

AnnualReview Annex

2014/2015



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.

HONORARY FELLOW

Elected in 2014 was:

Lord Bamford

Chairman, J C Bamford Excavators Ltd

INTERNATIONAL FELLOWS

Elected in 2014 were:

William Baker

Partner, Skidmore, Owings & Merrill LLP

Professor Teck Seng Low

Chief Executive Officer, National Research Foundation, Singapore

Professor Thomas O'Rourke

Thomas R Briggs Professor of Engineering, Cornell University

Dr Rick Rashid

Chief Research Officer, Microsoft Corporation

Professor Tieniu Tan

Deputy Secretary-General, Chinese Academy of Sciences (CAS); Professor and Director, Centre for Research on Intelligent Perception and Computing, National Laboratory of Pattern Recognition, Institute of Automation, CAS

Dr Andrew Viterbi

Presidential Chair Professor, University of Southern California

Professor Jianyun Zhang

Professor and President, Nanjing Hydraulic Research Institute; Director-General, Dam Safety Management, Ministry of Water Resources; Director-General, Research Centre for Climate Change, Ministry of Water Resources

FELLOWS

Elected in 2014 were:

Professor Andrew Amis

Professor of Orthopaedic Biomechanics, and Head of Medical Engineering Group, Department of Mechanical Engineering, and Department of Surgery and Cancer, Imperial College London

Ayman Asfari

Group Chief Executive, Petrofac Ltd

Professor Muhammed Basheer

Professor of Structural Engineering, University of Leeds

Professor Robin Bloomfield

Founding Partner, Adelard LLP; Professor of System and Software Dependability, City University London

Professor Alistair Borthwick

Professor of Applied Hydrodynamics, Institute of Energy Systems, The University of Edinburgh

Professor Anthony Bull

Professor of Musculoskeletal Mechanics, Head of Department of Bioengineering, and Director, Institute of Biomedical Engineering, Imperial College London

Professor Steve Bull

Cookson Group Chair in Materials Engineering, School of Chemical Engineering and Advanced Materials, Newcastle University

Professor Esteban Busso

Scientific Director, Materials and Structures Branch, ONERA – National Aerospace Research Centre, General Scientific Directorate (France)

Tim Chapman

Director, Arup, and Leader of Arup's Infrastructure design group London

Professor Sheng Chen

Professor of Communications, Signal Processing and Control Research Group, Electronics and Computer Science, University of Southampton

Professor Patricia Connolly

Professor of Bioengineering, Director of the Strathclyde Institute of Medical Devices, University of Strathclyde, and Chief Executive Officer, Ohmedics Ltd

Professor Steven Cowley

Chief Executive Officer, UK Atomic Energy Authority

Ed Daniels

Executive Vice President for Commercial and New Business Development for Upstream International, Shell UK Ltd

Dr Steve Denton

Engineering Director, Parsons Brinckerhoff Ltd; Visiting Professor, University of Bath

Professor Andy Doherty

Director of System Engineering, Network Rail

Bob Dudley

Group Chief Executive, BP plc

Dr Shaun Fitzgerald

Chief Executive Officer, Breathing Buildings

Dr Andrew Fitzgibbon

Principal Researcher, Microsoft Research Cambridge

Professor Pratibha Gai

JEOL Professor of Electron Microscopy, University of York

Professor Tony Gillespie

Fellow, Air and Weapon Systems Department, Dstl; Visiting Professor, University College London

Professor Paul Howarth

Managing Director, National Nuclear Laboratory

Professor David Jiles

Palmer Endowed Department Chair, Anson Martin Distinguished Professor and Chair of Department, Department of Electrical and Computer Engineering, Iowa State University

Professor Hanif Kara

Co-Founder and Director, AKT II

Dr John Leitch

Engineering Authority for BP Upstream Global Projects

Vice-Admiral Simon Lister

Chief Naval Engineer Officer and Chief of Materiel (Support), Ministry of Defence, Defence Equipment and Support

Professor Michael Lowe

Deputy Head of Department of Mechanical Engineering, Imperial College London; Director, Guided Ultrasonics Ltd

Muir Macdonald

Managing Director, BMT Defence Services Ltd

David MacKenzie

Chief Executive Officer, Flint and Neill Consulting Engineers

Andy MacLeod

Group Chief Networks Officer, Vodafone plc

Professor Malcolm Macleod

Chief Scientist, C4ISR division and Dean of Fellows, QinetiQ Ltd; Visiting Professor, University of Strathclyde

John Marlow

Director, John Marlow Ltd

Professor Mark Miodownik

Professor of Mechanical Engineering, University College London; Director, UCL Institute of Making

Professor Asoke Nandi

Head, Department of Electronic and Computer Engineering, Brunel University; Finland Distinguished Professor, University of Jyväskylä, Finland; Adjunct Professor, University of Calgary, Canada

Professor Paul Newman

BP Professor of Information Engineering, and Fellow of Keble College, University of Oxford

Dr David Parker

Chairman, Perpetuum Ltd; Managing Director, OPS Innovations Ltd; Venture Partner, Imperial Innovations

Dr James Ramage

Chairman, Tesla Engineering Ltd and Storrington Industries Ltd; Non-Executive Director, Microsaic Systems plc

Michael Ryan

Vice-President and General Manager, Bombardier Aerospace, Belfast

David Scott

Lead Structural Director, Laing O'Rourke Engineering Excellence Group, London

Professor Karen Scrivener

Professor (ordinaire) and Director of Laboratory of Construction Materials, Ecole Polytechnique Federale de Lausanne, Switzerland

Mike Simpson

Technical and Design Director, Philips Lighting UK

Professor Constantinos Soutis

Chair of Aerospace Engineering, Director of the Aerospace Research Institute and Director of the Northwest Composites Centre, University of Manchester

Dr Ralf Speth

Chief Executive Officer, Jaguar Land Rover; Non-Executive Director, Tata Group

Professor Stephen Temple

Visiting Professor, University of Surrey

Phil Tracy

Chairman, GreyHair LLP, and Non-Executive Director, Bowleven plc

Professor Nick Tyler

Chadwick Professor of Civil Engineering in the Department of Civil, Environmental and Geomatic Engineering and Director of the Accessibility Research Group and CRUCIBLE Centre for Lifelong Health and Wellbeing, University College London

Richard Vie

Vice President Technical Development and Quality Assurance, Corporate Shipbuilding, Carnival Corporation plc

Steve Wadey

Executive Group Director Technical and Managing Director UK, MBDA

Professor John Watts

Director of Research, Department of Mechanical Engineering Sciences, University of Surrey; Professor of Materials Science

James West

Chief Engineer, (Product), Warhead Design Authority (WDA) and AWE

Dr Paul Woollin

Research Director, The Welding Institute

Steve Yianni

Chief Executive Officer, Transport Systems Catapult

Trustee Board

The Trustee Board comprises 13 trustees elected by and from the Fellowship and is chaired by the President, Professor Dame Ann Dowling. The Trustee Board has co-opted an additional trustee for one year, Professor Sir William Wakeham, to oversee the implementation of the recommendations from a recent review of the Academy’s governance, which resulted in important amendments to the Academy’s Charter, Statutes and Regulations.

