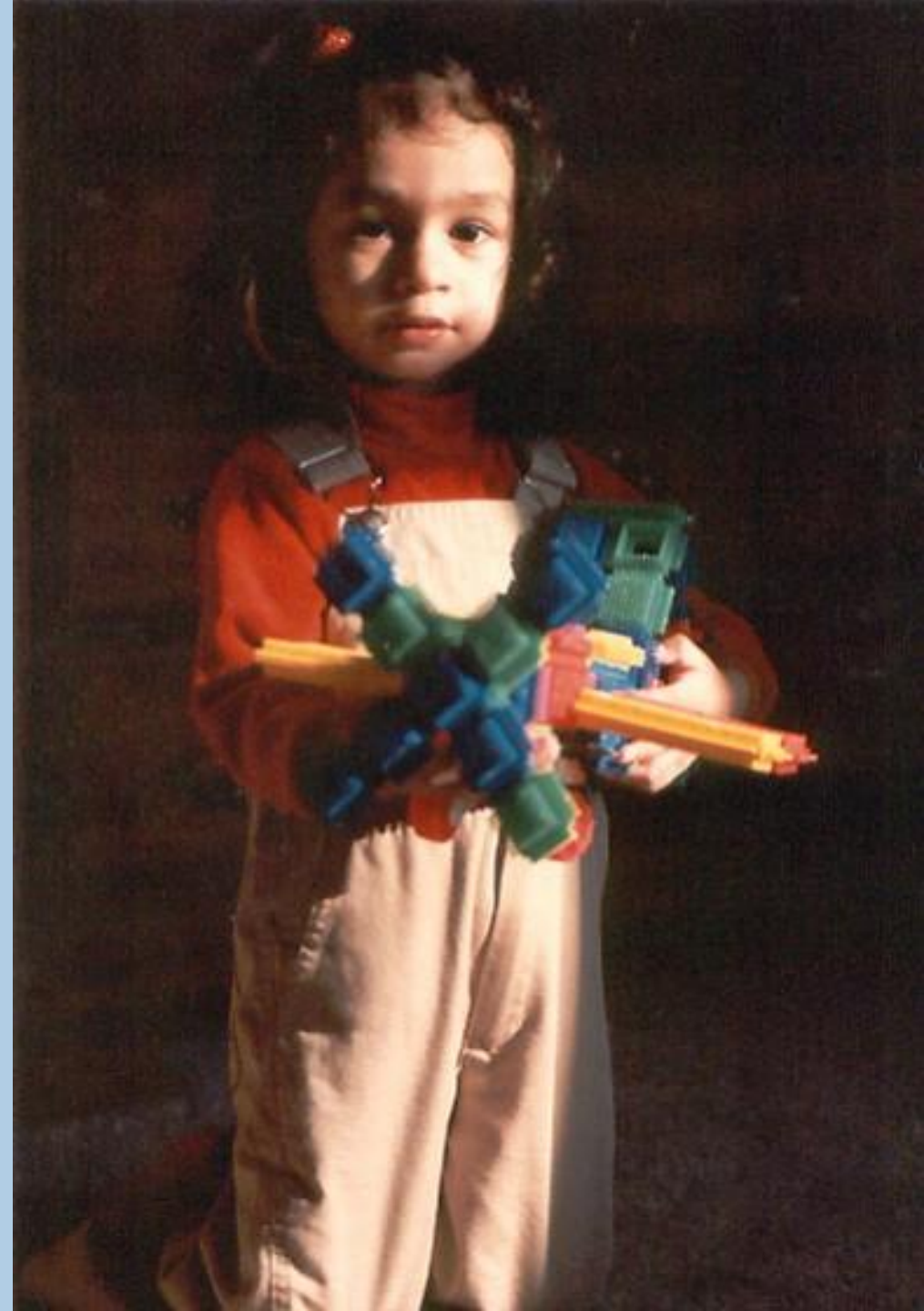


# Roma Agrawal

## Structural Engineer

Roma is a structural engineer who builds big – from train stations to footbridges and sculptures to skyscrapers, including The Shard, she has left a mark on London's skyline.

