Annual Review Annex

2017/18



Annex to the Annual Review

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Fellows

Fellows of the Academy are leading engineers in the UK drawn from academia, industry and the not-for-profit sectors. Fellowship is a national honour, awarded for outstanding personal engineering achievements. Election to the Fellowship is managed by current Fellows of the Academy.

INTERNATIONAL FELLOWS

Elected in 2017 were:

Professor John Hennessy

Director, Knight-Hennessy Scholars Program, Stanford University

Chad Holliday

Chairman, Royal Dutch Shell plc

HONORARY FELLOWS

Elected in 2017 was:

David Gammon

CEO and Founder, Rockspring

FELLOWS

Elected in 2017 were:

Professor Julian Allwood

Professor of Engineering and the Environment, University of Cambridge

Dr Don Arnone

Chief Executive Officer, TeraView Ltd

Christopher Barkey

Former Group Director, Engineering and Technology, Rolls-Royce plc

Dr Anthony Batchelor

Executive Chairman, GeoScience Ltd; Chairman, Camborne School of Mines Trust

Dr Michael Begg

Group Managing Director, Tesla Engineering Ltd (Storrington EquityCo Ltd)

Gordon Birrell

Chief Operating Officer, Production, Transformation and Carbon, BP plc

Dr Keith Bowers

Head of Tunnels, London Underground

Dr Andrew Carter

Chief Technology Officer, Oclaro Inc

Joan Cordiner

Technical and Change Manager, GBB Site; Global Risk Manager, Syngenta

Andrew Cowell

Managing Director, Mercedes AMG High Performance Powertrains Ltd

Professor David Cumming

Head, School of Engineering, and Chair of Electronic Systems, University of Glasgow

Mark Cutifani

Group Chief Executive Officer, Anglo American plc

Professor Michael Davies

Jeffrey Hamilton Collins Chair in Signal and Image Processing, University of Edinburgh

Professor Andrew Davison

Professor of Robot Vision, Department of Computing, and Director, Dyson Robotics Laboratory, Imperial College London

Professor Mischa Dohler

Chair Professor in Wireless Communications, and Director, Centre for Telecommunications Research, King's College London

Professor Alicia El Haj

Director, Institute of Science and Technology in Medicine, Keele University

Air Vice-Marshall Graham Farnell CB OBE

General Manager, NATO Eurofighter Tornado Management Agency (NETMA)

Mark Garrett

Chief Operating Officer and Executive Board Member, Ricardo plc

Dr Caroline Hargrove

Technical Director, McLaren Applied Technologies

Dr Demis Hassabis CBE

Co-Founder and Chief Executive Officer, DeepMind

Eric Hawthorn

Managing Director, Radio Design Ltd

Professor Morgan Heikal

Head of the Centre for Automotive Engineering, University of Brighton

Keith Howells

Group Chairman, Mott MacDonald Group Ltd

Rachel Hurst

Group Operations Director, Domino Printing Sciences

Professor Dr Uwe Krueger

Former Chief Executive Officer, WS Atkins plc

Professor Juergen Maier

Chief Executive, Siemens UK & Ireland

Dr Graeme Malcolm OBE

Chief Executive Officer, M Squared Lasers Ltd

Professor Ursula Martin CBE

Professor of Computer Science, University of Oxford

Dr Pavel Matousek

Chief Scientific Officer, Cobalt Light Systems

Geoff McFarland

Group Head of Engineering, Renishaw

Dr Philip O'Donovan

Angel investor

Professor Sir Timothy O'Shea

Principal and Vice-Chancellor, University of Edinburgh

Dr Andrew Palmer CMG

Chief Executive Officer, Aston Martin Lagonda

Professor Sir Martyn Poliakoff CBE

Research Professor in Chemistry, University of Nottingham

Professor Simon Pollard

Pro-Vice-Chancellor, School of Water, Energy and Environment, Cranfield University

Professor Richard Prager

Professor of Engineering, University of Cambridge

Professor Tony Purnell

Head of Technology, British Cycling

Professor Graham Reed

Professor of Silicon Photonics, University of Southampton

Professor Roger Reed

Professor of Engineering Science and Materials, University of Oxford

Dr Ian Ritchey

Group Chief Engineer, Rolls-Royce plc

Professor Spencer Sherwin

Professor of Computational Fluid Mechanics, Imperial College London

Dr Dame Angela Strank DBE

Head of Downstream Technology and Chief Scientist, BP plc

Professor Eleanor Stride

Professor of Engineering Science, University of Oxford

Professor Anne Trefethen

Pro-Vice-Chancellor, University of Oxford

Dr Eben Upton CBE

Chief Executive Officer, Raspberry Pi (Trading)

Professor Paul Watson

Professor of Computer Science, Newcastle University

Professor Terry Wilkins

Professor of Nanomanufacturing Innovation, University of Leeds

Dr Sarah Williamson

Technical Director, Laing O'Rourke; Construction Technical Director, BYLOR

Professor Alexandre Yakovlev

Professor of Computer System Design, Newcastle University

Professor Antoni Ziolkowski

Professor of Petroleum Geoscience, University of Edinburgh

Trustee Board

The Trustee Board comprises 12 Trustees elected by and from the Fellowship and is chaired by the President, Professor Dame Ann Dowling.

OFFICERS AND MEMBERS OF COUNCIL

Chair

Professor Dame Ann Dowling OM DBE FREng FRS

President

Vice-Presidents

Professor lain Gray CBE FREng FRSE

 $\label{thm:committee} \mbox{ Vice-President for Committee Coordination } \\$

Professor Richard Williams OBE FREng FRSE

Vice-President for Fellowship Engagement

Members

Professor Colin Bailey FREng Naomi Climer CBE FREng Norman Haste OBE FREng Dr David Hughes FREng Dr Bob Joyce FREng

Professor Elaine Martin OBE FREng Professor Geoffrey Maitland FREng Dr Dame Frances Saunders DBE CB FREng Professor Liz Tanner OBE FREng FRSE Paul Westbury CBE FREng

Paul Westbury CBE FREng Professor Stephen Young FREng

Chief Executive

Dr Hayaatun Sillem

Secretariat

Stuart Anthony FCA FIoD

Academy Governance Committees

AUDIT AND RISK COMMITTEE

The purpose of the Audit and Risk Committee is to assess and improve risk management and internal processes and controls across the Academy and oversee the external audit on behalf of the Trustee Board.

Chair

Professor Geoffrey Maitland FREng

Members

Professor Iain Gray CBE FREng FRSE Professor Jim Norton FREng Richard Sadler FREng

Committee secretariat

Stuart Anthony FCA FloD

FINANCE COMMITTEE

The Finance Committee is responsible for and accountable to the Trustee Board for the financial management of the Academy including compliance with the Charities Act 2011 and other relevant legislation, management of Academy budgets, external investment fund managers and compliance with external financial reporting standards.

Chair

Dr Bob Joyce FREng

Members

Naomi Climer CBE FREng Norman Haste OBE FREng Graeme Hobbs FREng Dr David Hughes FREng Professor David Lane CBE FREng FRSE Professor Stephen Young FREng

MEMBERSHIP COMMITTEE

The Membership Committee is the guardian of excellence in determining which candidates may go forward for election to the Fellowship. The Membership Committee consists of a Chair, Chairs of each of the Membership Selection Panels, and the Chair of the International Committee. Each of the 11 Membership Selection Panels looks after a sector of engineering.

Chair

Dr Dame Frances Saunders DBE CB FREng

Ex officio

The President

Panel Chairs

Panel 1 (Civil and environmental)
Professor Colin Bailey FREng

Panel 2 (Materials and mining)
Professor Eileen Harkin-Jones
OBE FREnq

Panel 3 (Chemicals and process)

Dr David Tomlinson FREng

Panel 4 (Aerospace)
Sir Simon Bollom KBE CB FREng

Panel 5 (Transport and mechanical)
Professor Paul Shaylor FREng

Panel 6 (Manufacturing and design) **Professor Roger Benson FREng**

Panel 7 (Electrical and electronic)
Professor Bashir Al-Hashimi FREng

Panel 8 (Energy and power)

Dr Martin Grant FREng

Panel 9 (Medical and bioengineering)
Dr Donal Cronin FREng

Panel 10 (Computing and communications)

Dr Andrew Fitzgibbon FREng

Panel 11 (Special)

Professor Gordon Masterton OBE FREng FRSE

Panel Members

Panel 1 - Civil and environmental
Professor Muhammed Basheer
FREng
Professor David Butler FREng
Timothy Chapman FREng
Dr Steve Denton FREng
Chris Dulake FREng
Professor Ahmed Elghazouli FREng
Steven Harridge FREng
Christopher Hendy FREng
David MacKenzie FREng
Michelle McDowell MBE FREng
Professor Karen Scrivener FREng
Dr Mark Raiss FREng
Dr Toby Roberts FREng

Panel 2 - Materials and mining
Professor Stephen Bull FREng
Professor Paul Curtis FREng
Professor Sarah Hainsworth FREng
Dr Chris Haynes OBE FREng
Professor Robert Pine FREng
Professor Mark Rainforth FREng
Professor Mary Ryan FREng
Catriona Schmolke FREng
Professor Robert Wood FREng
Dr Paul Woollin FREng

Panel 3 - Chemicals and process
Professor Adisa Azapagic FREng
Professor Michael Hounslow FREng
Professor Gary Lye FREng
Professor Paul O'Brien CBE FREng
Professor Nilay Shah FREng
Paul Sinclair FREng
Professor Robin Smith FREng
Professor Hugh Stitt FREng
Patrick Thomas FREng
Phillip Tracy FREng

Panel 4 - Aerospace
Sir Richard Brook OBE FREng
Professor Esteban Busso FREng
Dr Roger Digby FREng
Dr Richard Greaves FREng
Dr Alan Newby FREng
Professor Constantinos Soutis
FREng
Professor Michael Wisnom FREng

Panel 5 - Transport and mechanical
Professor Andrew Doherty FREng
Professor Colin Garner FREng
Dr Willem van Griethuysen FREng
Tony Harper FREng
Professor Karen Holford CBE FREng
FLSW
Professor David Hutchins FREng
Professor Neville Jackson FREng
Professor William Jones FREng

Panel 6 - Manufacturing and design Richard Barber FREng Professor Peter Clarkson FREng Professor Lianne Deeming FREng Richard Goodwin FREng Dr Clive Hickman FREng Professor Sri Hinduja FREng Professor Patrick Keogh FREng

Panel 7 - Electrical and electronic
Professor David Cardwell FREng
Professor Giles Davies FREng
Professor Andrew Marvin FREng
Professor Barrie Mecrow FREng
Professor Mohamed Missous FREng
Dr Edward Morton FREng
Professor Bucur-Mircea Novac FREng
Dr David Parker FREng
Professor Robert Parkin FREng
Dr Andrew Shields FREng
Professor Sarah Spurgeon OBE
FREng
Dr Nicholas Waltham FREng
Dr Richard Wylde FREng

Panel 8 - Energy and power
Jane Atkinson FREng
Professor Nigel Brandon OBE FREng
Andrew Carlick FREng
Edward Daniels FREng
Dr Andrew Garrad CBE FREng
Dr Edward Jefferys FREng
Dr Marcus Newborough FREng
Professor Win Rampen FREng
Professor Ian Smith FREng

Panel 9 - Medical and bioengineering Professor Serena Best CBE FREng Professor Nicholas Medcalf FREng Professor Rod Smallwood FREng Professor Mark Tooley FREng Mike Tuke FREng Professor Sir Saeed Zahedi OBE RDI FREng

Panel 10 – Computing and communications

Professor Robin Bloomfield FREng Professor Darwin Caldwell FREng Professor Sheng Chen FREng Professor Anthony Cohn FREng Professor Michael Norton FREng Professor Peter O'Hearn FREng FRS Professor Stephen Roberts FREng Professor Daniel Rueckert FREng Professor Mark Sandler FREng

Panel 11 - Special
Dr Alan Begg FREng
Graham Dalton FREng
Professor Graham Davies FREng
Jonathan Lyle CB FREng
Dr Paul Miller FREng

Committee secretariat **Jo Ryley**

NOMINATIONS COMMITTEE

The purpose of the Nominations Committee is to ensure that a sufficient number of Fellows stand as candidates in the annual Trustee election and that the candidates bring to the Trustee Board skills, knowledge, experience and diversity that would yield, among the ordinary members and vice-presidents, a balanced Board. The Committee will recommend to the Board candidates for appointment as vice-presidents and candidates for appointment as chairs of the Academy's committees. The Committee is also to recommend to the Trustees, and ultimately the Fellowship, the Academy's President from nominations submitted by the Fellowship.