OFFICERS AND MEMBERS OF COUNCIL

Chair

Professor Dame Ann Dowling DBE FREng FRS, President

Vice Presidents

Allan Cook CBE FREng, Vice President Committee Coordination

Professor Sir William Wakeham FREng, Vice President Governance

Professor Richard Williams OBE FREng, Vice President Fellowship Engagement

Members

Professor Helen Atkinson CBE FREng

Professor Brian Collins CB FREng

Professor Sir Michael Gregory CBE FREng

Dr Andrew Harter FREng

Dr Michael Howse CBE FREng

Professor John Loughhead OBE FREng

Professor Richard Parker CBE FREng

Ian Ritchie CBE FREng FRSE

Dr John E Roberts CBE FREng

Professor Martyn Thomas CBE FREng

Secretariat

Howard Beeston ACIS

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

Dr Michael Howse CBE FREng

Deputy Chair

Professor Brian Collins CB FREng

Members

Carolyn Griffiths FREng
Dr Joanna Kennedy OBE FREng
Dr Gordon Masterton OBE FREng FRSE
Dr Michael Purshouse FREng
John Robinson CBE FREng

Secretariat

Howard Beeston ACIS

FINANCE COMMITTEE

The Finance Committee is responsible 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

Ian Ritchie CBE FREng FRSE

Members

John Baxter FREng FRSE
Carol Burke FREng
Allan Cook CBE FREng
Professor Jim Norton FREng

Secretariat

Howard Beeston ACIS

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 John Roberts CBE FREng

Ex Officio:

The President

Panel Chairs

Panel 1 (Civil and Environmental)
Professor Timothy Broyd FREng

Panel 2 (Materials and Mining)
Professor Jan Cilliers FREng

Panel 3 (Chemicals and Process)
Judith Hackitt CBE FREng

Panel 4 (Aerospace)
Air Marshall Simon Bollom CB FREng

Panel 5 (Transport and Mechanical)
Dr Stephen Garwood FREng

Panel 6 (Manufacturing and Design)
Professor Roger Benson FREng

Panel 7 (Electrical and Electronic)
Dr Frances Saunders CB FREng

Panel 8 (Energy and Power)
Dr Martin Grant FREng

Panel 9 (Medical and Bioengineering)
Professor Elizabeth Tanner FREng

Panel 10 (Computing and Communications)
Professor Alan Bundy CBE FREng

Panel 11 (Special)
VAdm Sir Andrew Mathews KCB FREng

Panel Members

Panel 1 (Civil and Environmental)
Professor Colin Bailey FREng
Professor Nicholas Buenfeld FREng
Ginny Clarke CBE FREng
Peter Hansford FREng
Professor Oubay Hassan FREng
Christopher Hendy FREng
Professor Douglas King FREng
Michelle McDowell MBE FREng
Dr Toby Roberts FREng
Professor Peter Robery FREng
Professor Tom Stephenson FREng

Panel 2 (Materials and Mining)
Professor Paul Curtis FREng
Professor Eileen Harkin-Jones FREng
Professor Chris Hall FREng FRSE
Mike Goulette FREng
Dr John Groom FREng
Professor Anthony Kinloch FREng FRS
Professor Allan Matthews FREng
Professor David Owen FREng FLSW FRS
Professor Jane Plant CBE FREng FRSE
Jeff Smith FREng
Dr Alan Turnbull FREng FRS

Panel 3 (Chemicals and Process)
Professor Zhanfeng Cui FREng
Professor Michael Hounslow FREng
Dr Andrew Jamieson OBE FREng
Professor Andrew Livingston FREng
Professor Elaine Martin FREng
Professor Raffaella Ocone FREng FRSE
Nigel Perry FREng
Professor Robin Smith FREng
Dr David Tomlinson FREng

Panel 4 (Aerospace)
Garrett Copeland FREng
Dr Roger Digby FREng
Dr Stephen Elston FREng
Dr Richard Greaves FREng
Graham Hopkins FREng

Professor Andrew Keane FREng
Tony Kinghorn FREng
Dr Matthew Perkins FREng

Panel 5 (Transport and Mechanical)
Kenneth Burrage FREng
Professor David Cebon FREng
Dr Simon Gallimore FREng
Professor Timothy Leighton FREng
Dr Michael Purshouse FREng
Professor Paul Shayler FREng
Professor Raymond Snidle FREng
Professor Hugh Spikes FREng
Professor Paul Wrobel FREng
Dr Willem van Griethuysen FREng

Panel 6 (Manufacturing and Design)
Carol Burke FREng
Professor Stuart Cameron FREng
Professor John Clarkson FREng
Professor Jane Jiang FREng
Professor Patrick Keogh FREng
Professor Lin Li FREng

Panel 7 (Electrical and Electronic)
Professor Roger Appleby FREng
Professor Cliff Burrows OBE FREng
Professor Jonathon Chambers FREng
Professor Roger Goodall FREng
Professor Ian Hunter FREng
Professor Cliff Jones FREng
Professor Andrew Marvin FREng
Professor Mohamed Missous FREng
Professor Sir Michael Pepper FREng FRS
Professor Richard Penty FREng
Professor Harvey Rutt FREng
Dr Nicholas Waltham FREng
Dr Richard Wylde FREng

Panel 8 (Energy and Power)
Professor Nigel Brandon OBE FREng
Janice Crawford FREng
David Eyton FREng
Dr Malcolm Kennedy CBE FREng FRSE
Dr Marcus Newborough FREng
Dr Win Rampen FREng
Professor Albert Rodger FREng

Nicholas Winsor CBE FREng
Panel 9 (Medical and Bioengineering)
Dr Douglas Anderson OBE FREng FRSE

Professor Serena Best FREng
Dr Clive Buckberry FREng
Dr Donal Cronin FREng
David Gow FREng
Professor Nicholas Medcalf FREng
Professor Guang-Zhong Yang FREng

Panel 10 (Computing and Communications)
Professor Bashir Al-Hashimi FREng
Dr Steve Allpress FREng
David Braben FREng
Professor Carole Goble CBE FREng
Nic Holt FREng
Dr David Watson FREng
Dr Richard Whittington FREng
Professor James Woodcock FREng

Panel 11 (Special)
Professor Richard Godwin FREng
Sir Patrick Haren FREng
Commodore Peter Hurford OBE FREng
Dr Gordon Masterton OBE FREng FRSE
Professor Ian Wallace FREng

Committee Secretariat
Jo Ryley

Academy Operating Committees

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 DBE FRS FREng

Members

John Baxter FREng FRS
Professor Dame Wendy Hall DBE FREng FRS
Dervilla Mitchell CBE FREng
Professor Sir Christopher Snowden FREng FRS
Professor Sir William Wakeham FREng
Professor Richard Williams OBE FREng
Paul Westbury CBE FREng

Secretariat

Howard Beeston ACIS

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 Directors and agree their remuneration and to set the remuneration of the Chief Executive.

Chair

Professor Dame Ann Dowling DBE FRS FREng

Members

Allan Cook CBE FREng
Professor Sir Michael Gregory CBE FREng
Ian Ritchie CBE FREng FRSE
Professor Sir William Wakeham FREng

Secretariat

Philip Greenish CBE

AWARDS COMMITTEE

The role of the Awards Committee is to identify and to 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 and the MacRobert Award).

Chair

Nigel Perry FREng

Members

Professor Adisa Azapagic FREng
Dr Steve Allpress FREng
Dr Rob Buckingham FREng
Professor Christos Christopoulos FREng
Chris Hendy FREng
Professor Tim Ibell FREng
Tony Kinghorn FREng
Professor Raffaella Ocone FREng FRSE
Professor Jason Reese FREng FRSE
Professor Jim Woodcock FREng

Secretariat

Philip Greenish CBE

Committee Secretariat

Sylvia Hampartumian

EDUCATION AND TRAINING COMMITTEE

The Education and Training 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 Helen Atkinson CBE FREng

Members

Jayne Bryant FREng
Dr Michael Cook FREng
Professor Kel Fidler FREng
Professor Anthony Finkelstein FREng
Professor Ian Hutchings FREng
Dr John Lazar FREng
Professor Jonathan Seville FREng
Mike Simpson FREng
Faith Wainwright MBE FREng

Ex Officio

Chris Earnshaw FREng
Professor Peter Goodhew FREng
Dr Stephen Huntington FREng
Chris Mairs FREng
Professor Andrew McNaughton FREng
Professor David Nethercot FREng
Professor Sarah Spurgeon 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 John Loughhead OBE FREng

Members

Dr Peter Bonfield OBE FREng
Professor John Clarkson FREng
Professor Brian Collins CB FREng
Lambert Dopping-Hepenstal FREng
Professor Nigel Gilbert FREng
Professor Jim Hall FREng
Dr Mike Lloyd FREng
Richard Maudslay CBE FREng
Professor Jim Norton FREng
Professor Andrew Sherry FREng
Dr Liane Smith FREng
Professor Jeremy Watson CBE FREng
Nicholas Winser CBE FREng
Steve Yianni FREng

Ex Officio

Professor Serena Best FREng

Committee Secretariat

Dr Alan Walker

EXTERNAL AFFAIRS COMMITTEE

The role of the 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 they are delivered in line with Royal Charter and business plan commitments.