She is also an author, her first book BUILT was published in February 2018





# Dervilla Mitchell

Civil Engineer

Dervilla is a Civil Engineer who is a member of the Group Board and Chair of the UK, India, Middle East and Africa Region Board of Arup.

Dervilla has spent her career working as a structural engineer and design manager. She is known for her work on aviation projects including T5 Heathrow, T2 Dublin and Abu Dhabi Midfield Terminal, where she has led large multidisciplinary design teams.

Dervilla has received a CBE for her contribution to engineering and was awarded an Honorary PhD by University College Dublin.



**WE5** 

THE TOP 50 WOMEN IN ENGINEERING





# Faye Banks

## Electrical Engineer



Faye Banks is an electrical engineer and started her career as an Advanced Apprentice before going on to complete an Open University International Triple Accredited MBA, MSc in technology management, MEng, and has now started a PhD!

Faye is now Director of Energy at Costain.

She became the **UK Young Woman Engineer** in 2004 and is role model and spokeswoman for the apprenticeship routes into engineering.





# Dawn Childs

Aviation & Leisure/Entertainment  
Engineer

A passionate advocate of careers in engineering, Dawn has unusually moved between several engineering sectors. She started her career as an aeronautical engineer in the RAF and then moved to airport infrastructure engineering.

After joining the leisure & entertainment sector she developed Leisure & Entertainment engineering as a new engineering discipline.





# Ying Hu

Manufacturing Systems  
Engineer



**Ying Hu has led the introduction of modernised manufacturing systems and technology in Rolls-Royce for a decade. Her expertise with digital systems has allowed her to take advantage of the rise of shop floor computing – including developments such as electronic work instructions, filmless radiography, and model based manufacturing.**



# Heidi Mottram

CEO, Northumbrian Water  
Group

CEO of Northumbrian Water Group since 2010, Heidi began her career with British Rail in the 1980's, moving through a number of leadership roles, to become Managing Director of Northern Rail, the largest train operator in the UK.

Heidi was awarded an OBE in the New Year Honours list 2010 for services to the rail industry and in 2016, her achievements in the water industry were recognised when she was named North East Business Executive of the Year and also selected to be HRH Prince of Wales' Business Ambassador to the North East.

Heidi led NWG to achieve the Queen's Award for Sustainable Development in 2014 and has been the only water company on the World's Most Ethical companies list seven years in a row (2010-2017). Northumbrian Water is currently the UK's Utility Company of the year, an accolade achieved twice under Heidi's leadership.

Heidi was awarded a CBE in the Birthday Honours list 2018 for services to the water industry and business community.







**Vicky Stewart**  
Acoustician




Vicky is an Acoustic engineer working on road schemes and planning projects in the UK and the Middle East.

Vicky loves her job and is keen to inspire the next generation into Acoustics, Engineering and other STEM Careers, as the National STEM Coordinator for Atkins.

In 2016 Vicky was awarded the Institute of Acoustics Award for 'Promoting Acoustics to the Public', as well as being listed as one of the Top 50 Women in Engineering.





**Alison leads the thinking on how to protect England from flooding and coastal erosion.**

**She is passionate about the environment and making a positive difference to people's lives.**

**A year in Nepal inspired her to follow a career in engineering.**



**Alison Baptiste**  
Civil Engineer





Isobel is a Patron of the Women's Engineering Society and is passionate about promoting engineering as a diverse profession. As a Past President of the Institution of Mechanical Engineers (2012-13) and Past Master of the Worshipful Company of Engineers, she continues to promote engineering and the importance of measurement.



Isobel Pollock-Hulf  
Mechanical Engineer



# Karen Holford

## Mechanical Engineer

Karen always had a passion for “finding out how things work”. She studied at Cardiff University as an Undergraduate Engineer sponsored by Rolls-Royce. During the Falklands war she stripped and rebuilt Pegasus engines for the Harrier jets. She worked in industry as Design Engineer, including designing a pressure sensor for use on BMW braking systems. Professor Karen Holford CBE FREng is now Deputy Vice-Chancellor at Cardiff.