Chair

Professor Dame Ann Dowling OM DBE FREng FRS

Members

Alan Cook CBE FREng
Dr Andrew Harter CBE FREng
Dervilla Mitchell CBE FREng
Professor Sir Christopher Snowden
FREng FRS
Paul Westbury CBE FREng
Professor Richard Williams OBE
FREng FRSE

REMUNERATION COMMITTEE

The purpose of the Remuneration Committee is to establish and keep under review the remuneration policy for permanent Academy staff, which will be implemented by the Chief Executive; to consider the recommendation of the Chief Executive for remuneration of the Academy's Senior Leadership Team and agree their remuneration; and to set the remuneration of the Chief Executive.

Chair

Professor Dame Ann Dowling OM DBE FREng FRS

Finance Committee Chair **Dr Bob Joyce FREng**

Members

Naomi Climer CBE FREng Professor Iain Gray CBE FREng FRSE

Secretariat

Dr Hayaatun Sillem

Academy Operating Committees

AWARDS COMMITTEE

The role of the Awards Committee is to identify and recommend to the President and Trustee Board appropriate candidates for all of the Academy's relevant prizes and awards (with the exception of National Honours, the International Medal, the Queen Elizabeth Prize for Engineering and the MacRobert Award).

Chair

Professor Raffaella Ocone FREng FRSF

Members

Dr Alan Belfield FREng Professor Alistair Borthwick FREng FRSE

Professor Anthony Bull FREng Jane Buglear FREng Professor Trish Connolly FRSE FREng Professor Mojtaba Ghadiri FREng Professor Malcolm Macleod FREng Alan Newby FREng Dr Jim Ramage FREng Dr John Tubman FREng Professor John Watts FREng

Committee secretariat **Sylvia Hampartumian**

EDUCATION AND SKILLS COMMITTEE

The Education and Skills Committee's role is to oversee and be responsible for the Academy's activities in engineering education and training, and to maintain links with other bodies working in these fields.

Chair

Professor Jonathan Seville FREng

Members

Professor Claire Adjiman FREng Chris Allam FREng Nick Cooper FREng Professor Graham Davies FREng Professor Eileen Harkin-Jones OBE Dr Paul Holbourn FREng (until January 2018) Professor Tim Ibell FREng Bernard Looney FREng **Howard Mathers CBE FREng** Colin Matthews CBE FREng Professor Tony Ridley CBE FREng Professor Mary Ryan FREng Professor Nick Tyler CBE FREng Dr Jean Venables CBE FREng Faith Wainwright MBE FREng

Ex officio

Chris Earnshaw OBE FREng Professor Peter Goodhew CBE FREng Dr Stephen Huntington OBE FREng Howard Mathers FREng

Observers

Katy Turff Professor Sarah Spurgeon OBE FREng

Committee secretariat

Dr Rhys Morgan

ENGINEERING POLICY COMMITTEE

The Engineering Policy Committee's role is to advise and be responsible to the Trustee Board for the engineering policy of the Academy and for all matters concerned with the application of engineering knowledge and principles (other than education and training). It should identify, monitor and promote attention to emerging and generic issues of importance to engineering in pursuit of this role.

Chair

Professor Jeremy Watson CBE FREng

Members

Professor Polina Bayvel CBE FREng FRS Gavin Campbell FREng Tim Chapman FREng Mandy Chessell CBE FREng Dr Steve Denton FREng Professor John Fisher CBE FREng Professor Paul Howarth FREng Professor Nick Jennings CB FREng Nigel Perry MBE FREng Catriona Schmolke FREng Professor Nilay Shah FREng Paul Taylor FREng Professor Mark Tooley FREng Steve Yianni FREng

Committee secretariat **Dr Alan Walker**

ENTERPRISE COMMITTEE

The role of the Enterprise Committee is to provide strategic oversight and leadership of the Academy's Enterprise Hub, on behalf of the Trustee Board. The Committee oversees the development and operation of the Enterprise Hub, and supports and promotes its activities, which includes supporting UK based entrepreneurs, startups and SMEs, as well as developing appropriate partnerships and funding relationships. It ensures the quality and rigour of the assessment process and selection of awards for the Academy's UK-based enterprise schemes.

Chair

Ian Shott CBE FREng

Members

Professor Norman Apsley OBE FREng Professor Steven Beaumont OBE FREng FRSE Professor Richard Brook OBE FREng Mike Carr OBE FREng Anne Glover CBE HonFREng Sir David Grant CBE FREng FLSW Professor lain Gray CBE FREng FRSE Dr Andrew Harter CBE FREng Dr Hermann Hauser KBE FREng FRS **Professor Andrew Hopper CBE** FREng FRS John Leggate CBE FREng Dr Michael Lynch OBE DL FREng FRS Chris Mairs CBE FREng Professor Alison Noble OBE FREng **FRS**

Committee secretariat **Ana Avaliani**

Sir John O'Reilly FREng

Dr Robert Sansom FREng

Dr John C Taylor OBE FREng

Dr Richard Whittington FREng

EXTERNAL AFFAIRS COMMITTEE

The role of the External Affairs Committee is to provide strategic direction for external affairs activities on behalf of the Trustee Board. It oversees all aspects of the Academy's communications, public affairs and engagement activities and events programme, ensuring that they are delivered in line with the strategic plan.

Chair

Dame Judith Hackitt DBE FREng

Members (Fellows)

Professor Anthony Cohn FREng Janice Crawford FREng Professor Robin Grimes FREng Professor Geoffrey Maitland FREng Richard Maudslay CBE FREng Michelle McDowell MBE FREng Professor Sir Saeed Zahedi OBE RDI FREng

Ex officio

Professor Mark Miodownik MBE FREng

(Chair of *Ingenious* selection panel)

Dr Scott Steedman CBE FREng (Chair of *Ingenia*)

Members (Non-Fellows)
Clive Cookson

John Gardner Dr Roger Highfield Kelly Oakes

Committee secretariat **Juniour Blake**

INTERNATIONAL COMMITTEE

The role of the International Committee is to advise and be responsible to the Trustee Board for promoting the international interests of the Academy. In pursuit of this role, the Committee's interests include the Academy's membership of the International Council of Academies of Engineering and Technological Sciences (CAETS) and the European Council of Applied Sciences and Engineering (Euro-CASE). The Committee contributes to other international committees and study groups as appropriate and works to expand relationships with other academies of engineering and technological sciences, taking part in their activities where this is consistent with the Academy's objectives. The Committee oversees the Academy's Newton Fund and Global Challenges Research Fund activities, funded through UK Government Official Development Assistance.

Chair

David Thomlinson FREng

Members

Professor David Bogle FREng
Malcolm Brinded CBE FREng
Jane Buglear FREng
Professor Tariq Durrani FREng FRSE
David Eyton CBE FREng
Dr Allyson Lawless FREng
Dr John Lazar CBE FREng
Professor Ric Parker CBE FREng
Professor John Perkins CBE FREng
Professor William Powrie FREng
Professor Florin Udrea FREng
Dr Jean Venables CBE FREng
Professor Hai-Sui Yu FREng

Non-Fellow Member **Professor Barbara Evans**

Committee secretariat **Shane McHugh**

RESEARCH COMMITTEE

The role of the Research Committee is to advise and be responsible to the Trustee Board for the supervision of research and secondment schemes other than those concerned with education and training.

Chair

Professor Sir Jim McDonald FREng FRSE

Members

Dr Alan Begg FREng
Dr Jeremy Burroughes FREng
David Eyton CBE FREng
Professor Karen Holford CBE FREng
FLSW (until April 2018)
Professor Michael Hounslow FREng
Jeff Magee FREng
Professor Mark Sandler FREng
Professor Hywel Thomas CBE FREng
FRS FLSW
Professor Ann Trefethen FREng
Professor Robert Wood FREng

Ex officio

Professor Neil Alford MBE FREng (Research Fellowships)

Professor Elaine Martin OBE FREng (Industrial Fellowships)

Professor William Milne FREng (Leverhulme Trust, Senior Research Fellowships)

Professor Stephen Williamson FREng (Research Chairs)

Committee secretariat **Dr Christina Guindy**

Academy other committees

DIVERSITY AND INCLUSION COMMITTEE

The purpose of the Diversity and Inclusion Committee is to advise and have oversight of the all Diversity and Inclusion Programme strands of work, including that with employers, professional engineering institutions and within the Academy itself.

Chair

Dervilla Mitchell CBE FREng

Members

Allan Cook CBE FREng
Steven Dearden FREng
Professor Anthony Finkelstein CBE
FREng
Professor Dame Pratibha Gai DBE
FREng FRS
Professor Sarah Hainsworth FREng
Jonathan Lyle CB FREng
Professor Nilay Shah FREng
David Waboso CBE FREng
Air Marshal Julian Young CB OBE
FREng

Members (Non-Fellow)
Elspeth Finch MBE
Dr Nike Folayan
Dr Mark McBride-Wright

Committee secretariat **Bola Fatimilehin**

MACROBERT COMMITTEE

The purpose of the MacRobert Committee is to identify and choose appropriate finalists and winners of the Royal Academy of Engineering's MacRobert Award for UK innovation in engineering. The MacRobert Award, first presented in 1969, is the UK's longest-running and most prestigious national prize for engineering innovation. It honours the winning organisation with a gold medal, and the team members with a cash prize of £50,000.

Chair

Dr Dame Sue Ion DBE FREng FRS

Members

John Baxter CBE FREng FRSE
Keith Davis (Chairman, The
MacRobert Trust)
Professor David Delpy CBE FREng
FRS FMedSci
Professor Nick Jennings CB FREng
Professor Sir John McCanny CBE
FREng FRS
Professor Ric Parker CBE FREng
Dr Frances Saunders CB FREng
Professor Sir Saeed Zahedi OBE
RDI FREng

Committee secretariat **Sylvia Hampartumian**

Grants, fellowships and programmes

RESEARCH CHAIRS AND SENIOR RESEARCH FELLOWSHIPS

These prestigious five-year Chairs and Senior Research Fellowships enable outstanding senior engineering researchers to deliver 'use-inspired' research that meets the needs of their industrial partners and establish or enhance a world-leading engineering research group.

Name	Co-sponsor	Subject	University
Professor Guglielmo Aglietti	Surrey Satellite Technology	Space engineering	University of Surrey
Professor Robert Akid	BP	Corrosion and materials	University of Manchester
Professor John Andrews	Network Rail	Infrastructure asset management	University of Nottingham
Professor Matthew Angling	Defence Science and Technology Laboratory	Space environment and radio frequency engineering	University of Birmingham
Professor Ashraf Ayoub	Pell Frischmann	Nuclear infrastructure engineering	City, University of London
Professor Serafim Bakalis	Procter & Gamble	Engineering consumer products for a sustainable future	University of Birmingham
Professor Luke Bisby	Arup	Fire and structures	University of Edinburgh
Professor Robert Bowman	Seagate Technology	Advanced materials for data storage	Queen's University Belfast
Professor Christoph Breucker	BAE Systems	Aeronautical engineering	City University London
Professor Richard Butler	Rolls-Royce	Experimental studies of next generation gas-turbine combustion system aerothermal processes	University of Loughborough
Professor Byron Walter Byrne	Ørsted	Advanced geotechnical design	University of Oxford
Professor Jon Carrotte	Rolls-Royce	Next generation gas-turbine combustion system aerothermal processes	University of Loughborough
Professor George Constantinides	Imagination Technologies	Energy-efficient high performance embedded processing in an uncertain world	Imperial College London
Professor Jonathan Cooper	Airbus	Integrated design of advanced novel wing architectures	University of Bristol
Professor Claire Davis	Tata Steel	Low energy steel processing	University of Warwick
Professor Andrew Davison FREng	Dyson Technology Ltd	Ultra-efficient vision algorithms for resource-constrained robotics	Imperial College London
Professor Yulong Ding	Highview Power Storage	Cryogenic energy storage	University of Birmingham
Professor Hongbiao Dong	TWI Ltd	Innovative metal processing	University of Leicester
Professor Fionn Dunne FREng	Rolls-Royce	Integrative mechanistic design	Imperial College London
Professor Daniel Esser	SELEX Galileo	Laser devices and engineering	Heriot-Watt University
Professor Brian Falzon	Bombardier	Advanced aerospace composites	Queen's University Belfast
Professor Alistair Gibb	ECI	Management of complex projects	Loughborough University
Professor Mark Girolami	Lloyd's Register Foundation	Data centric engineering	Imperial College London