Chair

Dr Martyn Thomas CBE FREng

Members (Fellows)

Dr Peter Cochrane OBE FREng
Dr Dougal Goodman OBE FREng
Professor Douglas King FREng
Dr Gordon Masterton OBE FREng FRSE
Professor Alison Noble OBE FREng
Professor Sarah Spurgeon FREng
Dr Scott Steedman CBE FREng

Members (Non-Fellows)

Jeremy Greaves
Dr Richard Highfield
Sir Roland Jackson, Bt

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 also 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 Research Exchanges with China and India Scheme and the Academy's Newton Fund activities.

Chair

Professor Sir William Wakeham FREng

Members

Timothy Askew FREng
Professor Ian Bogle FREng
Malcolm Brinded CBE FREng
Dr Andrew Chan FREng
Dr Alastair Glass FREng
Professor Sir Michael Gregory FREng
Professor Anthony Hey CBE FREng
Dr Shirley Jackson FREng
Professor William Lee FREng
Dr Timothy Leverton FREng
Professor John Loughhead OBE FREng
Professor Anne Neville FREng FRSE
Professor Sir Martin Sweeting OBE FREng FRS
Dr Stephen Myers OBE FREng
Dr Gareth Williams OBE FREng

Committee Secretariat

Shane McHugh

PROACTIVE MEMBERSHIP COMMITTEE

The Proactive Membership Committee is responsible for ensuring that the pool of candidates proposed for election as Fellows better reflects the society within which the Academy exists. Activities include identifying and tracking potential candidates from novel and overlooked areas, and engaging more existing Fellows in the process.

Chair

Nicholas Cooper FREng

Members

Dr Andrew Bradley FREng
Tudor Brown FREng
Dr Richard Laming FREng
Professor Geoffrey Maitland FREng
Dervilla Mitchell CBE FREng
Professor William Powrie FREng
Professor Rodney Smallwood FREng
Professor Keith Ridgway CBE FREng
Professor Tony Unsworth FREng
Professor Bernard Weiss FREng

Committee Secretariat

Dr Chris Coulter

RESEARCH AND SECONDMENT SCHEMES COMMITTEE

The role of the Research and Secondment Schemes 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 Ric Parker CBE FREng

Members

Professor Bashir Al-Hashimi FREng
Professor Polina Bayvel FREng
Professor Peter Fryer FREng
Professor Carole Goble CBE FREng
Dr Andrew Hosty FREng
Professor John McDermid OBE FREng
Professor Stephen McLaughlin FREng FRSE
Professor Andrew McNaughton FREng
Professor Kenichi Soga FREng
Professor Lionel Tarassenko CBE FREng
Dr David Watson FREng
Professor Paul Younger DL FREng

Ex Officio

Professor William Milne FREng
(Leverhulme Senior Research Fellowships)
Professor Clive Parini FREng
(Industrial Secondments)
Professor Roger Whatmore FREng
(Research Fellowships)

Committee Secretariat

Dr Ian Forristal

Awards

2014 MacRobert Award

The premier award for UK innovation in engineering, with a £50,000 prize, awarded annually to a team of engineers for an exceptional engineering innovation that has been both commercially successful and delivered societal benefits.

Awarded to:

Cobalt Light Systems for the Insight100 airport security liquid scanner

2014 President's Medal

Awarded to an Academy Fellow who has contributed significantly to the Academy's aims and work through initiative in promoting excellence in engineering.

Awarded to:

Dr Dame Sue Ion DBE FREng

2014 Sir Frank Whittle Medal

Awarded to an engineer resident in the UK whose achievements have had a profound impact upon their engineering discipline.

Awarded to:

Professor Peter Wells CBE FREng FRS FMedSci FLSW MAE, Distinguished Research Professor, School of Engineering, Cardiff University

2014 Silver Medals

For an outstanding personal contribution to UK engineering by an early to mid-career engineer resulting in market exploitation. Up to four medals may be awarded in any one year.

Awarded to:

Peter Brewin and Will Crawford, Directors, Concrete Canvas

Professor Dino Distefano, Professor of Software Verification, Queen Mary, University of London

Professor Máire O'Neill, Professor of Information Security, Centre for Secure Information Technologies, Queen's University Belfast

Christopher Young, Director - Trent XWB Programme, Rolls-Royce

2014 Major Project Award

The award recognises the contribution of a team of up to five engineers, based in the UK, who have delivered a major engineering project that has had a substantial impact on society.

Awarded to:

Kings Cross St Pancras development by Arup

2014 Colin Campbell Mitchell Award

Awarded to an individual or team of up to six engineers either working or studying in the UK. It will be awarded for having made the greatest contribution to the advancement of any field of engineering within the period of the four years prior to the making of the award.

Awarded to:

**Ford's 1.0 litre EcoBoost engine
Dr Roland Ernst, Dominic Evans,
Steve Johnson, James Seward,
Dr Mark Cary and Mike Rowland**

2014 Prince Philip Medal

The medal is awarded biennially to an engineer of any nationality who has made an exceptional contribution to engineering as a whole through practice, management or education.

Awarded to:

Professor CC Chan FREng, Honorary Professor, University of Hong Kong

2014 Rooke Award

The prize is awarded to an individual, small team or project based in the UK that has supported the Academy's aims and work through their initiative in promoting engineering to the public.

Awarded to:

Dr Diane Crann, Clothworkers' Fellow in Mathematics and Mathematics Fellow, Royal Institution

2014 Sir George Macfarlane Medal

The award recognises the potential of engineers working in the UK who have demonstrated excellence in the early stage of their career.

Awarded to:

Eur Ing Mark Wallace CEng, Engineering Project Manager, Wabtec Rail Limited

Academy staff As at 1 June 2015

Chief Executive
Philip Greenish CBE

QUEEN ELIZABETH PRIZE FOR ENGINEERING

Director, QE Prize
Keshini Navaratnam

Head of Operations, QEPrize
Jonathan Narbett

Communications Manager, QEPrize
Katya-yani Vyas

Manager, QEPrize
Cuong Dang

DEVELOPMENT

Director, Development
Sarah Philbrick

Trust Manager
Dominic Geyer

ENGINEERING TALENT PROJECT

Director, Engineering Talent Project
Fiona Sampson

Interim Campaign Manager, Engineering Talent Project
Caroline Evans

POLICY AND EXTERNAL AFFAIRS

Director, Policy and External Affairs
Beverley Parkin

Communications Manager
Jane Sutton

Interim Press and Communications Officer
Alexandra Rees

External Relations Manager
Juniour Blake

Publications and Web Editor
Dominic Joyeux

Manager, Web and Publications
Emily Bick

Head of Events and Marketing
Ivana Mackintosh

Events Manager
Jane Divito

Events Coordinator
Emma Calvert

Junior Events Coordinator
Katie Jones

Head of Policy
Dr Alan Walker

Policy Advisors
**Dr Andrew Chilvers
Philippa Shelton
Philippa Westbury**

PROGRAMMES AND FELLOWSHIP

Director, Programmes and Fellowship
Dr Hayaatun Sillem

Head of International Activities
Shane McHugh

International Policy Advisor
Meredith Ettridge

Programme Managers - International (Newton Fund)
**Eleanor Hood
Shaarad Sharma**

International Partnerships and Missions Manager
Samantha Frost

Team Coordinator, International
Abigail Taylor

Head of Research and University Programmes
Dr Ian Forristal

Programme Managers, Research
**Angus Baker
Tapsi Khambra**

Programme Manager, Research and University Programmes
**Jacqueline Clay
Dr Lucy Wheeler**