# Mandy Chessell

## Software Engineer

Mandy Chessell is an IBM Distinguished Engineer, Master Inventor and Fellow of the Royal Academy of Engineering.

Mandy is the first woman to win a Royal Academy of Engineering Silver Medal.

She has published numerous books on data engineering and has over 50 patents issued worldwide.

Mandy is a trusted advisor to executives from large organizations, working with them to develop their strategy and architecture relating to the governance, integration and management of information.



# Liv Carroll

## Chartered Geologist in Mining

Liv Carroll is a Chartered Geologist focussed on Digital Transformation; bringing the latest technology and techniques to mining companies to improve yield and increase sustainability. She has worked at all stages in quarrying & mining from grassroots exploration, operational mines, to mine closure & legacy mines undertaking investment due diligence and considering the environmental, geotechnical, legal and social setting of operations also.

Past President of MinSouth (IOM3) and a Trustee & Council Member of the Geological Society; one of 10 women selected as Top 100 Inspirational Women in Mining twice; and Top 50 Women in Engineering 2016.







Ailie managed the magnificent overhaul of St. Pancras station and delivery of HS1, was director for the central Crossrail tunnels and 6 stations and is now delivery partner on Sydney Metro.



**Ailie MacAdam**

Global Rail Sector Lead : Bechtel

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# Dr Michèle Dix

## Civil Engineer

Michèle is the Managing Director of Crossrail 2 and works for Transport for London.

She completed a PhD in transport & land use planning & became a chartered civil engineer.

Michèle is passionate about improving public transport, and as well as her job at Transport for London has a number of other roles including being a Visiting Professor at University College London, a Board member for the Major Projects Association & a Trustee for the London Transport Museum.



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THE TOP 50 WOMEN IN ENGINEERING



Dame Ann Dowling OM FREng FRS was the first female Professor of Engineering at the University of Cambridge, where she was Head of the Department of Engineering 2009-14. She is known for her research on low noise, low emission aircraft.

President of the Royal Academy of Engineering since 2014, she was appointed by the Queen as one of the 24 members of the Order of Merit.

**Ann Dowling**  
Mechanical Engineer





# Caroline Hargrove

## Modelling & Simulation Engineer

Caroline is the Chief Technology Officer of McLaren Applied Technologies. She has worked in motorsports, elite sports, transport, manufacturing, energy and health.

She started her career lecturing at Cambridge, followed by 11 years in F1 at McLaren, focused on the development of simulations and the first F1 simulator.

She was a founder member of McLaren Applied Technologies and it is now the growth engine to the McLaren Group.

Caroline is a Fellow of the Royal Academy of Engineering and a Visiting Professor at Oxford.





# Chi Onwurah

Electrical Engineer

Chi Onwurah is Labour MP for Newcastle Central and Shadow Minister for Industrial Strategy, Science & Innovation.

Chi is a Chartered Engineer with a BEng in Electrical Engineering from Imperial College London and an MBA from Manchester Business School.

Prior to Chi's election to Parliament in May 2010 she worked as Head of Telecoms Technology at Ofcom. Before this she worked across the world as an engineer and built out GSM networks in Nigeria and South Africa.







# Naomi Climer

## Broadcast Engineer

Naomi spent her career designing, building, operating and fixing studios and broadcast kit, and her career took her to work for the BBC, and then Sony Media Cloud Services in California.

In 2015 she became the first female President of the Institution of Engineering and Technology.

Now, she campaigns for diversity in engineering and advocates for the potential to achieve positive change in the future with technology as a tool.



# Eleanor Stride

Mechanical Engineer

Eleanor studied Mechanical Engineering at University College London. She was inspired by the idea that engineers could help to develop new and better medical treatments.

Her PhD investigated how tiny bubbles of gas interact with the body when exposed to ultrasound. This led to her developing new microbubble agents to help target the delivery of very toxic drugs in order to minimise their side-effects and improve the treatment of cancer.



THE TOP 50 WOMEN IN ENGINEERING



# Alison Vincent

## Software Engineer

Alison was the first female Chief Technology Officer for Cisco in the UK. She has a degree in Maths and Computer Science and a PhD in Cryptography from London University. She loves to show all ages the power of software to shape the future. She influences Government departments and Innovators as to the potential uses of technology for good. Alison is a fellow of the British Computer Society.