Name	Co-sponsor	Subject	University
Professor Kenneth Grattan FREng	George Daniels' Educational Trust	Next generation optical and fibre-optic instrumentation	City, University of London
Professor Matthew Hall	British Geological Survey	Rock-fluid interactions in carbon capture, storage and alternative hydrocarbons	University of Nottingham
Professor Eileen Harkin-Jones FREng	Bombardier	Composites engineering	Ulster University
Professor Lorenzo lannucci	Defence Science and Technology Laboratory	Multiscale composite armour design	Imperial College London
Professor Xiangqian (Jane) Jiang FREng	Renishaw	Precision metrology	University of Huddersfield
Professor Roy Kalawsky	Airbus	Digital and data engineering information systems	Loughborough University
Professor Nikil Kapur	GlaxoSmithKline	Pharmaceutical processing	University of Leeds
Professor Alan Kemp	Fraunhofer UK	Advanced laser engineering	University of Strathclyde
Professor Jianguo Lin FREng	Tata Steel	Multidisciplinary studies of hot stamping	Imperial College London
Professor Omar Matar	Petronas	Multiphase fluid dynamics	University of Oxford
Professor Bruno Merk	National Nuclear Laboratory	Computational modelling for nuclear engineering	University of Liverpool
Professor James Moore	Bagrit Trust	Medical devices	Imperial College London
Professor Stephen Muggleton FREng	Syngenta	Applications of automated theory-formation using meta-interpretive machine learning	Imperial College London
Professor Kamran Nikbin	EDF Energy	Structural integrity assessment	Imperial College London
Professor Chris Pearce	EDF Energy	Computational mechanics for nuclear power engineering	University of Glasgow
Professor Stephen Roberts FREng	Man Group Plc	Machine learning at industrial and commercial scale	University of Oxford
Professor Mary Ryan FREng	Shell	Interfacial nanoscience for engineering systems	Imperial College London
Professor Vladimiro Sassone	Roke	Cyber security	University of Southampton
Professor Sven Schroeder	Infineum UK	Engineering applications of synchrotron radiation	University of Leeds
Professor Thomas Scott	AWE	Performance and detection of actinide materials	University of Bristol
Professor Sridhar Seetharaman	Tata Steel	Low-carbon technologies	University of Warwick

Name	Co-sponsor	Subject	University
Professor Spencer Sherwin FREng	McLaren Racing	Transient flow simulation for advanced race and road cars	Imperial College London
Professor Tong Sun	Faiveley Brecknell Willis	Smart railway electrification: evolvable from contact to contactless	City, University of London
Professor lain Todd	GKN Aerospace	Additive manufacture and advanced structural metallics	University of Sheffield
Professor Andrew Tyas	Defence Science and Technology Laboratory	Protection engineering against high explosive blast	University of Sheffield
Professor Phillip Webb	Airbus	Aero-structures design	Cranfield University
Professor Jennifer Whyte	Laing O'Rourke	Systems integration	Imperial College London
Professor Michalis Zervas	SPI Lasers	Advanced fibre laser technologies for future manufacturing	University of Southampton
Professor Zi-Qiang Zhu FREng	Siemens Wind Energy	High efficiency and power density wind-power generator systems	University of Sheffield

SENIOR RESEARCH FELLOWSHIPS

Name	Co-sponsor	Subject	University
Dr Brian Connolly	EDF Energy	Corrosion performance of energy systems	University of Manchester
Dr Corin Barry Edmund Gawith	Covesion	Nonlinear optical materials by ultra-precision machining	University of Southampton
Dr Stephen Neethling	Rio Tinto	Heap and in-situ leaching	Imperial College London
Dr Radan Slavik	Luminisity	Thermally insensitive hollow core optical fibres	University of Southampton
Dr Cindy Jane Smith	Scottish Water	Biofiltration by biological design	University of Glasgow
Dr Graham Spinardi	Ove Arup Foundation	Integrating technical and social aspects of fire safety engineering	University of Edinburgh
Dr Sophie Williams	DePut Synthes	Hip replacement technology	University of Leeds
Dr Xibo Yuan	Safran Electrical & Power UK	Advanced aircraft power generation systems	University of Bristol

CHAIRS IN EMERGING TECHNOLOGIES

The Chairs in Emerging Technologies scheme provides long-term support of up to 10 years to global research visionaries to lead on developing emerging technology areas with high potential to deliver economic and social benefit to the UK.

Name	Subject	University
Professor Anne Neville OBE FREng FRS FRSE	Bio-inspiration for functional surface design	University of Leeds
Professor Jeremy O'Brien	Photonic quantum ICT	University of Bristol
Professor Susan Rosser	Engineered cells for combined diagnostics and therapeutics	University of Edinburgh
Professor Jonathan Rossiter	Smart materials and mechanisms for ubiquitous soft robotics	University of Bristol
Professor Timothy Denison	Brain engineering: towards closed-loop, non-invasive bioelectronic therapies for neurological disorders	University of Oxford
Professor Colin McInnes MBE FREng FRSE	Emerging space technologies	University of Glasgow
Professor Alessio Lomuscio	Trusted learning-based autonomous and robotic systems	Imperial College London
Professor Paul Shearing	Emerging battery technologies for next generation energy storage	University College London
Professor Brian Gerardot	Integrated two-dimensional classical and quantum photonics	Heriot-Watt University
Professor Sriram Subramanian	Interactive technologies using metamaterials	University of Sussex
Professor Jason Reese FREng FRSE	PYRAMID: a platform for multiscale design, from molecules to machines	University of Edinburgh
Professor Ana Cavalcanti	Software engineering for robotics: modelling, validation, simulation, and testing	University of York

DAPHNE JACKSON TRUST FELLOWSHIPS

The Daphne Jackson Trust Fellowship is designed to return STEM professionals to their careers after a break.

Name	Subject	University
Dr Xuanli Luo	Nano quasicrystals for hydrogen storage	University of Nottingham
Dr Maria Ribera Vicent	Satellite FEM validation with advanced optimisation and virtual vibration testing	University of Surrey

RESEARCH FELLOWSHIPS

These Fellowships enable outstanding early-career engineering researchers to develop successful academic careers and become research leaders in their chosen fields. Funding is awarded for five years to successful candidates who will be hosted within a UK institution.

Name	Subject	University
Dr Yoann Altmann	Bayesian computational methods for efficient low-energy imaging and sensing	Heriot-Watt University
Dr David Armstrong	Micro-engineering advanced alloys for extreme nuclear power environment	University of Oxford
Dr Emmanouil Benetos	Software inspired by the human ear/looking at the human ear to design novel listening software	Queen Mary University of London
Dr Martynas Beresna	Ultrafast laser-induced nanostructuring: a pathway to advanced optical-fibre engineering	University of Southampton
Dr Ben Britton	Better understanding of materials to make safer reactors	Imperial College London
Dr Peter Carrington	High efficiency mid-infrared semiconductor materials and devices grown on silicon	Lancaster University
Dr Siming Chen	Integrated III-V quantum dot photonic circuits on Silicon platforms	University College London
Dr Mark Chiew	Characterising the brain's spatio-temporal dynamics by integrating EEG and FMRI	Oxford University
Dr David Clifton	Machine learning for the intelligent patient record	University of Oxford
Dr Alexander Dickinson	Developing the next generation of prosthetic limbs	University of Southampton
Dr Trung Duong	Meeting future wireless capacity via secure and energy-efficient small-cell networks	Queen's University Belfast
Dr Marco Endrizzi	Laboratory-based x-ray dark-field microscopy and microtomography	University College London
Dr Amanda Joy Foust	Holographic light shaping for reverse engineering neural circuit learning	Imperial College London
Dr Enrique Galindo-Nava	Developing novel materials for gas turbine engines: an integrated computational and modelling approach	University of Cambridge
Dr Ben Green	Long-distance quantum communication devices via engineered defects in diamond	University of Warwick
Dr Rainer Groh	Robust computational methods and design paradigms for spatially chaotic structures	University of Bristol
Dr Charlotte Hagen	A novel 3D, non-destructive imaging platform for tissue engineering	University College London
Dr Edward Johns	Empowering next-generation robots with dexterous manipulation: deep learning via simulation	Imperial College London
Dr Gregory Jasion	Hollow microstructured optical fibres for high-power laser delivery	University of Southampton
Dr Edmund Kelleher	Next-generation short-pulse lasers for the visible and ultraviolet	Imperial College London
Dr Maiwenn Kersaudy-Kerhoas	Towards better pregnancy monitoring: miniaturised tools for non-invasive prenatal diagnosis in clinics and hospitals	Heriot-Watt University

Name	Subject	University
Dr Edward Laird	Quantum computing devices based on carbon nanomaterials	University of Oxford
Dr Domanic Lavery	Simplified transceiver architectures for high capacity optical networks	University College London
Dr Martin Lavery	Increasing data transfer capacity using light's unusual properties	University of Glasgow
Dr Fleur Loveridge	New thermal and geotechnical facility for ground heat exchangers	University of Southampton
Dr Myra Lydon	Solutions to monitor and assess resilience in transport (SMART) infrastructure	Queen's University Belfast
Dr Luca Magri	Adjoint-based approaches in thermo-acoustics: understanding, modelling and controlling instabilities	University of Cambridge
Dr Massimiliano Materazzi	Advanced thermal technologies for conversion of waste into second-generation biofuels	University College London
Dr Adnan Mehonic	Next-generation adaptive electronics for neuromorphic engineering	University College London
Dr Milos Nedelijkovic	On-chip systems for mid-infrared sensing	University of Southampton
Dr Thomas Okell	Novel imaging techniques to visualise blood flow in the brain	University of Oxford
Dr Pola Goldberg Oppenheimer	Advanced micro-optofluidic portable sensing (AMPS) technology for timely point-of-care diagnostics	University of Birmingham
Dr Oliver Payton	Mapping, measuring and manufacturing nanostructures via high-speed atomic force microscopy	University of Bristol
Dr David Phillips	Sensing and actuation of nanoscale mechanics in biological systems	University of Glasgow
Dr Soraia Pimenta	Exploiting novel carbon-fibre composites	Imperial College London
Dr Antoniu Pop	Developing a language for the computers of the future	University of Manchester
Dr Ludovic Renson	Developing next-generation testing methods for nonlinear mechanical structures	University of Bristol
Dr Robert Richards	Development of indium gallium arsenide bismide for midwavelength infrared applications	University of Sheffield
Dr Brian Sheil	Intelligent real-time monitoring to inform underground construction processes	University of Oxford
Dr Joseph Sherwood	Interactions between fluid dynamics and biological function in microvascular disease	Imperial College London
Dr Radu Sporea	Novel high performance transistors for use in large area electronics	University of Surrey
Dr Neil Vaughan	Virtual reality training: development of frameworks for haptic skill assessment, material modelling and adaptation	University of Chester
Dr Freddie Withers	Light harvesting hybrid - graphene-based devices (GrapheX)	University of Manchester
Dr Weijia Yuan	Advancing renewable energy integration by innovative SMES-battery storage systems	University of Strathclyde
Dr Min Zhang	Fully superconducting machines for next-generation electric aircraft propulsion	University of Strathclyde

RAENG/LLOYD'S REGISTER FOUNDATION RESEARCH FELLOWSHIPS

This Fellowship is funded by the Lloyd's Register Foundation, and is aimed at outstanding researchers from all branches of engineering who are about to finish their PhDs or have up to four years' postdoctoral experience.

Name	Subject	University
Dr Mark Batty	Holographic light shaping for reverse engineering neural circuit learning	University of Kent
Dr Rebecca Boston	Nanostructured oxides for sustainable energy storage and recovery	University of Sheffield

ENGINEERING FOR DEVELOPMENT RESEARCH FELLOWSHIPS

The Engineering for Development Research Fellowships are funded by the Global Challenges Research Fund (GCRF) and must focus on engineering research that will directly contribute towards economic and social development in developing countries.

Name	Subject	University
Dr Ralf Bauer	Miniaturised 3D-printed biomedical imaging system using optical MEMS	University of Strathclyde
Dr Maria Chernysheva	Novel mid-infrared ultrafast fibre lasers for molecular vibrational sensing technologies	Aston University
Dr Ana Namburete	Ultrasound-based atlas for longitudinal analysis of fatal brain maturation	University of Oxford
Dr Jan Mol	Single-molecule electronics	University of Oxford
Dr Samuel Powell	Engineering a new approach to biomedical imaging using sound and light	University College London
Dr Ton van den Bremer	Cleaning the ocean: understanding transport of plastic pollution by waves	University of Oxford
Dr Thomas Vetter	Understanding impurity incorporation into organic crystals from measurements and simulations	University of Manchester

UK INTELLIGENCE COMMUNITY POSTDOCTORAL RESEARCH FELLOWSHIPS

These two-year Fellowships are funded by the Government Office for Science to promote unclassified basic research in areas of interest to the intelligence, security and defence community.

Name	Subject	University
Dr John David Haynes	Calculus of privacy	City, University of London
Dr James Robinson	Environmentally stable rechargeable batteries for flexi wearable electronics	ble University College London
Dr Jonathan Michael Silver	Quantum and optical sensors	City, University of London
Dr Fabio Alessio Vittoria	Stored energy detection in complex environments	University College London

INDUSTRIAL FELLOWSHIPS

These Fellowships support academics to undertake a collaborative research project in an industrial environment for up to one year. The aim is to strengthen the strategic relationship and facilitate knowledge transfer between the university and the industry host, and, improve the quality and industrial relevance of the applicant's teaching.