Research Policy Advisor
Dr Helen Ewles

Head of Fellowship Services and Awards
Sylvia Hampartumian

Membership Manager
Jo Ryley

Fellowship Advisor
Dr Chris Coulter

Departmental Administrators
**Anne Mahabal
Pauline Stillman
Yohanes Scarlett**

Head of Enterprise
Arnoud Jullens

Programme Manager, Enterprise
Catherine Lawrence

Marketing and Communications Officer, Enterprise
Lisa Huggins

ENGINEERING AND EDUCATION

Director, Engineering and Education
Dr Rhys Morgan

Head of Engineering the Future
Claire Donovan

Head of 5-19 Education
Lynda Mann

Manager, STEM Curricula
Dominic Nolan

Head of Further and Higher Education
Stylli Charalampous

Head of Diversity
Bola Fatimilehin
Jenny Young

Project Officer, Diversity
Elena Fatisi

STEM Education Projects Officer
Rebecca Hill

FINANCE AND CORPORATE SERVICES

Director, Finance and Corporate Services
Howard Beeston

Head of Executive Services
Kim Turner

Executive Assistants
Karen Childe
Gillian Birkbeck

Senior Administrator
Christine Dowling

Facilities Manager
Casey Mack

AV and Web Administrator
Barry Weekes

Reception/Security
Paul Morant

Receptionist
Carolyn Clarke

Head of Finance
Lisa Kiew

Management Accountant
David Lewthwaite

Finance Assistants
Sanjay Jethwa
Nazia Malik

Head of IT
Hakan Altinisik

Web and Data Administrator
Josephene Amirthanayagam

Grants, fellowships and programmes

INGENIOUS PUBLIC ENGAGEMENT AWARDS ROUND 9 AWARDS

Ingenious provides funding for projects that enable engineers to enhance their public engagement skills, consider the societal applications of their work and take part in debate with the public on engineering and its impact on society.

Awardee	Organisation	Project title
Dr Teresa Anderson	Jodrell Bank, University of Manchester	Engaging with the engineering of the Square Kilometre Array
Dr Sarah Bell	University College London	Engineering Exchange
Dr Giovanni Biglino	University College London	3D printing and engineering simulations to communicate with teenagers with congenital heart disease
Dr Geoff Coxon	SKYLAB	Scotland to the skies @ the SKYLAB
Erik Engebretsen	University College London	UCell public engagement events, 2015
Dr Kathy Fawcett	At-Bristol	On shaky ground?: Earthquakes, fracking, engineering and risk
Luisa Golob	Ignite Imaginations	Before now
Dr Elizabeth Granger	University of Central Lancashire	3D future
Jennifer Greenwood	Space, Science & Engineering Foundation	UK space design competition
Joseph Hooton	Cambridge Hands-On Science	Cambridge Hands-On Science (CHaOS) Summer Science Roadshows 2015 and 2016
Jenny Jopson	Guerilla Science	Fire organ: Seeing sound
Dr Carol MacGillivray	TROPE	Chain Reaction - Creating an installation at Kirkaldy Testing Museum
Shane McCracken	Gallomanor Ltd	I'm an Engineer, Get Me Out of Here!
Peter McGinty	University of Strathclyde	Space for art: Making mechanical engineering in space visible
Dr John McKinley	Queens University, Belfast	Creative bridges: Ingenious design in civil engineering
Dr Nicole Metje	University of Birmingham	Why is aerodynamics important? - A wind engineering view of the world!
Clive Gee	Brunel University	Robo-Code - up-skilling engineers' communication skills, enabling them to stimulate young people through engagement with engineering
Lisa Naas	University of Edinburgh	Glass whispers: Audio and electrical engineering meets studio glass for interactive, personal art experiences
Dr Thrishantha Nanayakkara	Kings College, London	Humanitarian demining: Questions of engineering, ethics, and engagement
Tracey Ogden-Davies	Techniquet	Making light work
Professor Paul Shore	Cranfield University	Watch it Made
Dr Patricia Sterpaio	University of Abertay, Dundee	On the right track: Engineering and education for all

RESEARCH CHAIRS

Research Chairs provide funding, together with industry and other research organisations, to support strategically important research in UK universities. The Academy provides funding initially for a period of five years.

Name	Co-sponsor	Subject	University
Professor Guglielmo Aglietti	Surrey Satellite Technology (EADS)	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	Dstl	Space environment and radio frequency engineering	University of Birmingham
Professor Ashraf Ayoub	Pell Frischmann	Nuclear infrastructure engineering	City University
Professor Luke Bisby	Arup	Fire and structures	University of Edinburgh
Professor Richard Butler	Rolls-Royce	Experimental studies of next generation gas-turbine combustion system aerothermal processes	University of Loughborough
Professor Jon Carrotte	Rolls-Royce	Next generation gas-turbine combustion system aerothermal processes	University of Loughborough
Professor Jonathan Cooper	Airbus	Integrated design of advanced novel wing architectures	University of Bristol
Professor George Constantinides	Imagination Technologies	Energy-efficient high performance embedded processing in an uncertain world	Imperial College London
Professor Yulong Ding	Highview Power Storage	Cryogenic energy storage	University of Birmingham
Professor Steve Dixon	Elster	Industrial Ultrasonics	University of Warwick
Professor Fionn Dunne	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 Chris Gerada	Cummins Generator Technologies	Electrical machine technology	University of Nottingham
Professor Alistair Gibb	ECI	Management of complex projects	Loughborough University
Professor Kenneth Grattan FEng	George Daniels Trust	Next generation optical and fibre optic instrumentation	City University
Professor Hugh Griffiths FEng	Thales UK	Intelligent radar systems	University College London
Professor Susan Grimes	SITA	Environmental waste management	Imperial College London
Professor Eileen Harkin-Jones FEng	Bombardier	Composites engineering	University of Ulster
Professor Ian Hunter	Radio Design Limited	Microwave signal processing	University of Leeds
Professor Neil Hyatt	The Nuclear Decommissioning Authority	Nuclear waste management	University of Sheffield

Name	Co-sponsor	Subject	University
Professor Lorenzo Iannucci	Dstl	Multiscale composite armour design	Imperial College London
Professor Nikil Kapur	GSK	Pharmaceutical processing	University of Leeds
Professor Alan Kemp	Fraunhofer UK	Advanced laser engineering	University of Strathclyde
Professor Jianguo Lin	TATA Steel	Multidisciplinary studies of hot stamping	Imperial College London
Professor Philip Mawby	Converteam	Power electronics	University of Warwick
Professor John Miles	Arup	Energy transitions	University of Cambridge
Professor James Moore	Bagrit Trust	Medical devices	Imperial College London
Professor Stephen Muggleton FEng	Syngenta	Applications of automated theory-formation using meta-interpretive machine learning	Imperial College London
Professor Bernard Mulgrew FEng	SELEX GALILEO	Multi-sensor signal processing	University of Edinburgh
Professor Andrew Neely	IBM/BAE Systems	Complex engineering systems	University of Cambridge
Professor Kamran Nikbin	EDF Energy – Existing Nuclear	Structural integrity assessment	Imperial College London
professor mc schraefel	Microsoft Research	Human computer interaction	University of Southampton
Professor Sven Schroeder	Infineum UK	Engineering applications of synchrotron science	University of Leeds
Professor Sridhar Seetharaman	TATA Steel	Low carbon technologies	Warwick University
Professor Spencer Sherwin	McLaren Racing	Transient flow simulation for advanced race and road cars	Imperial College London
Professor David Smith	Rolls-Royce/EDF Energy	Structural performance of energy systems	University of Bristol
Professor Iain Todd	GKN Aerospace	Additive manufacture and advanced structural metallics	University of Sheffield
Professor Anton Ziolkowski	PGS Geophysical	Petroleum geoscience	University of Edinburgh
Professor Zi-Qiang Zhu	Siemens Wind Energy	High efficiency and power density wind power generator systems	University of Sheffield

RESEARCH CHAIRS IN EMERGING TECHNOLOGIES

These Chairs allow recipients to develop an area of early-stage research into a new technology to the extent that it engages the wider research community, and subsequently can be taken forward by industry.

Name	Subject	University
Professor Anne Neville FEng FRSE	Bio-inspiration for functional surface design	University of Leeds
Professor Jeremy O'Brien	Photonic quantum ICT	University of Bristol

SENIOR RESEARCH FELLOWSHIPS

The Senior Research Fellowships (SRFs) scheme provides funding for Senior Lecturer/Reader level appointments. Like Research Chairs, SRFs are funded jointly with industry for a period of five years.