Dame Judith Hackitt studied Chemical Engineering at Imperial College London and worked in chemicals manufacturing for more than 20 years. Judith is passionate about the role that engineers must play in ensuring safety, and during 9 years as Chair of the UK Health and Safety Executive she took a very public stance on the importance of real health and safety. She has recently completed a major review of Building and Fire Safety Regulation for the UK Government in the wake of the Grenfell Tower tragedy.

Judith was made a Dame for her services to Health and Safety and for being a role model for young women engineers

**Judith Hackitt**  
Chemical Engineer



# Paulina Bohdanowicz-Godfrey

## Energy and Environmental Engineer

In her current role as director of Energy and Environment at Hilton Hotels, Paulina is responsible for the management, planning and directing of all the energy and environmental activities for the across Europe, the Middle East and Africa. She also continues her research and cooperation with the Universities through publications and project supervision.

She is passionate about making a difference and reducing environmental footprint of businesses whilst investing in positive social impacts through responsible hospitality across the value chain. She describes the engineering as "the silent engine of change" within the hotels sector.



**WE5** 

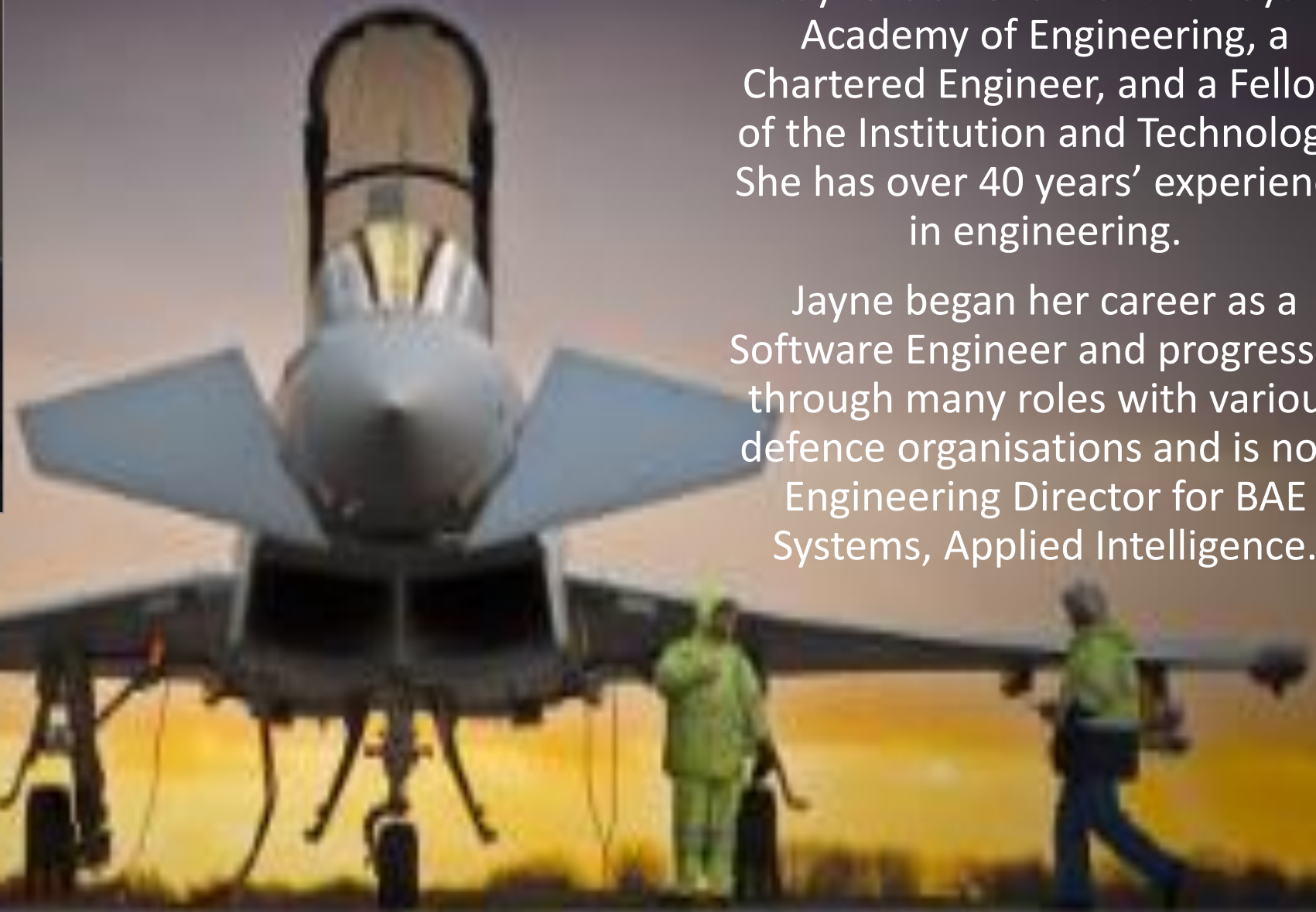
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Jayne is a Fellow of the Royal Academy of Engineering, a Chartered Engineer, and a Fellow of the Institution and Technology. She has over 40 years' experience in engineering.