Name	University	Host	Project title
Dr Indika Dinesh Bandara Pamunuwa	University of Bristol	Microsemi Semiconductor Ltd	Nanoelectromechanical relay-based electronics
Dr Birgit Painter	De Montfort University	Pick Everard	Integrated building performance evaluation: practical assessment of management tools
Dr Christie Maddock	University of Strathclyde	Orbital Access Ltd	Preliminary design of a UK small satellite launch system
Dr Mehrnoosh Sadrzadeh	Queen Mary University of London	British Broadcasting Corporation Research and Development	Vectors and tensors for textual understanding of subtitles and news
Dr Zhenyu Zhang	University of Birmingham	DuPont Teijin Films	Nanotechnology enabled polyester film production
Dr Dimitrios Gerogiorgis	University of Edinburgh	Molson Coors Brewing Company Ltd	Data analytics for high-performance multiobjective beer fermentation and filtration optimisation
Dr Kevin Briggs	University of Bath	Network Rail	Railway infrastructure resilience
Dr Robert William Hewson	Imperial College London	Airbus	Design optimisation of 3D-printed hierarchical structures
Dr Abby Megan Jayne Paterson	Loughborough University	Central Scanning	Researching the quality of additive manufactured parts and services
Dr James Ernest Green	University of Sheffield	Controlled Power Technologies Ltd	Advanced electronic instrumentation systems for electric vehicle motors and generators

LEVERHULME TRUST SENIOR RESEARCH FELLOWSHIPS

These Fellowships enable senior academics to reinvigorate their research or start new lines of research. The Fellowships cover the salary costs of a replacement academic who will take over the awardee's teaching and administration duties for up to one year.

Name	Subject	University
Dr Kevin Curran	Device-free location-oriented activity identification in the home	Ulster University
Dr Denis Kramer	Glass-fibre solar redox receiver for grid-scale electricity provision	University of Southampton
Dr Fang Xie	Nanoscale engineering of photoelectrodes for whole spectrum light harvesting	Imperial College London
Dr Christopher Keylock	Characterising the complexity of environmental, turbulent flows	University of Sheffield
Dr Raul Fuentes	Developing infrastructure robotics - a low-cost small robot for infrastructure inspection	University of Leeds
Dr Jonathan Pearson	Coastal flood risks under extreme events: creating resilience through retrofitting	University of Warwick
Dr James Covington	How does the future smell?	University of Warwick

APEX AWARDS

The Academy, in partnership with the British Academy and the Royal Society, with the support of The Leverhulme Trust, launched the APEX Awards (Academies Partnership in supporting Excellence in cross-disciplinary (X) research). These awards aim to demonstrate how researchers from different disciplines sharing a common vision can come together to generate creative and innovative solutions that will benefit wider society.

Name	Project title	University
Dr Kate Robson Brown	The ontogeny of bone microstructure as a model of programmed transformation in 4D materials	University of Bristol
Dr James Burridge	Spatial theories of linguistic and cultural evolution	University of Portsmouth
Professor Jennifer Barclay	Making sense of risk and uncertainty: narrative and metaphor in the face of volcanic activity	University of East Anglia
Dr Marilina Cesario	Before and after Halley: medieval visions of modern science	Queen's University Belfast
Professor Rama Cont	Systemic risk: mathematical modelling and interdisciplinary approaches	Imperial College London
Professor Fay Dowker	The emergence of the continuum	Imperial College London
Dr Andrew Duncan	Data driven profiling and assessment of conflicts in Africa	University of Sussex
Professor Robert Field	Exploring water re-use - the nexus of politics, technology and economics	University of Oxford
Professor Dave Goulson	People, pollinators and pesticides in peri-urban farming	University of Sussex
Professor Andrew Hogg	New models of sediment suspensions	University of Bristol
Dr David Horsell	Hot fuzz: bumble bee hair as a thermal metamaterial	University of Exeter
Dr Christina Lee	Nettles and networks: new ways to tackle wound infections	University of Nottingham

Name	Project title	University
Dr Tom Mitchell	Exploring molecular data with immersive technology: interactive sonification in virtual reality	University of the West of England
Professor Stuart Murray	Engineering the imagination: disability, prostheses and the body	University of Leeds

ENTERPRISE FELLOWSHIPS

Enterprise Fellowships provide funding and support to outstanding entrepreneurial postdoctoral engineers, working at a UK university, to enable them to develop a spin-out business based on their technological idea.

Name	Innovation	University
Kitty Liao	Ideabatic - Ideabatic's SMILE for temperature-sensitive products	Imperial College London
Dr Alexander Patto	WaterScope - enabling simple, affordable, bacterial testing	University of Cambridge
Dr Richard Ahlfeld	UQuant - combining Al and engineering simulations	Imperial College London
Dr Mihai Caleap	Metasonics - spatial sound modulation	University of Bristol
Dr Johnathan Siviter	Thermoelectric Conversion Systems Ltd - high efficiency cooling of datacentres	University of Glasgow
Dr Edmund Kay	The Cambridge Stethoscope Company - an intelligent stethoscope	University of Cambridge
Professor Keith Pullen	Gyrotricity - flywheel energy storage system	City, University of London
Dr Tian Carey	Wearable and intelligent smart-textile electronics (WISE)	University of Cambridge
Dr Florence Gschwend	Chrysalix Technologies	Imperial College London
Dr David McKee	Massive-scale simulation integration eco-system	University of Leeds
Dr Li Ping Lu	GraphExe Technologies	University of Exeter
Dr Eoin Hyde	Innersight Labs - bringing medical images to life	King's College London
Dr Ilan Adler	EcoNomad - fuelling a sustainable future	University College London
Dr Amber Hill	Neurobridge	University College London
Dr Liam Donovan	Bela - high-performance embedded computing for makers	Queen Mary University of London
Pae Natwilai	Trik - 3D reporting system for structural inspection	Imperial College London

BLAVATNIK FAMILY FOUNDATION ENTERPRISE FELLOWSHIP ALUMNI AWARDS

The Blavatnik Family Foundation Alumni Awards celebrate engineering innovation and promote role models for engineering entrepreneurship, by recognising the achievements of the most successful early-stage Hub members in turning innovative technologies into viable businesses. Awardees act as role models for future entrepreneurs.

Name	Innovation	Organisation
Dr Enass Abo-Hamed	H2GO Power: hydrogen-storage 'plug & play' units for clean and consistent power	Imperial College London
Victoria Hamilton	VH Innovation	Recoil Knee Pads
Dr Rob Oldfield	SALSA Sound - the future of live sports audio	University of Salford
Dr Katerina Spranger	Oxford Heartbeat: correct stent - ViVa (virtual vascular) project	University College London

SME LEADERS PROGRAMME

The SME Leaders Programme supports promising leaders of high-growth engineering SMEs, with a grant towards the cost of training courses and executive education, plus monthly scale-up workshops at the Academy.

Awardee companies

Lightpoint Medical	Terrabotics	BMLL Technologies
Metix Medical	Adaptix	PervasID
Ludwick Precision	Oxford nanoSystems	Grakn Labs
bio-bean	Oxsensis	CCm Technologies
Greenspur Renewables	NURON LIMITED	Brill Power
Q-Bot	Metronome Energy	LettUs Grow
Snap Tech	CYdar	Grant Instruments

LAUNCHPAD COMPETITION

The Launchpad Competition aims to find an exceptionally promising engineering entrepreneur or team of entrepreneurs, between the ages of 16 and 25, and enable them to start a business based on their engineering innovation and maximise the chances of its successful growth. The winner(s) of the competition receive the JC Gammon Award – a prize of £15,000 and membership of the Enterprise Hub. Other individuals or teams may be chosen as runners-up. The winner and finalists are invited to become Hub members.

Winner

Name	Startup company	Project title	
Nick Schweitzer	Klydo	An Al research assistant that drives innovation	
People's Choice winner			
Name	Startup company	Project title	
Brittany Harris	Qualis Flow (Q.FLOW)	Managing water resources more sustainably on development sites	

RAENG-ERA FOUNDATION ENTREPRENEURS AWARD

This award identifies, encourages and rewards entrepreneurial engineering researchers working in the field of electro-technology.

Winner

Name	University	Project title
Jack Pearson	EngX	Enabling the production of custom products

RAENG - ROYAL COMMISSION 1851 ENTERPRISE FELLOWSHIPS

The RAEng-Royal Commission 1851 Enterprise Fellowships provide funding and support to outstanding entrepreneurial engineering graduates to build a business based on their innovation.

Name	Startup company	Project title
Guillem Buxarrais Singla	Neurofenix	A novel medical device for accessible and enjoyable post-stroke rehabilitation
Victoria Hamilton	VH Innovation	Recoil Knee Pads
George Wright	Vochlea Music	Prototyping music
Dr Atif Syed	Wootzano Ltd	Novel electronic skin - Nanskin
Hsin-Hua Yu	Aergo	Responsive postural management system
Tara Maaoudi	Zyba Ltd	Ecological coastal protection that generates electricity

GCRF FRONTIERS OF ENGINEERING FOR DEVELOPMENT SEED FUNDING

This scheme supports new interdisciplinary collaborative pilot projects between groups of two or more attendees of the Frontiers of Engineering for Development symposia.

Tranche 3

Names	Institutions	Project title
Helen Brindle Walter Karlen Priayanka Jamwal Suman Chakraborty	Herriot Watt University ETH Zurich ATREE Bangalore Indian Institute of Technology Kharagpur	Microfluidics diagnostics for water quality: applications in decentralised water treatment
Mehran Moazen Carlos Cifuentes Esther Colombini Helge A Wurdemann Shervanthi Homer- Vanniasinkam Vinh-Chau V Nguyen	University College London Colombian School of Engineering Julio Garavito University of Campinas Unviersity College London Hospital for Tropical Diseases	Development of an affordable hand prosthesis
George Chagaluka Peter Mbiria Maina	Queen Elizabeth Central Hospital	
Paolo Bombelli Priyanka Jamwal Chris Howe	University of Cambridge ATREE Bangalore University of Cambridge	BES for treating of wastewater and monitoring of effluent quality
Evidoxia Viza Hindu Nabulumba Amadou Boly Million Mafuta Katherine Kirk Dina Nziku	University of the West of Scotland Yaaka Digital Network African Development Bank University of Malawi - The Polytechnic University of the West of Scotland Centre for African Research on Enterprise and Economic Development	Critical factors for facilitating capacity building for the hand-craft women in Uganda
Michele Cano John Struthers	University of the West of Scotland Centre for African Research on Enterprise and Economic Development	
Thanos Kourouklis Ana Mijic Andre Nel Wouter Buytaert Gerrit Genis	University of the West of Scotland Imperial College London Eco-V Imperial College London Eco-V	Blue-Green Tower greywater recycling pilot for social housing in South Africa
Timothy Whitehead Peter Mbiria Lilac Sanjo Roy Ombatti	Aston University Voltarent Engineering Ltd University of Nairobi African Born 3D Printing	Building 3D printing capacity in Kenya: utilising a co-design approach to create products and components for essential products

Names	Institutions	Project title
Louise Thwaites Tingting Zhu Nguyen Van Vinh Chau David Clifton Tran Duc Duong Le Nguyen Thanh Nhan	Oxford University Clinical Research Unit University of Oxford Hospital for Tropical Diseases University of Oxford Hospital for Tropical Diseases Vietnam Children's Hospital Number 1	Predictive monitoring of acute infectious disease in critically ill Vietnamese patients
David Clifton Maoyi Tian Tingting Zhu Linqun Xu	University of Oxford George Institute for Global Health University of Oxford China Mobile Research	Tools for predicting falls for the elderly in rural China
Timothy Whitehead Vanesa Castan Broto Million Mafuta Amadou Boly Shaun Smith Domingos Augusto Macucule	Aston University University of Sheffield University of Malawi African Development Bank University College London Universidade Eduardo Mondlane	User-centred cookstove design in urban areas in Mozambique and Malawi
Louise Thwaites Walter Karlen Kanika Sagar Dheman Nguyen Van Hao	Oxford University Clinical Research Unit ETH Zurich Hospital for Tropical Diseases	Bio-impedance for detection of fluid status in Dengue

Tranche 4

Names	Institutions	Project title
Yuner Huang Harinaivo Ramanantoanina Alexandre Gagnon Mark Olweny Veronica Kiluva	University of Edinburgh University of U-MAGIS ETS University of the West of Scotland Uganda Martyrs University Masinde Muliro University of Science and Technology	The resilience of the built environment of Madagascar to cyclones in a changing climate (REBEC)
Christopher Beckett Thomas Reynolds	University of Edinburgh University of Edinburgh	
Barry Gordon Rawn Anh Tran Akintunde Babatunde Muyiwa Oyinlola Leanne Townshend Victor Odumuyiwa Oliver Dzobo Prabal Dutta Dénes Csala	Brunel University Coventry University University of Leeds De Montfort University University of Aberdeen University of Lagos University of Johannesburg University of California Berkeley Lancaster University	Blackout-chasing: tapping peri-urban energy perspectives
Dénes Csala Dickson Ayuka Chweya Leanne Townsend Barry Gordon Rawn	Lancaster University Ujuzi Kilimo University of Aberdeen Brunel University	AFGRID: agriculture and off-grid energy investments for development: East Africa