Name	Co-Sponsor	Subject	University
Dr Matthew Hall	British Geological Survey	Rock-fluid interactions in carbon capture, storage and alternative hydrocarbons	University of Nottingham
Professor Nicholas Hills	Rolls-Royce	Computational engineering	University of Surrey
Dr Stephen Neethling	Rio Tinto	Heap and in situ leaching	Imperial College London
Dr Rongshan Qin	TATA Steel	Steel research	Imperial College London
Dr Graham Spinardi	Ove Arup Foundation	Integrating technical and social aspects of fire safety engineering	University of Edinburgh

LEVERHULME TRUST SENIOR RESEARCH FELLOWSHIPS

These Fellowships provide mid-career engineers working in UK academic institutions with the opportunity to focus on research activities for a period of up to 12 months with their academic and administrative responsibilities being taken over by an early-career academic.

Name	Project title	University
Dr Haofeng Chen	Modelling the fatigue and creep of metal matrix composite	University of Strathclyde
Dr Piotr Dudek	Analogue computation with novel nanodevices for machine learning	University of Manchester
Dr Marianne Ellis	Scale-up of immune cell therapies for organ transplants	University of Bath
Dr Stephen Garrett	Understanding transition in boundary-layer flows over rotating geometries	University of Leicester
Dr Paola Lettieri	A life cycle approach for nuclear waste management and plant decommissioning	University College London
Dr Chenfeng Li	Real time computational methods for complex high-fidelity surgical simulation	Swansea University
Dr Cyril Lynsdale	Recycling of carbon dioxide in mortar and concrete	University of Sheffield
Dr Dmitry Nerukh	Personal supercomputer for modelling complete virus at all atom resolution	Aston University
Professor Thomas Nowotny	Enabling scientific computing with GPUs with domain specific languages and metacompilers	University of Sussex
Dr Rachel Oliver	Understanding and utilising nitride nanostructures	University of Cambridge
Dr Justin Philips	A non-invasive continuous monitor of intracranial pressure	City University
Dr David Sanders TD	Improving mobility and quality of life for children with disabilities	University of Portsmouth
Dr Sebastian Savory	Realising the capacity in fibre-optic networks with uncertainty and Nonlinearity	University College London
Dr Aleksandra Vuckovic	Home based patient-managed neurorehabilitation following spinal cord injury	University of Glasgow

DAPHNE JACKSON FELLOWSHIPS

These Fellowships enable engineers to return to work following a career break.

Name	Subject	University
Dr Margarita Fernandez-Chas	Effect of changes in the spatial properties of the myocardial tissue mechanics on the overall efficiency of the heart	Kings College London
Dr Suhaila Mattar	Embodied CO ₂ of concrete: Materials, structural and methodological factors	University of Leeds
Dr Divya Tiwari	LPG sensors for measuring carbon dioxide concentration at carbon capture and storage sites	Cranfield University

RAENG/EPSRC RESEARCH FELLOWSHIPS

These Fellowships, which are funded jointly with the EPSRC, are aimed at outstanding researchers from all branches of engineering who are about to finish their PhDs or have up to three years' post-doctoral experience.

Name	Subject	University
Dr Sachi Arafat	Foundations research in information retrieval inspired by quantum theory	University of Glasgow
Dr Helen Bridle	Biosensors in engineering: From in situ pathogen detection to global impacts	Heriot-Watt University
Dr Tore Butlin	Modelling the vibration of complex structures with localised nonlinearities	University of Cambridge
Dr Maria Ana Cataluna	Compact and ultra-versatile lasers based on quantum-dot materials	University of Dundee
Dr Simon Cotton	Next generation body-centric communications: a joint analytical-statistical approach to modelling quasi-cyclostationary anisotropic signal reception	Queen's University Belfast
Dr Christophe Dubach	Adaptable processor architecture and software for energy-efficient computing	University of Edinburgh
Dr Filippo Fazi	Electroacoustical inverse problems	University of Southampton
Dr Maria Galano	Development of aluminium metal matrix complex nanocomposites for high strength applications	University of Oxford
Dr Deborah Gunning	Neural interfaces for studying cortical processes	University of Strathclyde
Dr Matthew Himsworth	Atom-chip integration for quantum-enabled devices	University of Southampton
Dr Hugh Leather	Optimising the mobile net	University of Edinburgh
Dr Andrew Marshall	Exploiting emerging interface misfit epitaxy to engineer cheaper, higher performance photodiodes for imaging, communications and gas monitoring	Lancaster University
Dr Davide Mattia	Nanoparticle factory-on-a-chip	University of Bath
Dr Steven Neale	Micro-actuators controlled by optoelectronic tweezers (MACOET)	University of Glasgow

Name	Subject	University
Dr Francesca Parmigiani	Optical processing of high spectral efficiency phase encoded signals for future generation optical networks	University of Southampton
Dr Andrew Robertson	Intelligent interactive musical performance systems	Queen Mary, University of London
Dr Silvia Schievano	FEM before FIM – Finite element modelling prior to first-in-man in heart valve technology	University College London
Dr Aleksey Shitvov	Distributed passive intermodulation phenomena in microwave circuits	Queen's University Belfast
Dr Susannah Speller	Superconducting metamaterials for near field NMR microscopy applications	University of Oxford
Dr Danail Stoyanov	Real-time intra-operative navigation for robotic assisted minimally invasive surgery	University College London
Dr Manlio Tassieri	Rheology at the microscale: New tools for bio-analysis	University of Glasgow
Dr Kevin Webb	Optical stimulation for the long-term control and monitoring of neural network activity	University of Nottingham
Dr Amanda Wright	New horizons in adaptive optics for life science research: adaptive microscopy	University of Nottingham

RESEARCH EXCHANGES WITH CHINA AND INDIA AWARDS

The Research Exchanges with China and India scheme promotes academic collaboration between high-quality engineering researchers in the UK and China/India, aims to strengthen relations between leading partners in these countries, and supports the expansion of international networks of excellence, offering funding (to cover travel, accommodation and subsistence) for exchanges of 3-12 months.

UK academic	Chinese/Indian academic	Project title
Professor Kai Cheng Brunel University	Dr Hui Ding Harbin Institute of Technology	Design and manufacturing of micro-featured engineering surfaces
Dr Richard Fu University of the West of Scotland	Professor Yan Li Beihang University	Super high strength nanocomposite functionally graded smart thin film materials
Professor Tim Heath University of Nottingham	Professor Tong Cui Institute of Architecture Design and Research, Chinese Academy of Sciences	Vertical Farms: engineering sustainable urban food supplies
Dr Jerry Yong Yew Heng Imperial College London	Dr Zhongqiang Yang Tsinghua University	DNA nanotechnology: a new strategy for protein nucleation and crystallisation
Professor Wayne Luk FEng Imperial College London	Professor Yuchun Ma Tsinghua University	Exploiting run-time reconfiguration for high-performance reconfigurable computing
Professor Perumal Nithiarasu Swansea University	Dr K Arul Prakash Indian Institute of Technology Madras	Developing a comprehensive systemic circulation model for fractional flow reserve (FFR)
Professor Duc Truong Pham University of Birmingham	Professor Zude Zhou Wuhan University of Technology (WUT)	Intelligent monitoring for Machine tools based on optical fibre sensing
Dr Therese Sheehan University of Bradford	Professor Lin-Hai Han Tsinghua University	Cyclic response of hollow and concrete-filled elliptical hollow section braces
Dr Shuncai Wang University of Southampton	Professor Wensheng Li Lanzhou University of Technology	Near frictionless and wear monitoring coatings by electro-deposition
Professor Stewart Williams Cranfield University	Professor Qiang Zhan Beihang University	Process monitoring and control for wire plus arc additive manufacture

RAENG RESEARCH FELLOWSHIPS

These Fellowships are aimed at outstanding researchers from all branches of engineering who are about to finish their PhDs or have up to three years' post-doctoral experience.