Jayne began her career as a Software Engineer and progressed through many roles with various defence organisations and is now Engineering Director for BAE Systems, Applied Intelligence.



**Jayne Bryant**  
Engineering Director





**Haifa Ross**  
Nuclear Engineer

A pioneer, using reactors and accelerators in research, Haifa used a high energy research reactor to develop a 3D gamma camera used in medical imaging. She used proton-induced x-ray emissions to analyse normal and diseased tissue in various applications. Haifa succeeded in science and engineering occupations, traditionally male-dominated fields.





# Jacqueline Castle

Mechanical Engineer - Aerospace



Jacqueline Castle is Head of A350 & A380 Landing Gear Engineering for Airbus.

She joined Airbus as a Mechanical Engineering Graduate and has worked in Wing Design on all Airbus Aircraft. She was the Chief Engineer for the new A330neo Wing development.

After more than 20 years at Airbus she remains excited by the daily engineering challenges and is proud leading talented teams to develop the best solutions.

Jacqueline's advice to girls and boys considering STEM careers is *'Go for it!'*





Rachel is a Vice President of the **Institution of Civil Engineers (ICE)** and will become its **youngest ever President** in 2020. She is Head of WSP's Development business, having begun her career with a Geography degree. Rachel is also a founding member and Patron of **Women in Transport**.

With a focus on **transport and mobility futures**, she is a leading industry voice on better place-making and transport networks.

Rachel is passionate about making civil engineering much more **visible, relevant and interesting** to the general public – both children and adults.



**Rachel Skinner**  
Civil Engineer & Transport Planner



# Susan Dio

## Chemical Engineer

Susan Dio is a chemical engineer by training and is now Chief Executive of BP Shipping in the United States.

“I love to put on my boiler suit and hard hat. That’s a big day for me,” she says. “I really like that — getting to peek at a few welds.”





# Alison Nimmo

Chartered Surveyor and Town Planner

Alison Nimmo CBE is the Chief Executive of The Crown Estate, a leading real estate business which owns and manages property and land in the right of the British Monarch.

Prior to this, Alison worked on London 2012 Olympic and Paralympic Games, where she led the design and delivery of many of the Olympic Park venues and parklands.

She has previously led big city redevelopment projects including the Manchester Millennium Project, which rebuilt the city centre following the 1996 bomb, and Sheffield One.







# Dana Skelley

## Civil Engineer

Dana joined the major building contractor **Skanska** in 2017 where she leads technical, quality, business improvement, innovation, risk and customer strategy teams.

Prior to this she was with **Transport for London** for 17 years, leading on asset management and inspiring collaboration with a focus on efficiency and customer service.

She was named Surveyor Magazine Engineer of the Year in 2006 and was awarded an OBE for services to transport in 2018.