Names	Institutions	Project title
Nishanth Ramakrishna Sastry Nicolene Fourie Victoria Rautenbach Serena Coetzee Kiev Gama	King's College London Meraka Institute University of Pretoria University of Pretoria Centro de Informática – UFPE	Monitoring coastal areas with mapathons and hackathons
Eiko Yoneki Taita Ngetich	University of Cambridge Illuminum Greenhouses	BUGALERT: pest and disease monitoring in greenhouses with Raspberry-Pi network
Vijayalakshmi Velusamy Dickson Ayuka Chweya Musenga Silwawa	Manchester Metropolitan University Ujuzi Kilimo Ministry of Agriculture and Livestock	Sustainable soil fertility monitoring for informed farming in Africa (SoilSens)
Ahn Tran Alaika Kassim Kit Franklin Brendan Moroso Churchill Agutu Musenga Silwawa Rodrigo Filev Maia	Coventry University University of KwaZulu Natal Harper Adams University CGIAR Big Data Africa Green Collar Project Spot Agro Technologies Centro Universitário FEI	Sensing change: using agriculture IoT sensors to cross-pollinate farming innovations
Aruna Ivaturi Gloria Iyawa Yung Wey Chong Vijayalakshmi Velusamy	University of Strathclyde University of Namibia Universiti Sains Malaysia Manchester Metropolitan University	Solar-powered wearable wireless sensors for monitoring gestational diabetes mellitus
Yuner Huang Mark Olweny Yung Wey Chong Gabrielle Wojtowitz Rupert J. Myers Francesco Pomponi Bernardino D'Amico Christopher Beckett Hwa-Kian Chai Dipa Roy Thomas Reynolds	University of Edinburgh Uganda Martyrs University Universiti Sains Malaysia Aurecon South Africa University of Edinburgh Edinburgh Napier University Edinburgh Napier University University of Edinburgh University of Edinburgh University of Edinburgh University of Edinburgh	Informational database for sustainable and energy efficient materials in sub-Saharan Africa (DEEMA)
Jian Wan Colin Peter Schwegmann Yung Wey Chong Su Yin Chee Waldo Kleynhans	University of Plymouth Council for Scientific and Industrial Research South Africa Universiti Sains Malaysia Universiti Sains Malaysia Council for Scientific and Industrial Research South Africa	Autonomous catamarans for marine observation and coastal surveillance

LEADERS IN INNOVATION FELLOWSHIPS

The Leaders in Innovation Fellowship (LIF) programme is aimed at researchers from an emerging country who have an innovation that helps address their country's development needs, and offers an intensive two weeks of entrepreneurship training and coaching to help them commercialise their innovation. This year, the Academy delivered training to 210 researchers from Brazil, Chile, China, Colombia, Indonesia, India, Kenya, Malaysia, Mexico, the Philippines, South Africa, Thailand, Turkey, and Vietnam. All LIF participants also have the opportunity to partake in a follow-on support programme lasting up to six months with their individual coaches. They also automatically join the Academy's Global Innovation Network, to support awardees beyond their time in the UK.

GCRF AFRICA CATALYST

GCRF Africa Catalyst aims to strengthen professional engineering bodies in sub-Saharan Africa so that they can effectively promote the profession, share best practice and increase local engineering capacity to help drive development. This is supported by high-quality research focusing on expanding the evidence base for the importance of robust engineering institutions and the role they play in delivering sustainable growth, and mapping engineering capacity and diversity in the countries where grant funding is administered.

Lead applicant	Organisation	Project title
Naadiya Moosaje	WomEng	Capacity building for women in engineering bodies in sub-Saharan Africa
Osazoduwa Agboneni	Nigerian Institution of Mechanial Engineers (NiMechE)	NiMechE Innovation Challenge 2.0
Dr Allyson Lawless FREng	South African Institution of Civil Engineers	Engineering membership management system (EMMS)
Dorothy Okello	Uganda Institute of Professional Engineers	Strengthening diversity and inclusion in Uganda's engineering sector
Bernard Ordams	Federation of African Engineering Organisations (FAEO)	Building the capacity of FAEO
Cecile Uwimana	Institution of Engineers Rwanda	Bridging the gap between engineering workforce skills needs and young graduate competencies to foster their employability
Jeff Smithers	South African Institute of Agricultural Engineers	Planning for the growth of agricultural engineering in Africa by supporting the establishment of AfroAgEng
Gertrude Morgan	Sierra Leone Institution of Engineers	Upgrading engineering training and practice in Sierra Leone

HIGHER EDUCATION PARTNERSHIPS IN SUB-SAHARAN AFRICA (HEPSSA)

This programme forms and strengthens relationships between academia and industry, aiming to ensure that the higher education system in sub-Saharan Africa produces engineers with the skills and knowledge required to meet the needs of industry and tackle local challenges. It also addresses the engineering skills shortage in sub-Saharan Africa and showcases engineering's role in driving economic development in the region.

Hub university	Lead applicant	Project title
University of Botswana	Dr Edward Dintra	Addressing the engineering skills shortage and skills gap
University of Dar es Salaam, Tanzania	Professor Blasius Bavo Nyichomba	Addressing the engineering skills shortage and skills gap
NUST, Zimbabwe	Dr Annatoria Chinyama	Addressing the engineering skills shortage and skills gap
Makerere University, Uganda	Professor Henry Alinaitwe	Addressing the engineering skills shortage and skills gap
Moi University, Kenya	Professor Simiyu Sitati	Addressing the engineering skills shortage and skills gap
University of Malawi Polytechnic	Dr Suzgo Kaunda	Addressing the engineering skills shortage in Malawi through university-industry collaboration
University of Namibia	Professor Frank Kavishe	Quality engineering education through university-industry partnerships in Eastern and Southern Africa
University of Port Harcourt, Nigeria	Dr Mohammed Ojapah	Automotive engineering programme curriculum development with in-industry collaboration
University of Zambia	Professor Mundia Muya	Adaptive education for quality and employable engineering graduates

INDUSTRY-ACADEMIA PARTNERSHIP PROGRAMME

Under its remit as a delivery partner of the Newton Fund, the Academy runs the Industry-Academia Partnership programme, which aims to build engineering teaching, research and innovation capability in Newton Fund partner country universities through building bilateral industry-academia links. This programme also aims to foster greater ties between engineering research and innovation stakeholders in both countries.

	Partner country university	UK university	Industry partner	Project title
	Universidad Nacional de Colombia - Medellin	University of Sheffield	Empresa de Transporte Masivo del Valle de Aburrá Limitada Metro de Medellín Ltda., Instituto Tecnológico VALE	Rail grinding effects on friction response and fatigue resistance of wheel-rail pairs
	Universidad EIA	De Montfort University	Unipalma de Los Llanos	Intelligence system to improve the sustainability of oil palm crops through the construction of forecasting maps integrating adaptive vegetation indices from multispectral aerial views
	Escuela Colombiana de Ingenieria	Plymouth University	Fieldwork Robotics Ltd, Tejido de sueños SAS	CASTOR: compliant soft robotics
	Universidad del Valle	University of Nottingham	Cenicaña, Drax Power	Exploring opportunities for sugarcane (bagasse) waste densification as a renewable bioenergy source in Colombia and the UK
Colombia	Universidad de San Buenaventura Medellin	University of Southampton	Explora Park	Research and development of immersive interactive sound experiences for the appropriation and divulgation of science and technology as a transformation tool through inclusive and recreational education in the city of Medellin, Colombia.
	Universidad Cooperativa de Colombia	Heriot-Watt University	COTECMAR, Aquatera Ltd	Identification of knowledge gaps in academia and capacity building for aquatic renewable energy in Colombia
	National University of Colombia	University of Strathclyde	Compoestrcucturas SAS	Novel hybrid composites to improve structural performance of a compact electric utility vehicle's chassis
	Universidad Nacional de Colombia - Medellin	University of Nottingham	ECOPETROL	Development of robust modelling and upscaling techniques for studying nanofluids transport and retention in porous rocks for subsurface engineering applications
	Universidad de los Andes	University of Leeds	Croda Europe Ltd, Goole, The Dow Chemical Company	Engineering the energy gap: challenges in flow assurance and unconventional oil production

	Partner country university	UK university	Industry partner	Project title
	National Institute of Technology Raipur	University of Warwick	Vedanta Aluminium Limited	Development of sustainable metal casting technology for low greenhouse emissions
	Hindustan Institute of Technology and Science	University of Leeds	Axis Global Automation	Low cost patient assistive robot for elderly
	VIT University	Cranfield University	Mahindra & Mahindra	Advanced composite materials-based joint industrial/academic curriculum development for automotive sector in India and UK
	Amrita Vishwa Vidyapeetham and IIT Madras	Imperial College London	Prakti	Transforming global health through computational cookstove design
India	Bennett University and 25 universities	University College London, Brunel University London	Videoken; Amazon; NVIDIA; Edvantics	Making deep learning and Al skills mainstream in India to fulfil trilateral needs of entrepreneurship, industry-academia partnership and application-inspired engineering research
	Paavai Engineering College, Vivekananda Institute of Technology, GEC Hassan and Velammal College of Engineering and Technology Madurai	Swansea University	Aerospace Engineers Pvt Ltd, Bangalore Aircraft Industries Ltd; ACRi Infotech; NAFEMS; Kshipra Simulatoins; Rockfield	Advanced training programmes in computational mechanics, simulation methodologies of energy and mass transfer for engineering educators and industry practitioners
	Hindustan Institute of Technology and Science and KCG College of Technology	University of Leeds	Team Sustain Ltd	Optimal dispatch of virtual power plant using cyber-physical controller for realtime EMS
	BITS Pilani Hyderabad campus, GITAM University and IIT Madras	Heriot-Watt University	KS Projects & Process Engineers; First Green Consulting; Aditya Precitech	Sustainable technological solutions for energy efficiency in jaggery industry (STEEJ)
	Indian Institute of Technology Hyderabad and Vasavi College of Engineering	The Open University	NILE Ltd	Development of low cost methods for recycling lithium ion batteries

	Partner country university	UK university	Industry partner	Project title
	Institut Teknologi Bandung	University of Edinburgh	PT Xirka Silicon Technology	System on chip (SoC) visible light communication system for LiFi applications
	Institut Teknologi Bandung	London South Bank University	Mantra, Atelier 10, CLEAR Community	Integrated waste management facilities for coastal Indonesia at three scales - Desa (village), Kecamatan (district) and Kabupaten (region): technical feasibility and multidisciplinary virtual scheme design collaboration
	Institut Teknologi Bandung	Swansea University	PT Witteveen Bos Indonesia	Hybrid engineering solution for beach restoration in central Java
Indonesia	Institut Teknologi Sepuluh Nopember	University of Salford	PT Semen Indonesia	Development of 3D printing buildings for constructing sustainable houses
Indor	Institut Teknologi Bandung	Coventry University	PUSJATAN/IRE	Developing affordable energy efficient bridge health monitoring and early warning system with wireless sensor networks and multi agent system
	Sam Ratulangi University	University of the West of England	The Metal and Machinery Research Center, Indonesian Ministry of Industry	Development of supply chain FMEA model for managing supply chain sustainability risk in Indonesian small and medium enterprises
	Institut Teknologi Bandung and Institut Teknologi Sepuluh Nopember	University of Leeds	Department of Transport Bandung City	The uptake of electric motorcycles in Indonesia: the case of Bandung City
	University of Jordan	Cardiff University	Electricity Distribution Company (EDCO)	UK-Jordan educational and research partnership to build capacity of power grid to integrate solar PV systems
	German Jordanian University	Anglia Ruskin University	THERAPYAUDIT Limited UK, Atlas Medical - Jordan	Inkjet-printed respiratory rate wearable sensors for infants: towards remote monitoring solutions for low-setting villages and refugee camps
an	Mutah University and Tafila Technical University	University of Liverpool	Heat for engineering and technology, Huawei Technologies	Introducing mobile communications industry-related courses in undergraduate curriculum (IMMISSU)
Jordan	Al Hussein Technical University	University of Cambridge (Institute for Manufacturing)	Eastern Amman Industrial Association	Building roadmapping capability to enable effective sustainable industry-academia collaboration
	Al-Husein Technical University and University of Jordan	Kingston University London	Hammoudeh Thermolabs	Fostering innovation and creativity to bolster global competitiveness of industries in Jordan
	German Jordanian University	University of East Anglia	The Jordanian Pharmaceutical Manufacturing Company	Development of nanoemulsion for psoriasis: establishing a roadmap towards an efficient microfluidization preparation technique and inkjet characterization method