Name	Subject	University
Dr Mark Ainslie	Engineering interactions of magnetic and superconducting materials for electrical applications	University of Cambridge
Dr David Armstrong	Micro-engineering advanced alloys for extreme nuclear power environment	University of Oxford
Dr Mahdi Azarpeyvand	Source and propagation modelling for wind turbine and turbomachinery noise	University of Bristol
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 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	University College London
Dr Alasdair Clark	Plasmon enhanced pyroelectrodynamical nanoscale trapping and sensing	University of Glasgow
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 Christian Fensch	Auto-tuned programming patterns and the programmability gap	Heriot-Watt University
Dr Peter Gammon	Novel interlayer cooling for harsh environment (NICHE) devices and circuitry	University of Warwick
Dr Tawfique Hasan	Graphlex: Fully flexible graphene-based transparent conductors	University of Cambridge
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
Dr Edward Laird	Quantum computing devices based on carbon nanomaterials	University of Oxford
Dr Martin Lavery	Increasing data transfer capacity using light's unusual properties	University of Glasgow
Dr Grigorios Loukides	Privacy protection in event-based data sharing and analysis	Cardiff University
Dr Fleur Loveridge	New thermal and geotechnical facility for ground heat exchangers	University of Southampton
Dr Mathieu Lucquiaud	Future-proofing fossil power stations with CO ₂ capture	University of Edinburgh
Dr Christos Masouros	Interference as a source of green signal energy in wireless communications	University College London
Dr Matthias Mauch	Software systems for computer-aided music understanding	Queen Mary, University of London

Name	Subject	University
Dr Ruth Misener	Towards rational chemotherapy strategies: A hybrid computational/experimental approach	Imperial College London
Dr Mehran Moazen	Predicting skull growth in craniosynostosis for improved surgical treatment	University of Hull
Dr Thomas Okell	Novel imaging techniques to visualise blood flow in the brain	University of Oxford
Dr Oliver Payton	Mapping, measuring and manufacturing nanostructures via high-speed atomic force microscopy	University of Bristol
Dr Alberto Peruzzo	Quantum processors for quantum chemical engineering	University of Bristol
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 Paul Shearing	4-dimensional tomography of electrochemical devices	University College London
Dr Radu Sporea	Novel high performance transistors for use in large area electronics	University of Surrey
Dr Nikos Tzevelekos	Game semantics for program analysis	Queen Mary, University of London
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 Bath

RAENG/MINISTRY OF DEFENCE RESEARCH FELLOWSHIP

This Fellowship offers an innovative engineer opportunities to work with research, development and modelling teams within the Defence Science and Technology Laboratory and some of the laboratory's industrial and academic partners.

Name	Project title	University
Dr Benjamin Russell	Energy mitigation and blast impact loading	University of Cambridge

ENTERPRISE FELLOWSHIPS

Enterprise Fellowships provide funding and support to outstanding entrepreneurial engineering researchers, working at a UK university, to enable them to develop a spin-out business around their technological idea.

Name	University	Project title
Dr Angus Webb	University of Southampton	Using big data to reduce commercial fuel consumption
Dr David Hazafy	Queen's University Belfast	Creating smart materials with photocatalysts
Dr Toby Basey-Fisher	Imperial College London	AnemiStat: redefining the diagnosis of anaemia at the point of care.
Dr Nicola Irwin	Queen's University Belfast	Uroglide lubricious catheter coatings
Dr Thomas Frame	University of Surrey	The Halo System for aesthetic and cosmetic enhancement
Dr Stephen Hicks	University of Oxford	Smart glasses for blind and partially sighted individuals
Dr Jack Cohen	University of Warwick	Multiple fingertip tracking in three dimensions for computer interaction

PATHWAYS TO GROWTH

Pathways to Growth grants support capacity building within engineering and technology SMEs by providing £10,000, £15,000 or £20,000 of funding towards training for their engineering staff. Leaders of high-performing awardee companies may also have the opportunity to become members of the Academy's Enterprise Hub.

Awardee companies

3D Laser Mapping	Featurespace	React Engineering
Capital Refractories	Fianium	Recycling Technologies
Cobalt Light Systems	Firefly - Clean Energy	RPPTV
Data Harvesting	Hireserve	Shadow Robot Company
e2e Services	HMD Seal/Less Pumps	Sonobex
Embody Orthopaedic	Lindhurst Engineering	YASA Motors
ETA projects	OC Robotics	
Etdyn	PPM	

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.

Winners

Dr Niall Kent, UCL, and Dr Alessia D'Onofrio, Queen Mary University of London; Aerograft

RAENG/ERA FOUNDATION ENTREPRENEURS AWARD

The award seeks to identify, encourage and reward entrepreneurial engineering researchers working in UK universities, in a field involving electro-technology.

Co-winners

Name	University	Project title
Dr David Heath	University of Strathclyde	Advanced skincare product applicator
Dr James MacFarlane and Dr Oliver Payton	University of Bristol	Advanced airborne radiation monitoring (AARM) systems

Runners-up

Name	University	Project title
Dr Mark Symes	University of Glasgow	An integrated hydrogen production and fuel cell platform (PROMISE)

DISTINGUISHED VISITING FELLOWSHIPS

The Distinguished Visiting Fellowship Scheme provides funding to enable an academic engineering department in a UK university to be a host for up to a month to a senior academic from an overseas academic centre of excellence, and to engage the fellow in a range of mutually beneficial activities. The scheme aims to promote sharing of the latest developments and allow the participating organisations to discover common and complementary skills and initiatives that could form the foundation for future collaborations, thereby strengthening UK capacity and international standing.

Award holder	Distinguished Visitor	Area of collaboration
Dr Claudio Balocco Durham University	Professor Mikhail Kaliteevski St Petersburg Academic University	Development of fire-safe and smart building materials
Professor Atul Bhaskar University of Southampton	Professor Isaac Elishakoff Florida Atlantic University	The application of stochastic and probabilistic methods to response calculations in structural mechanics
Dr Basabdatta Bhattacharya University of Lincoln	Professor Piotr Suffczynski University of Warsaw	Engineering and evolving secure software systems
Professor Luke Alexander Bisby FREng University of Edinburgh	Dr Giovanni Terrasi EMPA Swiss Federal Laboratories for Materials Science and Technology	Advanced automotive turbo machines for boosting and exhaust and waste heat energy recovery
Professor Nigel Peter Brandon FREng Imperial College London	Professor Tom Zawodzinski University of Tennessee	Novel hybrid nanomaterials for biomedical applications
Dr Richard Burke University of Bath	Professor Jose-Ramon Serrano Universitat Politècnica de Valencia	Biomechanical analysis of lymph transport and immune function
Dr Biqiong Chen University of Sheffield	Professor Kang Sun Shanghai Jiao Tong University	Internal solitary waves: modelling to engineering application
Professor Steve Culley University of Bath	Dr Mario Štorga University of Zagreb	Language of traceability, context and culture (LOTCC)