Jane currently works in the Water sector, heading up Capital Delivery for treatment works for Severn Trent Water. Prior to that, in 1996, Jane started working in the Rail Industry, where she became Chief Engineer, the most senior Engineer in Network Rail. Jane has gained a wealth of experience from both the client and contractor perspective, Jane is an Engineering Fellow of the IET, and her passion lies in supporting others to realise their potential, which is why she is also a Trustee of the Scout Association.

**Jane Simpson**  
Electrical Engineer



A black and white portrait of Dame Sue Ion, a woman with short dark hair, smiling slightly. She is wearing a dark jacket over a light-colored top. The background is a textured, slightly mottled grey.

# Sue Ion

Nuclear  
Engineer

Dame Sue Ion is one of Britain's leading nuclear engineers and represents the UK on a number of high level groups Internationally. She is currently the honorary president of the National Skills Academy for Nuclear (NSAN) and holds a visiting professorship at Imperial College London.





Linda is Bechtel's construction director for Sydney Metro. She led teams on some of Crossrail's most challenging works, including bringing a 135-year old disused tunnel back to life. Linda received an OBE in 2017 for services to engineering and promoting diversity. She was recently named the 12<sup>th</sup> Brunel International Lecturer by the Institution of Civil Engineers



## Linda Miller

Construction Director : Bechtel  
Sydney Metro Tunnels & Stations



WE5

THE TOP 50 WOMEN IN ENGINEERING



**Katherine is the Engineering Manager at Offshore Wind Consultants. She is passionate about renewable energy and works in the offshore wind sector. She has been involved in several high profile UK and European developments and has also taken a leadership role in a highly novel floating offshore wind project. Katherine is currently involved in offshore wind projects around the world, as we share the lessons learned in Europe with the next generation of offshore wind projects.**