	Partner country university	UK university	Industry partner	Project title
	University of Cape Town	University of Leeds	MPTech, Amira international	CAPE partnership: characterisation advances in particle engineering
	University of Western Cape	Coventry University, Heriot-Watt University, University of Nottingham	Peprime, South African National Energy Development Institute, Geolympus	Delivery of training in carbon capture and storage for industry-oriented projects
	University of Pretoria	University of Liverpool	Carbon Reduction Technology, Northumbria Energy	Design and maintenance optimisation for large-scale PV arrays
frica	University of Johannesburg	Manchester Metropolitan University	The Virtual Space	Transforming teaching and learning in engineering through the application of virtual reality
South Africa	Stellenbosch University	University of Sheffield	GLS Consulting Engineers, Metashpere	Investigating potable water distribution networks and consumer demand for systems subjected to low pressures and intermittent supply
	Cape University of Technology	University of East London	Letaba Geotechnical	Towards the adoption of the 'fall cone' as the standard method of determining the index parameters in South African
	University of Cape Town and University of the Western Cape	University of Glasgow	SASOL	ANSDAC - African neutron and synchroton data analysis competency
	University of Venda	University of Bath	Council for Scientific and Industrial Research (CSIR): South Africa	Infrastructure for water resilience in urban areas
	Chulalongkorn University	University of Aberdeen	Unithai Shipyard and Engineering	Offshore decommissioning in Thailand - towards total waste management
	Chulalongkorn University	University of Oxford, University of Birmingham	Meticuly Company Limited	Additive manufacturing of Titanium-based metallic glass for biomedical applications
P	Kasetsart University	University of Southampton	Superkit and Marketing Co Ltd, TaiCaan Technologies Ltd	Effects of electrode surface properties on electricity generation performance of microbial fuel cells
Thailand	Chiang Mai University	Imperial College London	Tsus Excellent Engineering Co Ltd	Development of cost-effective ion exchange membrane for redox flow battery systems
	Mae Fah Luang University	Northumbria University	Defence School of Communications and Information Systems, Ministry of Defence UK, Royal Thai Airforce, T-Net Co Ltd, Ministry of Defence	Anomaly traffic identification through artificial intelligence, cyber security and big data analytics technologies

	Partner country university	UK university	Industry partner	Project title
	Chiang Mai University, Mahidol University	University of Sheffield, UK Carbon Capture and Storage Research Centre	Electricity Generating Authority of Thailand	Establishing partnerships in low carbon technology and carbon capture development to tackle industrial CO ₂ emission challenges
	Mahidol University	Newcastle University	Bangkok Mass Transit System Public Company Limited: BTSC, Nexus Tyne and Wear	MetroExchange – Thai rail engineering education and research improvement by exchange of good practice in metro operations in Thailand and in the UK
and	King Mongkut's Institute of Technology Ladkrabang	Coventry University	Oxford Vision and Sensor Technology	3D laser tracking and welding application in Industry 4.0 platform
Thailand	Ramkamhaeng University	University of Edinburgh	EnerGaia Co Ltd	Spirulina production as a scalable, decentralised and low environmental impact food source
	Mahasarakham University	University of York	Seagate Technology, Thailand	Magnetisation reversal of heat-assisted magnetic recording (HAMR) process
-	Mahidol University	Imperial College London	Orthopeasia Co Ltd	Establishing partnership of medical robotics between Thailand-UK research centre and industrial partner
	Vidyasirimedhi Institute of Science and Technology	Manchester Institute of Biotechnology	The Southern Palm Oil Industry	Synthetic biology for production of biopropane from palm oil waste

UK-CHINA URBAN FLOODING RESEARCH IMPACT PROGRAMME

Under its remit as a delivery partner in the UK-China Newton Fund, the Academy is partnering with the Chinese Academy of Engineering to implement the UK-China Urban Flooding Research Impact programme. This programme aims to support impactful research and enhance the impact of existing research in urban flooding in both countries by encouraging bilateral collaboration between academics and government as well as wider industry.

Project title	UK academic and industry partners	Chinese academic and industry partners	Chinese government partner
Early warning system for urban flooding in Chinese mega cities using advanced active phased array radar	Swansea University, HR Wallingford	Nanjing University of Information Science and Technology, Nanjing Hydraulic Research Institute, Naruida Technology	Guangzhou Meteorological Observatory
ESPRIT embedding strategic planning in flood resilient cities	University of Exeter, Jacobs, Sweco, Torbay Council	Tsinghua University, NCMEDRI, Suzhou University of Science & Technology Co Ltd.	Local authorities of Doumen (Zhuhai), Ningbo, Pingxiang, Qingdao and Suzhou
Studies on disaster-causing mechanisms and disaster reduction countermeasures of urban flooding in China and the UK	Cardiff University, Wallingford HydroSolutions	Wuhan University, Beijing Tepia Technology Company Limited	Hubei Provincial Department of Water Resources
Developing engineering options for mitigating future compound flooding risks in Shanghai by transferring the expertise of UK TE2100	SOAS University of London, HR Wallingford	Shanghai Climate Change Research Centre, HR Wallingford China	Shanghai Municipal Development and Reform Commission
Dynamic assessment and intelligent tracking of coastal city flood risk	Cardiff University, University of Cambridge, Mott MacDonald Ltd	Hohai University, Ningbo Hydraulic Waterpower Planning and Designing Research Institution	Ningbo Municipal Water Conservancy Bureau
A virtual collaboratory for flood forecasting, flood warning and decision- making under uncertainty in urban flood management	Newcastle University, Environmental Measurements Limited	Nanjing Hydraulic Research Institute, Beijing Golden-Water YanyuSci&Tech Co. Ltd.	Shenzhen Water Affairs Bureau, Huizhou Hydrographic Bureau
Enhancing China-UK technical co- operation, knowledge sharing, and business opportunities in urban flood management and intelligent urban water network monitoring	Centre for Ecology & Hydrology, Wallingford HydroSolutions, Fathom	Changjiang River Scientific Research Institute, Beijing Sinfotek Technology Co., Ltd.	Wuhan Water Affairs Bureau

DISTINGUISHED VISITING FELLOWSHIPS AND MISSIONS IN TURKEY

The Distinguished Visiting Fellowships and Missions – Turkey programme is a component of the UK Newton Fund, which aims to develop science and innovation partnerships to promote the economic development and social welfare of developing countries. The scheme provides funding so that an engineering department at a Turkish university can host a Distinguished Visitor or group of Distinguished Visitors from a UK academic centre of excellence for a visit lasting up to one month.

Award holder	Distinguished Visitor	Area of collaboration	
Dr Yasanur Kayikci, Turkish-German University	Dr Nachiappan Subramanian, University of Sussex; Dr Manoj Dora, Brunel University London; Professor Kulwant Pawar, University of Nottingham; Professor Samir Dani, University of Huddersfield; Dr Mukesh Kumar, University of Cambridge; Professor Michael Bourlakis, Cranfield School of Management; Professor Vikas Kumar, University of the West of England	Perishable food cold chain logistics in Turkey	
Professor Ilker Fatih Kara, Mersin University	Professor Ashraf Ashour, University of Bradford	FRP composites for durable infrastructures in Turkey	
Dr Tacha Serif, Yeditepe University	Professor George Ghinea, Brunel University London	3D software mapping for osteoarthritis pain self-management in older population	
Professor Kadriye Tuzlakoglu, Yalova University	Dr Helena Azevedo, Queen Mary University of London	Molecularly engineered biomaterials for the treatment of diabetic wounds	
Dr Ozlem Bicen Unluer, Anadolu University	Dr Gyorgy Szekely, University of Manchester	Clean water via nanomaterials-enabled sustainable purification	

DISTINGUISHED VISITING FELLOWSHIPS

The Distinguished Visiting Fellowships scheme provides funding for an engineering department in a UK university to host a senior academic from an overseas academic centre of excellence for up to a month. The scheme promotes sharing of the latest developments and allows the participating organisations to discover common and complementary skills and initiatives that could lead to future collaborations.

d Visitor	Area of collaboration
endra P. Shah, n University	Enhancing the properties of low-carbon cementitious materials with nano-materials
	Piezoelectric sensor using graphene nano-platelet filled carbon fibre dielectric elastomers
Science and	Research on fault tolerant control
llinois at	A collaborative approach to characterisation of advanced surfaces: probing functionality, chemistry and microstructure
	Dynamics and fusion of nano materials to design advanced composites for superior constructions
	Bioactuation in soft robotics
	Investigation of wave induced dynamic seabed response and liquefaction around a mono-pile foundation
	Energy-efficient and intelligent wireless sensor networks for smart healthcare
	Data-driven computer modelling and task scheduling for high performance computing
echnic Institute and	Co-design of hardware and software for addressing the variability challenge in high performance computing systems
	Virtual laboratory for development of paste materials used in microsystems assembly - materials dataset framework
	How clean is clean?
	Next generation ultrafast optical sources exploiting graphene and other 2D nanomaterials
iversity of Science	Fabrication and thermoelectric properties of SnTe-based thermoelectric materials
llinois at	Scalable and durable next generation nanoengineered coatings
	Biofabrication for future healthcare
	endia P. Shah, an University of Science and eijing sica Krogstad, Illinois at apaign wid Hui, New Orleans of Dorfmann, ity ong-Sheng Jeng, rrsity of Science and eijing sica Krogstad, Illinois at apaign wid Hui, New Orleans of Dorfmann, ity ong-Sheng Jeng, rrsity of Science o

Award holder	Distinguished Visitor	Area of collaboration
Professor Sarah Katherine Spurgeon, University College London	Professor Ian Peterson, Australian National University	Exploring recent advances in quantum control theory
Dr Jian Wan, University of Plymouth	Professor Luc Jaulin, ENSTA Bretagne	Sensors, power, navigation, guidance and control of autonomous marine surface vehicles
Dr Hongwei Wu, University of Hertfordshire	Professor Xiaoze Du, North China Electric Power University	Heat transfer fluid for high efficient solar energy utilisation: molecular dynamic approach and experimental study
Dr Jun Xia, Brunel University London	Professor Yiguang Ju, Princeton University	Plasma-assisted ignition and combustion in automotive engines
Dr Yuqing Zhang, Aston University	Professor Baoshan Huang, University of Tennessee	Diffusion multiscale modelling for superior recycled asphalt pavement
Dr Yuqing Zhang, Aston University	Professor Randy West, Auburn University	Multiple-component binder system design for 100% recycling of reclaimed asphalt pavement
Dr Huiling Zhu, University of Kent	Professor Zaichen Zhang, Southeast University	Advanced mobile communications research and development in China

AFRICA PRIZE FOR ENGINEERING INNOVATION

The Africa Prize for Engineering Innovation aims to stimulate, celebrate and reward innovation and entrepreneurship in sub-Saharan Africa through six months of mentoring and training before a cash prize is awarded to the winner and runners-up.

2016/2017 winner

Godwin Benson Nigeria

2016/2017 finalists

Andre Nel South Africa Hindu Nabulumba Uganda Kelvin Gacheru Kenya

2017/2018 shortlist

Alvin Kabwama Uganda Arthur Woniala Uganda Brian Gitta Uganda Brian Mwenda Kenya South Africa Collins Saguru Daniel Taylor Ghana Emeka Nwachinemere Nigeria Esther Gacicio Kenya Uganda Lawrence Okettayot Michael Asante-Afrifa Ghana Kenya Monicah Wambugu Cameroon Nges Njungle Nnaemeka Ikegwuonu Nigeria Uganda Lawrence Okettayot Peter Kariuki Rwanda Shalton Mothwa South Africa Ifediora Ugochukwu Nigeria

INGENIOUS PUBLIC ENGAGEMENT AWARDS Round 12 Awards

Ingenious provides funding for projects that enable engineers to enhance their public engagement skills, and raise awareness of the diversity, nature and impact of engineering.

Awardee	Organisation	Project title
Joshua Bailey	University College London	DIY renewables workshop with East London school students
Lorna Bennett	Offshore Renewable Energy Catapult	STEM engagement science club startup
Berry Billingsley	Canterbury Christ Church University	Working with engineers to teach children to think like engineers
Emma Bodiam	Edinburgh International Science Festival	Engineering engagement panel
Andrei Donko	University of Southampton	The photonics music workshop
Laura Fogg-Rogers	University of the West of England	Curiosity connections - women like me
Joanne Fox	Spacefund	Mars safari
Elizabeth Granger	University of Central Lancashire	Future engineers (Lancashire)
Dee Halligan	Fixperts	FixCamp: holiday activity for the problem-solvers of tomorrow
Cath Hassell	ech2o Consultants Ltd	The mysterious case of the elephant that forgot: explaining engineering
Zoe Hawken	Museum of Science and Industry	MakeFest: a celebration of engineering, technology and making for families
Caryn Hughes	Queen's University Belfast	Re-engineering science career-ing
Tracey Johnson	Barnsley Council	TechTown makerspace at Barnsley library
Heather MacRae	Ideas Foundation	Engineer the story
Hugh MacKay Thomas	The Bristol Initiative Charitable Trust	Shipping 2050, young people explore ships and shipping with maritime engineers
James McKay	University of Leeds	Low carbon technologies - the art of a sustainable future
Gavin Medza	The Play House	Daughters of invention - primary schools engineering and drama project
Lucy Morris	Westcountry Rivers Trust	Westcountry women working with water (5W)
Devon Sturdy	Engineering Development Trust	Engineering – everywhere, everyone: hands-on experiences for engineers, students, parents and academics
Katy Vanden	Cap-a-Pie Engagements	Performing engineering: bringing together engineers and children through theatre
Evdoxia Viza	University of the West of Scotland	Making engineering a family affair - answering the 'how' questions

ENGINEERING LEADERS SCHOLARSHIPS

This award funds ambitious engineering undergraduates to undertake an accelerated personal development programme to move into a leadership position soon after graduation. The Academy currently funds 105 awardees.