Award holder	Distinguished Visitor	Area of collaboration
Peter Anthony Davies University of Dundee	Professor Gregory Ivey University of Western Australia	Optimisation of the fire protection performance of water mist based on an advanced analytical approach
Dr Martin Davy The University of Oxford	Professor Ling-Shun (David) Hung Shanghai Jiao Tong University	Engineering electrodes for energy storage devices
Dr Siaka Dembele Kingston University Higher Education Corporation	Dr Leonid Dombrovsky Joint Institute for High Temperatures, NCHMT, Russian Federation	A computational model based study towards using steady-state-visually-evoked-potential in brain-computer-interface and clinical neuroscience
Dr Vimal Dhokia University of Bath	Professor Richard Wysk North Carolina State University	Decarbonizing the whole energy system from head to tail - a smart micro-grid solution
Dr Trung Q Duong Queen's University Belfast	Professor Marco Di Renzo Laboratoire des Signaux et Systèmes	Modelling, analysis and design of 5G self-powered heterogeneous wireless networks - a stochastic geometry approach
Dr James Elliott University of Cambridge	Professor Stephen Paddison University of Tennessee	Hybrid manufacture
Professor Roger Falconer FEng Cardiff University	Professor Junqiang Xia Wuhan University	Development of an integrated 2D model for the risk assessment of floodplain floods and its application
Professor Sanjeev Gupta Imperial College London	Professor Michael Lamb California Institute of Technology	Graph cut methods for higher-order priors in computer vision and medical imaging
Dr Erdin Ibrahim University of Bristol	Professor Bogdan Cazacliu Institut Français des sciences et technologies des transports, de l'aménagement et des réseaux (IFST)	Time effects in sand and large scale production of composite soils
Professor Serafim Kalliadasis Imperial College London	Professor Stephen H Davis Northwestern University	Surfactant dynamics near rupture sites
Andreas Kappos City University London	Professor Nicos Makris University of Central Florida	Mechanics and hazards of river avulsions on deltas
Professor Furong Li University of Bath	Professor Xiaoxin Zhou China Electric Power Research Institute (CEPRI)	Developing an evidence-based framework for informing energy policy development in China
Professor Kang Li Queen's University Belfast	Professor Hongjie Jia Tianjin University	Developing a novel biosensor based on circulating microRNAs for cancer diagnoses
Professor Zhenhong Li Newcastle University	Dr Maorong Ge Helmholz Centre	GNSS seismology for responding to large earthquakes and monitoring infrastructure stability
Professor James Moore Imperial College London	Professor David Zawieja Texas A&M University	Using electromagnetic acoustic transducers (EMATs) for wind turbine shaft crack detection
Professor Haralambos Mouratidis University of Brighton	Professor John Mylopoulos University of Trento	5G mobile communications research and development in China
Dr Linda Newnes University of Bath	Dr Ricardo Valerdi University of Arizona	Cost estimating: a systems-based approach
Dr Daphne O'Doherty Cardiff University	Professor David Thompson Mississippi State University	Enhancing the analysis of vertical flows

Award holder	Distinguished Visitor	Area of collaboration
Dr Stefanos Aldo Papanicolopoulos The University of Edinburgh	Professor Gioacchino Viggiani Université Joseph Fourier	Tornado simulation with implications for engineering structures today (TWIST)
Dr Apostolos Pesiridis Brunel University London	Dr Hua Chen Chinese National Laboratory of Engine Turbocharging Technology	Materials modelling of redox flow batteries
Professor Vladimiro Sassone University of Southampton	Professor Roberto Baldoni Sapienza Università di Roma	The study of cycle-by-cycle variation in mixture preparation and combustion in engines using proper orthogonal decomposition
Dr Sein Leung Soo University of Birmingham	Professor Ibrahim Jawahir University of Kentucky	Cryogenic processing of advanced aerospace materials for improved surface integrity leading to enhanced product performance, life and sustainability
Professor Molly Morag Stevens FEng Imperial College London	Professor Dave Winkler Commonwealth Scientific and Industrial Organisation (CSIRO)	Earthquake protection of bridges with rocking isolation
Professor Philip Torr Oxford University	Professor Ramin Zabih Cornell University	Tamm plasmon based optoelectronic devices
John Yiannis Vardaxoglou FEng Loughborough University	Professor Yingjie Jay Guo Commonwealth Scientific and Industrial Organisation (CSIRO)	Collaborative research on future antennas and wireless systems
Professor Jiangzhou Wang University of Kent	Professor Xiaohu You Southeast University	CREATE - collaborative research for advanced turbocharged engines
Dr Qing Wang Durham University	Professor Wei Zhao University of Beijing	Full-field experimental measurements in granular materials
Professor Wen Wang Queen Mary, University of London	Professor Lei Zheng Southern Medical University	High efficiency fluid power systems for sustainable engineering and construction

NEWTON RESEARCH COLLABORATION PROGRAMME

The Newton Research Collaboration 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 main focus of the Newton Research Collaboration Programme is to support the aims of the Newton Fund by facilitating international exchanges lasting three months to a year between researchers in the UK and their counterparts in selected Newton Fund partner countries.

Partner country	UK researcher	Project title	Partner country researcher
Brazil	Dr Martin Strangwood University of Birmingham	Use of increased Nb levels for welded high strength pipeline steel	Dr Waldek Bose Filho Universidade de Sao Paulo, Departamento de Engenharia de materiais
Brazil	Dr Jeff Kettle Bangor University	allocatall	Professor Edson Laureto Universidade Estadual de Londrina

Partner country	UK researcher	Project title	Partner country researcher
Brazil	Professor John Lloyd Provis The University of Sheffield	WASTECEM - Wastes as resources for producing eco-efficient cements	Dr Erich Rodriguez Núcleo Orientado para a Inovação da Edificação
Brazil	Dr Erdin Ibraim University of Bristol	UK-Brazil research collaboration: advanced laboratory testing and modelling of treated soils	Professor Nilo Cesar Consoli Federal University of Rio Grande do Sul
Brazil	Dr Craig White University of Glasgow	Aerothermodynamic characterisation of a microgravity experiment platform's re-entry module	Dr Rodrigo Palharini Institute of Aeronautics and Space
Brazil	Professor Yang Zhang The University of Sheffield	Colour imaging based investigation of biofuel spray and flame characteristics	Professor Sergio Hanriot PUC Minas
Brazil	Dr Alberto Marzo The University of Sheffield	In silico modelling of endovascular treatment of intracranial aneurysms: a UK-Brazil education and research initiative	Dr Fernando Silva de Moura Universidade Federal do ABC
Brazil	Professor David W Chadwick University of Kent	Security policy enforcement in federated open source clouds	Dr Carlos Ferraz Universidade Federal de Pernambuco
Brazil	Professor Dongsheng Wen University of Leeds	Engineered nanofluids for high concentration photovoltaic systems	Professor Enio Bandarra Filho Federal University of Uberlandia
Brazil	Professor Dariusz Rafal Kowalski University of Liverpool	Distributed algorithms for wireless communication – trade-off between time, energy and reliability	Dr Flavio Moraes de Assis Silva Federal University of Bahia
China	Dr Andrea Da Ronch University of Southampton	Fast nonlinear aeroelastic search for loads assessment	Dr Daochun Li University of Aeronautics and Astronautics
China	Professor Daniel Rueckert Imperial College London	Extracting clinically useful information from cardiac MR images using large-scale machine learning	Dr Xiahai Zhuang Shanghai Jiao Tong University
China	Professor Asif Usmani University of Edinburgh	Fire resistance of tall steel frame buildings in the context of resilient infrastructure and communities	Professor Suwen Chen Tongji University
China	Dr Max Migliorato University of Manchester	An Anglo-Sino partnership in piezotronics and nanogeneration	Dr Yan Zhang Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences
China	Dr Tao Sun Bolton University	Investigation of host tissue integration using closely integrated experimental and computational approaches	Professor Guifang Dou Institute of Perfusion Medicine
China	Dr Weijia Yuan University of Bath	Applications of large scale high temperature superconducting energy storage systems in renewable power grids in the UK and China	Dr Jiahui Zhu China Electric Power Research Institute
China	Dr Yongde Xia University of Exeter	Novel functional porous carbon-based materials for high-performance solid acid catalysts	Professor Yi Tang Fudan University
China	Dr Wenxian Yang Newcastle University	Research on an efficient and reliable biomimetic blade dedicated for tidal turbines	Dr Dazheng Wang Harbin Institute of Technology