# **Katherine Phillips**

## **Civil Engineer**





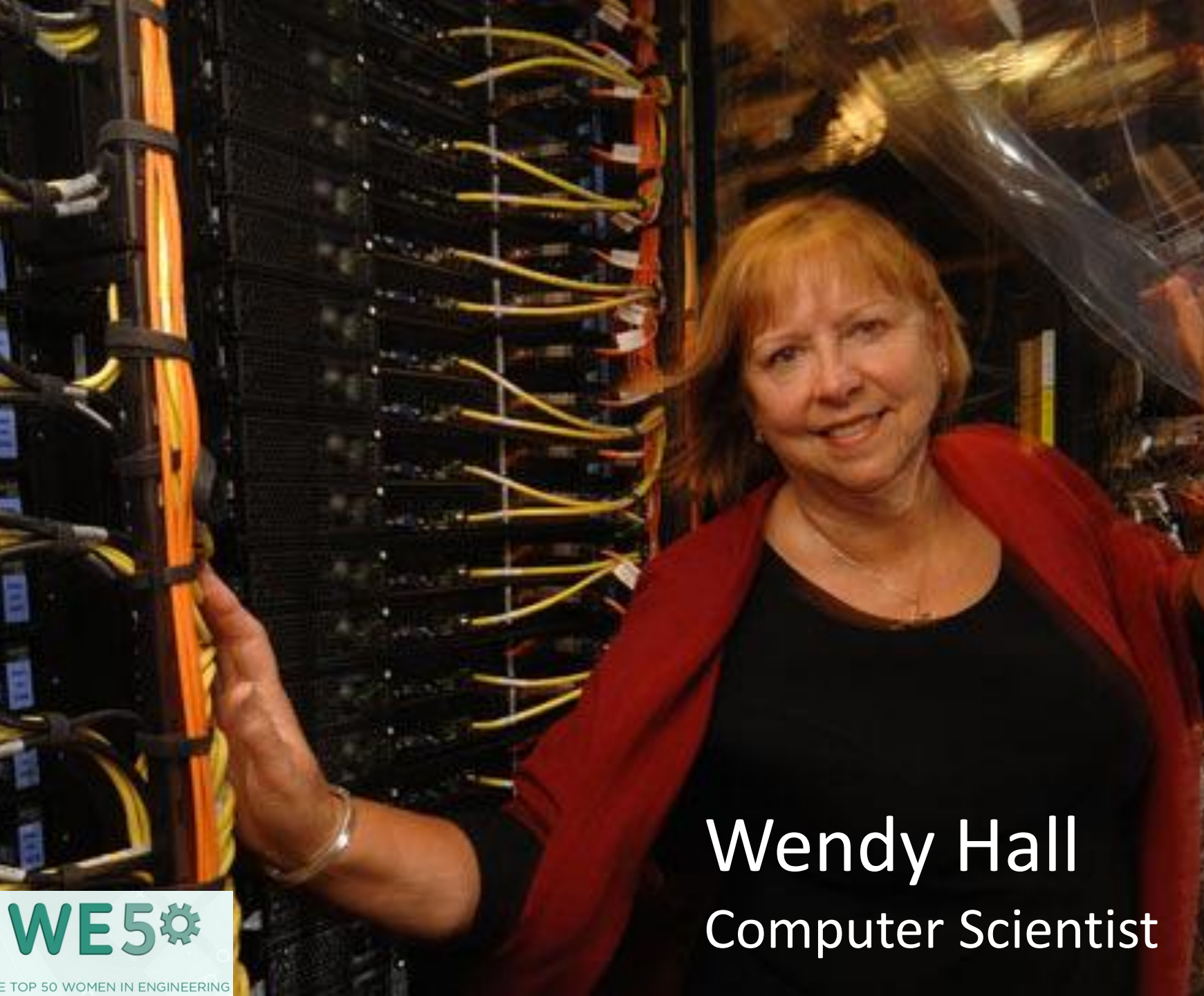
# Helen Atkinson

## Materials Engineer

Professor Helen Atkinson is a Materials Engineer and is the Pro-Vice Chancellor for Aerospace, Transport and Manufacturing at Cranfield University which includes work on driverless cars, the future of airports, airspace and airplanes, drones and cyber-secure manufacturing.







**Wendy Hall**  
Computer Scientist

Dame Wendy Hall is a Professor of Computer Science and Executive Director of the Web Science Institute at the University of Southampton. In 1994 she became the first professor of engineering at Southampton. She thrives on creativity and innovation, and has been a pioneer in the fields of multimedia, hypermedia, web technologies, the semantic web and web science as well as a serial entrepreneur. She has also been heavily involved in government policy work and most recently co-chaired the UK Government's AI Review the response to which was the launch of AI Sector Deal in April 2018.





Dr Nina Skorupska  
Chemist & Chemical Engineer

Dr Nina Skorupska CBE is passionate about climate change, clean energy and how women can play their important role in this. She is Chief Executive of Renewable Energy Association, Deputy Chair of the Board of Women in Science and Engineering (WISE) Campaign, and Board Member of TfL. She has over 30 years' experience in the Energy Industry working across Europe. She was the first female power station manager for RWE npower.

She studied at Newcastle upon Tyne, has a degree in Chemistry and a Doctorate in Coal Combustion.

Essent-topvrouw Skorupska stapt op, raad van bestuur blijft over met drie man

Marleen Graeff  
Thursday 13 December 2012, 13:34  
update: Tuesday 03 June 2014, 23:12

Tweet 1 Share Like 0



Nina Skorupska  
Essent

Chief technology officer (CTO) bij Essent Nina Skorupska (1961) verlaat het bedrijf per 1 januari 2013. Het lid van de raad van bestuur



WE50  
THE TOP 50 WOMEN IN ENGINEERING





# **Dr Angela Seeney**

## **Energy Engineer**

Angela Seeney is a senior leader in the nuclear industry at Sellafield Ltd, where she leads on business improvement through innovative, value led operational, commercial, technical and functional solutions including people, partnership, project, and related engineering and digital opportunities.

She pioneered the 2035 Vision for the UK Oil and Gas Industry, as a Director with the Oil and Gas Authority, and prior to that she had a long career with Shell International delivering multi billion dollar growth and performance improvements at lowest cost & risk.



Belinda Oldfield is a Fellow of the Institution of Civil Engineers and a General Manager with Scottish Water which supplies over 5 million customers across the mainland and islands of Scotland.