Name	University	Subject
Sushant Achawal	University of Cambridge	Engineering
Aminah Ahmad	University of Aberdeen	Chemical engineering
Akhil Ahmed	University of Strathclyde	Chemical and process engineering
Imran Ahmed	University of Cambridge	Engineering
Oluwatofunmi Akintaro	University of Sheffield	Civil and structural engineering
Ishan Alam	University of Bristol	Engineering design
Lucia Albelda Gimeno	University College London	Biomedical engineering
George Anderson	University of Southampton	Mechanical engineering with aerospace
Anam Balbolia	Imperial College London	Civil engineering
Abigael Bamgboye	Imperial College London	Materials science and engineering
Christopher Bartolo	Queen's University Belfast	Mechanical engineering
Leigh Baxter	University of Strathclyde	Electrical and mechanical engineering
Thomas Bewley	University of Bristol	Engineering design
Ciprian Blujdea	University of Southampton	Mechanical engineering with management
Georgina Box	Durham University	Engineering
Jake Brown	University of Sheffield	Mechanical engineering
Charlotte Bryant	Aston University	Chemical engineering
Liam Bushrod	Durham University	Engineering
Judith Cameron	Queen's University Belfast	Mechanical engineering
Francesca Capaldi	University of Strathclyde	Chemical engineering
Billy Cavanagh	University of Surrey	Mechanical engineering
Martina Cheadle	University of Cambridge	Engineering
Kai Chelliah	University of Bristol	Engineering design
Stephen Colbert	Queen's University Belfast	Aerospace engineering
Felix Cox	Queen Mary University of London	Mechanical engineering
Isabella Curtis	University of Warwick	Engineering
Matthew Curtis	University of Bristol	Engineering design
Olivia Daniel	University of Bristol	Engineering design
Alina Dragancea	University of Bristol	Civil engineering
Leah Edwards	Loughborough University	Mechanical engineering
Tirion Evans	University of Edinburgh	Mechanical engineering
Rachael Eynon	University of Strathclyde	Electronic and electrical engineering
Luke Falzon	University of Dundee	Civil engineering
Leena Farhat	Aberystwyth University	Computer science
Federica Freddi	University of Cambridge	Engineering

Name	University	Subject
Bradley Fowler	University of Cambridge	Engineering
Adrian Gallet	University of Sheffield	Civil and structural engineering
Cherie Gardiner	Queen's University Belfast	Mechanical engineering
Harry Garstka	University of Bristol	Engineering design, aerospace
Miroslav Gasparek	Imperial College London	Biomedical engineering
Joseph Gibson	University of Strathclyde	Electronic and electrical engineering
Alexander Gleed	University of Surrey	Medical engineering
Thomas Gonda	Imperial College London	Design engineering
Shannon Graham	Queen's University Belfast	Product design engineering
Siddharth Gupta	University of Cambridge	Engineering
Dylan Hall	Imperial College London	Materials science and engineering
Edward Hanton	University of Bristol	Engineering design
Joanna Hartnell	University of Surrey	Civil engineering
Tahir Hassuji	University of Bath	Mechanical engineering
Thomas Henderson Edwards	University of Southampton	Civil engineering
Esme Hotston Moore	Imperial College London	Aeronautical engineering
Jodie Howlett	Sheffield Hallam University	Mechanical engineering
Cameron Huggins	University of Surrey	Medical engineering
George Imafidon	University College London	Mechanical engineering
Shahidurahman Janatmir	University College London	Chemical engineering
Emma Johnston	University of Strathclyde	Aero-mechanical engineering
Vidya Kanakaratnam	University of Cambridge	Engineering
Dmitro Khroma	University of Bristol	Engineering design
James Kinch	University of Leeds	Mechanical engineering
James Lamyman	University of Southampton	Ship science with small craft
Anastasia Laurie	University College London	Mechanical engineering
Sarah Linnell	University of Bath	Civil and architectural engineering
Susan Little	University of Strathclyde	Electrical and mechanical engineering
Jonathan Louden	Queen's University Belfast	Mechanical engineering
Ella Maule	University of Edinburgh	Mechanical engineering
Joseph McFarlane	University of Bristol	Engineering design
Naomi McGregor	Queen's University Belfast	Product design engineering
Marnie McKay	University of Strathclyde	Electrical and mechanical engineering
Kyle McLean	University of Sheffield	Civil and structural engineering
Jade McMorland	University of Strathclyde	Electronic and electrical engineering
Emma McQuiggan	Queen's University Belfast	Mechanical engineering
Connor McShane	Queen's University Belfast	Mechanical engineering
Erin Meredith	Loughborough University	Chemical engineering
Bruno Mlodozeniec	University of Cambridge	Engineering

Hanesh Patel University of Cambridge Engineering Matthew Price University of Southampton Electronic engineering Marcia Pryce Newcastle University Chemical engineering Alice Purcell Queen's University Belfast Mechanical engineering Alice Quinn Loughborough University Innovative manufacturing engineering Osian Rees University of Bristol Engineering design Lisa Rossi University of Aberdeen Chemical engineering Jonathan Saad University of Bristol Aerospace engineering Blham Said University of Bristol Aerospace engineering Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Bristol Engineering design Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Conor Taylor Queen's University Belfast Aerospace engineering Conor Taylor Queen's University Belfast Aerospace engineering Enrico Varano University of Rottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Bristol Engineering design Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Edinburgh Mechanical engineering Nathan Whear University of Strathclyde Electronic and electrical engineering Nathan Whear University of Edinburgh Mechanical engineering Nathan Whear University of Southampton Ship science	Name	University	Subject
Matthew Price University of Southampton Electronic engineering Marcia Pryce Newcastle University Chemical engineering Alice Purcell Queen's University Belfast Mechanical engineering Alice Quinn Loughborough University Innovative manufacturing engineering Osian Rees University of Bristol Engineering design Lisa Rossi University of Aberdeen Chemical engineering Jonathan Saad University of Warwick Engineering Ilham Said University of Bristol Aerospace engineering Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Sheffield Materials science and engineering Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Edinburgh Structural engineering University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electronic and electrical engineering Nathan Whear University of Edinburgh Mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Rhys Williams Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Plerome Wynne University of Southampton Ship science	Charles Newton	Loughborough University	Mechanical engineering
Marcia Pryce Newcastle University Chemical engineering Alice Purcell Queen's University Belfast Mechanical engineering Alice Quinn Loughborough University Innovative manufacturing engineering Osian Rees University of Bristol Engineering design Lisa Rossi University of Aberdeen Chemical engineering Jonathan Saad University of Bristol Aerospace engineering Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Edinburgh Engineering design Julian Vercruysse University of Edinburgh Structural engineering Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Edinburgh Mechanical engineering Nathan Whear University of Edinburgh Structural engineering Nathan Whear University of Strathclyde Electronic and electrical engineering Nathan Whear University of Edinburgh Mechanical engineering Nathan Whear University of Southampton Ship science	Hanesh Patel	University of Cambridge	Engineering
Alice Purcell Queen's University Belfast Mechanical engineering Alice Quinn Loughborough University Innovative manufacturing engineering Osian Rees University of Bristol Engineering design Lisa Rossi University of Aberdeen Chemical engineering Jonathan Saad University of Warwick Engineering Ilham Said University of Bristol Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Bristol Engineering design Matthew Smith University of Bristol Engineering design Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design University of Bristol Engineering design Structural engineering University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electronic and electrical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Engineering Engineering Engineering Engineering Engineering	Matthew Price	University of Southampton	Electronic engineering
Alice Quinn Loughborough University Innovative manufacturing engineering Osian Rees University of Bristol Engineering design Lisa Rossi University of Aberdeen Chemical engineering Jonathan Saad University of Warwick Engineering Ilham Said University of Bristol Aerospace engineering Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Bristol Engineering design Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Strathclyde Electrical and mechanical engineering Rhys Williams Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Marcia Pryce	Newcastle University	Chemical engineering
Osian Rees University of Bristol Lisa Rossi University of Aberdeen Chemical engineering Jonathan Saad University of Warwick Engineering Ilham Said University of Bristol Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Bristol Engineering design Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Conor Taylor Queen's University Belfast Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Calum Watkins University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electronic and electrical engineering Recture Mechanical engineering Mechanical engineering Calum Watkins University of Strathclyde Electronic and electrical engineering Nathan Whear University of Edinburgh Mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Rhys Williams Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Bristol Engineering design	Alice Purcell	Queen's University Belfast	Mechanical engineering
Lisa Rossi University of Aberdeen Chemical engineering Jonathan Saad University of Warwick Engineering Ilham Said University of Bristol Aerospace engineering Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Bristol Engineering design Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electronic and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Rys Williams Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Jerome Wynne University of Southampton Ship science	Alice Quinn	Loughborough University	Innovative manufacturing engineering
University of Warwick Engineering	Osian Rees	University of Bristol	Engineering design
Ilham Said University of Bristol Aerospace engineering Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Bristol Engineering design Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Edinburgh Mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Bristol Engineering design	Lisa Rossi	University of Aberdeen	Chemical engineering
Roberto Sesia Cardiff University Electrical and electronic engineering Peter Simmons University of Bristol Engineering design Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Bristol Engineering design	Jonathan Saad	University of Warwick	Engineering
Peter Simmons University of Bristol Engineering design Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Ship science Jerome Wynne University of Bristol Engineering design	Ilham Said	University of Bristol	Aerospace engineering
Matthew Smith University of Sheffield Materials science and engineering Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Bristol Engineering design	Roberto Sesia	Cardiff University	Electrical and electronic engineering
Gareth Stephenson Queen's University Belfast Product design engineering Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Bristol Engineering design	Peter Simmons	University of Bristol	Engineering design
Hugo Stock Imperial College London Mechanical engineering Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Bristol Engineering design	Matthew Smith	University of Sheffield	Materials science and engineering
Kathryn Taheny University of Edinburgh Electronics and electrical engineering Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Bristol Engineering design	Gareth Stephenson	Queen's University Belfast	Product design engineering
Conor Taylor Queen's University Belfast Aerospace engineering Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Hugo Stock	Imperial College London	Mechanical engineering
Duncan Trenholm University of Nottingham Civil engineering Enrico Varano University of Bristol Engineering design Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Kathryn Taheny	University of Edinburgh	Electronics and electrical engineering
Enrico Varano University of Bristol Engineering design Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Conor Taylor	Queen's University Belfast	Aerospace engineering
Julian Vercruysse University of Edinburgh Structural engineering with architecture Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Duncan Trenholm	University of Nottingham	Civil engineering
Matthew Walker Loughborough University Chemical engineering Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Enrico Varano	University of Bristol	Engineering design
Liam Warnock University of Strathclyde Electronic and electrical engineering Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Julian Vercruysse	University of Edinburgh	Structural engineering with architecture
Calum Watkins University of Strathclyde Electrical and mechanical engineering Nathan Whear University of Edinburgh Mechanical engineering Lucinda Wilkinson Imperial College London Civil and environmental engineering Rhys Williams Imperial College London Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Matthew Walker	Loughborough University	Chemical engineering
Nathan WhearUniversity of EdinburghMechanical engineeringLucinda WilkinsonImperial College LondonCivil and environmental engineeringRhys WilliamsImperial College LondonAeronautical engineeringRobert WinnUniversity of SouthamptonShip scienceJerome WynneUniversity of BristolEngineering design	Liam Warnock	University of Strathclyde	Electronic and electrical engineering
Lucinda WilkinsonImperial College LondonCivil and environmental engineeringRhys WilliamsImperial College LondonAeronautical engineeringRobert WinnUniversity of SouthamptonShip scienceJerome WynneUniversity of BristolEngineering design	Calum Watkins	University of Strathclyde	Electrical and mechanical engineering
Rhys Williams Imperial College London Aeronautical engineering Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Nathan Whear	University of Edinburgh	Mechanical engineering
Robert Winn University of Southampton Ship science Jerome Wynne University of Bristol Engineering design	Lucinda Wilkinson	Imperial College London	Civil and environmental engineering
Jerome Wynne University of Bristol Engineering design	Rhys Williams	Imperial College London	Aeronautical engineering
	Robert Winn	University of Southampton	Ship science
Paul Yuile University of Strathclyde Electrical and mechanical engineering	Jerome Wynne	University of Bristol	Engineering design
	Paul Yuile	University of Strathclyde	Electrical and mechanical engineering
Mareks Zevalds University of Bristol Engineering design	Mareks Zevalds	University of Bristol	Engineering design

VISITING PROFESSORS

Name

The Visiting Professor programme places practising engineers into UK universities to enhance the teaching and learning, as well as employability and skills, of undergraduate engineering students. The programme currently supports nearly 80 Visiting Professors at more than 40 universities.