She has worked in the water industry for over 25 years in asset management, investment delivery, finance and risk management roles. She was a member of the merger team who created Scottish Water in 2002 and is one of the Top 50 women in Engineering in 2016.

Belinda chairs the Institute of Water Scottish Area Committee, is a member of the ICE Scottish Public Voice Committee and is a keen promoter of women in engineering. She is also a Non Executive Board Director with Highlands & Islands Enterprise.



**Belinda Oldfield**  
**Civil Engineer**



Steph is a journalist and television presenter. She works for the BBC and is the main business presenter for BBC Breakfast.

At the age of 19 she was awarded 'Young Engineer for Britain', after saving Black & Decker £150,000 a year by improving production techniques used for the Leaf Hog product.

# Steph McGovern Broadcaster







# Lynn Gladden

Chemical Engineer

Lynn is the Shell  
Professor of  
Chemical  
Engineering at  
the University  
of Cambridge



# Barbara Judge

Lady Barbara Judge is an American-British lawyer and businesswoman, based in London.

She was Chair of the UK Atomic Energy Authority (UKAEA), and the first female Chair of the Institute of Directors.





Debbie is Managing Director of BRE Global, and she joined BRE's Fire Research Station in 1984 after completing her PhD at the University of Birmingham in Metallurgy and Materials Science. During her career with the organisation, she has been involved in fire-related research, testing, certification and consultancy as well as with sustainability, in particular its impact and influence on fire protection and construction methods.

In June 2010, she was awarded an OBE for services to fire safety. Debbie is also Chair of the European standardisation committee responsible for the development of all of the fire test methods for construction products in Europe.

# Debbie Smith

## Fire Safety Engineer






**Helen is Network Rail's engineering director. Her role is to lead the 2,000 engineers working in the projects team to deliver a five-year, £25bn investment in new infrastructure.**

**"Engineering is basically problem solving. Sometimes it's maths, but sometimes it's helping people to understand what you are doing and why, or figuring out how to build something for less money. Diverse teams are important for this, and having a mixture of skill sets in these problem-solving situations is key."**

**Helen Samuels**  
**Rail Industry Engineer**





**Danella was one of Land Rover's first ever female vehicle programme directors and is passionate about designing cars with women in mind to ensure female customers are properly catered for. In charge of the Evoque model, Danella says "It's the first time I've been responsible for a complete vehicle and I'm the first woman to hold this role. It's a real technical role but I'm also responsible for the profit and loss"**



**Danella Bagnall**  
**Automotive Engineer**





**Julia King**

**Baroness Brown of Cambridge**  
**Materials Engineer**

**Dame Julia King has mixed an academic career at Cambridge, Imperial College and Aston Universities with an industrial career as Head of Materials; Director of Advanced Engineering; Managing Director Fan Systems; Engineering Director, Marine Business at Rolls-Royce plc.**

**She is now sits as a Crossbencher in the House of Lords under her title Baroness Brown of Cambridge.**

**Starting out as a materials engineer, she is passionate about addressing climate change, innovation, ensuring every young person in the UK has an inspiring science education, and persuading more girls into STEM.**



# Elizabeth Eastaugh

## Software Engineer

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Elizabeth Eastaugh is Director of Technology at Expedia. She says people who think engineers all look the same and have the same backgrounds are wide of the mark, but at the same time it is one of her life aims to make the software engineering community more diverse.





# Jane Gartshore

## Refrigeration Engineer

Jane is one of the highest profile women in the refrigeration industry. She served as the President of the Institute of Refrigeration from 2007 to 2010 and is also on the Council of the British Refrigeration Association. Throughout her career she has taken a lead in sustainability issues such as energy efficiency, deployment of natural refrigerants and reduction of refrigerant leakage. She has also built an international profile, for example working with UNEP to support the phase out of CFCs in developing countries.





# Cathy McClay

## Electrical Engineer



Cathy joined National Grid in September 2015 as Head of Commercial Electricity.

Her teams are responsible for ensuring that the Electricity control room has the operational strategy and commercial tools in place to manage the network in real time. She is currently leading the work on flexibility for National Grid.