Traine.
Paul Rawlinson
Dr Erol Hepsaydir
Dr Andrew Bradley FREng
Ron Bell
Philip John Sams
Dr Mei Juan Ren
Professor Peter Robery FR
Dr Richard Whittington FR
Dr John Haine
Paul Jennings
Dr Rick Bradford
Crispin Oakman
Dr Ashish Darbari
Tim Milne
Dr Robin Irons
Dr Shaun Fitzgerald FREng
Professor Norman MacLeo
Dr Aaron Smith
Richard Baker
Professor Colin Eddie FREn
Dr Ian Robertson
Pierre French
Dr Walter Holweger
Professor Malcolm Fox
Dr Scott Owens
Chris Lawrence
Dr Ivan Lucic
Professor David Daniels CB
Dr David Goddard
Dr Steve Graham
Massimo Bombino
David Drew
Dr Isabel Hadley
Brian McFarland
Dr Darren Lee
Dr Michael Raxworthy

David Maroney

Dr Andy Clough

Neil Barron

University University of Manchester University of Kent Loughborough University Liverpool John Moores University Northumbria University University of Manchester Eng University of Birmingham Eng University of York University of Bristol University College London University of Bristol University of Nottingham University of Southampton University of Leicester University of Nottingham University of Cambridge University of Leeds University of Edinburgh University of Leeds University of Warwick University of Warwick University of Huddersfield University of Southampton University of Bradford Imperial College London University of Nottingham City, University of London University of Manchester University of Manchester University of Liverpool Middlesex University University of Nottingham University of Bristol Queen's University Belfast Lancaster University University of Leeds Queen's University Belfast University of Warwick Royal College of Art

Name	University
Dr David Williams	Loughborough University
Kevin Steptoe	University of York
Andrew Jackson	University of Sheffield
Robert Shanks	Coventry University
Xavier Poteau	University of Manchester
Professor Graeme Shaw	University of Southampton
Robert Harris FREng	University of Southampton
Anthony (Tony) Morgan	University of Leeds
Dr Vili Panov	University of Lincoln
Dr Vaughan Thomas	University College London
Andrew Langridge	University of Bath
Teo Heng Jimmy Yang	Cardiff University
Dr Allen Edwards	Cardiff University
Professor Steve Franklin	University of Sheffield
Dr Jon Machtynger	University of Surrey
Paul Tymkow	Brunel University London
Professor Anthony Banford	University of Manchester
Professor Martin Goosey	Loughborough University
Martin Simpson	University of Liverpool
Robert Hutchison	University College London
Dawn Bonfield MBE	Aston University
Dr Tim Fox	University of Exeter
Malcolm Lees	King's College London
Dr Nicholas Hazel	University College London
Atul Roy	University of Kent
Professor K Clive Thompson	University of East London
John Eldridge	University of Liverpool
Gary Morgan	University of York
Robert Deaves	Imperial College London
Ruth Allen	University of Exeter
Don McQuillan	Queen's University Belfast
Patrick Conaghan	Heriot-Watt University
Dr John Harris	University College London
Dr Shidhartha Das	Newcastle University
Gordon Findlay	Brunel University London
Oliver Broadbent	Imperial College London
Stephen Newbury	University of Oxford
Dr Andrew Sherlock	University of Edinburgh
Dr Brian Henderson	University of Central Lancashire

Name	University	Name	University
Christina Jackson	University of Birmingham	Dr Raj Nangia	University of the West of England
Peter Debney	University of Bradford	James Yu	University of Glasgow
Dr Caspar Clark	University of the West of Scotland	Sean Moran	University of Chester
Dr Richard Pearson	Brunel University London	Jochen Leidner	University of Sheffield
Steven Adams and	University of Cambridge	Dr Paul Taylor	University of the West of England
Dr Sam Beale		Chris Winter	University of Plymouth
Dr Paul Davies	Liverpool John Moores University	Colin Cunningham	University of Edinburgh
Dr Nelson Ogunshakin OBE	Aston University	Dr Honor Powrie	University of Southampton
Steve Kaye	Brunel University London	Dr Uwe Stein	University of Edinburgh

SAINSBURY MANAGEMENT FELLOWSHIPS

This scheme aims to enhance the capability of the UK engineering industry by providing grants to young engineers with leadership qualities so that they can undertake an MBA course at a leading international business school. Last year, 10 Fellowships were awarded.

Name	Business school
Kofoworola Agbaje	Wharton, University of Pennsylvania
Nicholas Asselin-Miller	INSEAD
Benjamin Banks	London Business School
James Diaz-Sokoloff	London Business School
Matthew Dixon	London Business School
Qiang Fu	INSEAD
Andrew Glykys	INSEAD
Mukunth Kovaichelvan	Kellogg School of Management, Northwestern University
David MacGeehan	London Business School
Imogen Rey	Stanford Graduate School of Business

CONNECTING STEM TEACHERS

The Connecting STEM Teachers programme was launched in 2011 and aims to create a national network of support for teachers across all STEM subjects, ensuring they have the knowledge and confidence to engage a greater number and wider spectrum of school students with STEM. Central to the continued success of this project is the work of the Academy's teacher coordinators who lead support networks for local STEM teachers across the UK. There are currently 44 teacher coordinators operating across the UK.

Teacher Coordinator	Area covered
Scott Atkinson	Hampshire, South East
Jorden Birch	Sheffield, Yorkshire and Humberside
Simon Brown	Oxfordshire, South East
Andrew Carruthers	Leeds, Yorkshire and Humberside
Laura Watford	Portsmouth, South East
Claudia Clarke	Oxfordshire, South East

Teacher Coordinator	Area covered
Tom Cookson	Nottingham, East Midlands
Amanda Courtney	Crowborough, South East
Geoff Coxon	Glasgow, Scotland
Michael Cronk	Devon, South West
Richard Daniel	Bridgend, Wales
Richard Davies	Hull, Yorkshire and Humberside
Lorraine Drybrough	Cornwall, South West
Kate Finlay	Norwich, East of England
Andrew Gilbert	Shropshire, West Midlands
Rob Gray	Aberdeenshire, Scotland
Arthur Harwood	Kettering, East Midlands
Stuart Higham	Hertfordshire, South East
Tom Lavery	Belfast, Northern Ireland
Holly Leat	Southampton, South East
Beverly Maloney	Colchester, South East
Lewis Matheson and Barney Brown	Bath, South West
Michael McAteer	Warrington, North West
Yeasmin Mortuza	Newham, London
Michael Nelson	County Durham, North East
Emily Northwoord	Staffordshire, West Midlands
Des O'Connor	Limavady, Northern Ireland
Tracey O'Connor	Birmingham, West Midlands
Tunde Orelaja	Lewisham, London
Krissi Pink	Kent, South East
Annie Price-Beglin	Wokingham, South East
Martin Reid	Perthshire, Scotland
Gareth Richards	Lincolnshire, East Midlands
Gaynor Sharp	Coventry, West Midlands
Martin Simmons	Manchester, North West
Irene Somerville	Edinburgh, Scotland
Philip Sutton	Colwyn Bay, Wales
David Thomas	Gateshead, North East
Peter Thomas	Aberdare, Wales
Anthony Vaughan-Evans	Lowestoft, East
Chris Wallis	Preston, North West
Terry Watts and Sam Lawrence	Bristol, South West

Queen Elizabeth Prize for Engineering

The Queen Elizabeth Prize for Engineering (QEPrize) is a global award that celebrates outstanding innovations in engineering that have created significant benefit to humanity. The £1 million prize is awarded to an individual or team of people, of any nationality, directly responsible for a groundbreaking advance in engineering.

QUEEN ELIZABETH PRIZE FOR ENGINEERING PANEL OF JUDGES

Name	Job title	
Professor Sir Christopher Snowden FREng FRS	Chair of Judges Vice-Chancellor, University of Southampton	UK
Professor Jim Al-Khalili OBE	Professor of Physics and Professor of Public Engagement in Science, University of Surrey	UK
Professor Mary Boyce	Dean of Engineering, The Fu Foundation School of Engineering and Applied Science, Columbia University	USA
Dr Jean-Lou Chameau	President, King Abdullah University of Science and Technology	Saudi Arabia
Professor Lynn Gladden CBE FREng FRS	Pro-Vice-Chancellor for Research, Shell Professor of Chemical Engineering, University of Cambridge	UK
Professor Carlos Henrique de Brito Cruz	Science Director, Saõ Paulo Research Foundation	Brazil
Professor Dr Dr hc Reinhard Huettl	Past President, German National Academy of Science and Engineering	Germany
Professor Hiroshi Komiyama	President, Engineering Academy Japan	Japan
Professor Jinghai Li	Vice-President, Chinese Academy of Sciences	China
Ilya Marotta	Executive Vice-President for Engineering, Panama Canal Authority	Panama
Dr Raghunath Mashelkar	National Research Professor, Chairman of the National Innovation Foundation and President of Global Research Alliance	India
Dr Dan Mote Jr	President, U.S. National Academy of Engineering; Regents Professor, University of Maryland	USA
Professor Dr Dr hc Viola Vogel	Head of Laboratory of Applied Mechanobiology, ETH Zurich	Switzerland
Paul Westbury CBE FREng	Group Technical Director, Laing O'Rourke	UK
Dr Henry Yang	Professor of Mechanical Engineering and Chancellor, University of California, Santa Barbara	USA

QUEEN ELIZABETH PRIZE FOR ENGINEERING FOUNDATION TRUSTEES

The Queen Elizabeth Prize for Engineering is run by a charitable company limited by guarantee and called The Queen Elizabeth Prize Foundation, which manages the prize and its funding.

Chairman

Lord Browne of Madingley FREng FRS

Members

Sir John Beddington CMG HonFREng FRS FRSE Mala Gaonkar Professor Dame Ann Dowling OM DBE FREng FRS Sir Paul Nurse HonFREng FRS

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QEPRIZE SEARCH GROUP

The role of the search group is: profile raising; engaging the global professional engineering community in making nominations for the prize; acting as global ambassadors for the prize; promoting awareness throughout networks; participating in events; discovering emerging areas of accomplishment and innovation; and assisting in the search for nominations.

Name	Job title	
Professor Stephen Williamson FREng	Chair of Search Group; Emeritus Professor, University of Surrey	UK
Professor Neil Alford MBE FREng	Associate Provost (Academic Planning), Imperial College London	UK
Professor Adisa Azapagic FREng	Professor of Sustainable Chemical Engineering and Head of Sustainable Industrial Systems, University of Manchester	UK
Professor John Clarkson FREng	Professor of Engineering Design, University of Cambridge	UK
Professor Roger Falconer FREng FLSW	Professor of Water Management, Cardiff University	UK
Dr Martin Grant FREng	Chief Executive Officer - Energy, WS Atkins	UK
Professor Guy Houlsby FREng	Professor of Civil Engineering and former Head of the Department of Engineering Science, University of Oxford	UK
Professor Joe McGeehan CBE FREng	Emeritus Professor of Communications Engineering, University of Bristol	UK
Professor Philip Nelson CBE FREng	Chief Executive, Engineering and Physical Sciences Research Council; Professor of Acoustics, University of Southampton	UK
Professor Alison Noble OBE FREng FRS	Technikos Professor of Biomedical Engineering and Director of Institute of Biomedical Engineering, University of Oxford	UK
Professor Ric Parker CBE FREng	Former Director of Research and Technology, Rolls-Royce (until April 2016)	UK
Professor Richard Penty FREng	Professor of Photonics and Master, Sidney Sussex College, University of Cambridge	UK
Professor Duc Pham OBE FREng FLSW	Chance Professor of Engineering and Director of Research, University of Birmingham	UK

Development and fundraising

DEVELOPMENT ADVISORY BOARD

The role of the Development Advisory Board is to support the realisation of the Academy's goals and in particular its fundraising efforts. In anticipation of a major new Academy fundraising campaign, the Board is currently being reconstituted.

Chair

Steve Holliday FREng

Members

Malcolm Brinded CBE FREng lain Conn FREng FRSE Dr Mike Lynch OBE DL FREng FRS David Thomlinson FREng

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The Academy extends its gratitude to the Fellows, companies and charitable trusts whose generosity has enabled the continuing growth and development of its programmes and activities and creation of the Taylor Centre. In the financial year, support was received from the following:

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