Partner country	UK researcher	Project title	Partner country researcher
China	Dr Qing Wang Durham University	Real time laser condition monitoring system for wind turbine shaft	Professor Song Ling Huang Tsinghua University
China	Dr Hua-Peng Chen The University of Greenwich	Monitoring-based performance assessment of civil infrastructure	Dr Tian-Li Huang Central South University
China	Professor Ali Emrouznejad Aston Business School, Aston University	Analysis of efficiencies and productivity evolution in manufacturing industries with CO ₂ emissions in China	Dr Guoliang Yang Institute of Policy and Management, Chinese Academy of Sciences
China	Professor Song Wu University of Huddersfield	Dynamic building usage and occupant behaviour simulation for energy analysis – China case study	Dr Yi Zhou Huazhong University of Science and Technology
China	Professor Longbin Tao Newcastle University	Impact of extreme nonlinear waves on offshore structures	Professor Jianmin Yang Shanghai Jiao Tong University
China	Dr Xue Jin University of Glasgow	Innovative energy neutral membrane system for metallurgy wastewater treatment and heavy metal recovery	Professor Xing Yuliu General Research Institute for Nonferrous Metals
China	Dr Dongfang Liang University of Cambridge	Hydrological and hydro-environmental responses of urban catchments to heavy rainfalls	Professor Yuefei Huang Tsinghua University
China	Dr David Jorge Alexander Trujillo Coventry University	Standards for bamboo and timber: novel materials in new contexts	Dr Haiqing Ren Chinese Academy of Forestry
China	Professor Anne Neville FREng The University of Leeds	Design, synthesis and evaluation of carbon-based nanomaterials for drilling fluid loss control	Dr Guixin Wang Sichuan University
China	Professor Zidong Wang Brunel University	Probabilistic state-constrained optimal control for key performance indicators in Large-scale industrial plants and its application to hot strip mill process	Professor Kaixiang Peng University of Science and Technology Beijing
China	Dr Zhijun Peng University of Hertfordshire	ANN Bio-fuel combustion control by identifying variable fuel property from combustion characteristics	Professor Yuzhen Lin Beihang University
China	Dr Yue Huang Liverpool John Moores University	Potential for using the park-and-ride systems for reducing congestion problems in China's main cities	Dr Xu Hao China Waterborne Transport Research Institute
China	Dr Xibo Yuan The University of Bristol	Leakage current reduction and grid integration issues in solar power inverter systems	Dr Xiao Jiewu China University of Mining and Technology
China	Dr Jing Li University of Nottingham	Diagnostics and prognostics of electrical machines for electrical vehicles	Dr Xiaoyan Huang Zhejiang University
China	Dr Martin D Jaere Imperial College London	A novel concept in pre-surgical planning in orthopaedic oncology	Professor Shekhar Mkumta The Chinese University of Hong Kong
Mexico	Dr Lionel Christopher Ganippa Brunel University	Exploring the potential of utilising waste for public road transport	Dr Oscar de la Garza de León Universidad Autónoma de Nuevo León

Partner country	UK researcher	Project title	Partner country researcher
Mexico	Professor Alfonso Arturo Castrejon-Pita University of Oxford	Dynamics of pairs of falling drops	Professor Eduardo Ramos Mora Instituto de Energias Renovables
Mexico	Professor Sanowar Khan City University London	Fast optimal state estimation over finite data for industrial applications	Professor Yuriy Shmaliy Universidad de Guanajuato
South Africa	Professor Malcolm Neil James University of Plymouth	Innovation in friction processing platforms to support economic development in manufacturing for South Africa	Professor Danie Hattingh Nelson Mandela Metropolitan University
South Africa	Professor Paul Tarisai Mativenga University of Manchester	UK - South Africa Circular Economy Synergies	Professor Charles Mbohwa University of Johannesburg
Turkey	Dr Basabdatta Bhattacharya University of Lincoln	Towards a neuro-inspired seismo-bot for seismic disaster-response in Turkey	Dr Neslihan Serap Sengor Istanbul Technical University
Turkey	Dr Gheorghita Ghinea Brunel University	Multimodal emergency guide system for the elderly	Dr Tacha Serif Yeditepe University
Vietnam	Dr Christopher Chuck University of Bath	Remediation and valorisation of Vietnamese industrial waste streams via algal growth	Dr Ngoc Thang Cong Hanoi University of Mining and Geology
Vietnam	Dr John Hugh George Macdonald University of Bristol	Behaviour of complex slender structures against wind actions: oscillation, testing and stability	Dr Cung Huy Nguyen Industrial University of Ho Chi Minh City
Vietnam	Professor Thanh Thi Kim Nguyen University College London	Engineering multifunctional magnetic nanoparticles for enhanced oil recovery	Dr Bich Thi Luong Institute of Applied Materials Science, Vietnam Academy of Science and Technology
Vietnam	Dr Trung Q. Duong Queen's University Belfast	Energy harvesting enabled two-way relay networks in D2D communications: an optimization design	Dr Nguyen Son Vo Duy Tan University
Vietnam	Dr Thuc Vo Northumbria University	A nonlocal higher-order beam theory with application to bending, buckling, and vibration of functionally graded nanobeams	Dr Trung-Kien Nguyen Ho Chi Minh City University of Technology and Education

LEADERS IN INNOVATION FELLOWSHIPS

The Academy is a Delivery Partner of the UK Government's Newton Fund - a five-year, £375 million initiative to help build strong, sustainable and systemic ties in science, innovation and R&D with 15 emerging powers across the globe. Under the Newton Fund, the Academy delivers the Leaders in Innovation Fellowships (LIF) programme, which provides training and coaching to engineering researchers from partner countries who wish to commercialise their innovations. 149 researchers from eight different countries - Brazil, Chile, India, Mexico, the Philippines, South Africa, Thailand and Vietnam - participated in the programme in 2014-15.

THE 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.

2014/2015 shortlist

Samuel Njuguna Wangui and team	Kenya
Captain Abubakar Surajo	Nigeria
Chinenye Justin Nwaogwugwu	Nigeria
Tolulope Ajuwape and team	Nigeria
Ernst Pretorius	South Africa
Dr Reinhardt Kotzé and team	South Africa
Dr Askwar Hilonga	Tanzania
Dr Oscar Kibazohi and team	Tanzania
Samuel Malinga and team	Uganda
Musenga Silwawa and team	Zambia
Ian Mutamiri and team	Zimbabwe
Rujeko Masike and team	Zimbabwe

ENRICHING ENGINEERING EDUCATION IN SUB-SAHARAN AFRICA

The Enriching Engineering Education Programme aims to bring engineering curricula in universities in line with current industrial practice, and to improve teaching practices in engineering, through a structured partnership between universities and industry.

Hub institutions

University of Dar es Salaam, Tanzania
University of Zimbabwe

Spoke institutions

Makerere University, Uganda
Moi University, Kenya
Dedan Kimathi University of Technology, Kenya
Harare Institute of Technology, Zimbabwe
Chinhoyi University of Technology, Zimbabwe
National University of Science and Technology, Zimbabwe
Namibia University of Science and Technology
Universidade Eduardo Mondlane, Mozambique
University of Botswana

INDUSTRIAL SECONDMENTS SCHEME

This scheme facilitates knowledge transfer between universities and UK industry by providing engineering academic staff exposure to industrial and commercial practice.

Name	University	Project title	Host
Dr Rafic Ajaj	University of Southampton	Loads alleviation for transport Aircraft using folding wingtips	Airbus Operations Ltd
Dr Akram Alomainy	Queen Mary, University of London	Advance traceable and cost-effective measurement solutions for characterising wearable antennas and body-centric wireless networks	National Physical Laboratory (NPL)
Dr Paul Bagot	University of Oxford	Advanced atom probe studies of critical engineering for Rolls-Royce	Rolls-Royce plc
Dr Phil Brooke	Teesside University	Reliable approaches to gathering evidence and intelligence from network sources	Cleveland Police
Dr Gary Burnett	University of Nottingham	Human factors engineering methods for vehicle design	Jaguar Land Rover Ltd
Dr Jyoti Chaodrie	University of Hertfordshire	Evaluating cloud computing technologies development using vertical and horizontal communication	Xerox Europe
Dr Tao Chen	University of Surrey	In-silico modelling of transdermal permeation	Unilever UK
Dr Adam Clare	University of Nottingham	Nontraditional manufacturing technology deployment for future Rolls-Royce factories	Rolls-Royce plc
Dr Martin Foster	University Of Sheffield	Development of 1-2kW power converter system for battery storage applications	Vxl Power Ltd
Professor Stephanie Haywood	University of Hull	Energy works academy: building industry-focused energy research and education for the future	C Spencer Ltd
Dr David Hessom	University of Wolverhampton	Industrial implementation of HD laser scanning for visualisation of building information modelling	The Severn Partnership Ltd
Professor Raffaella Ocone	Heriot-Watt University	Management of sour water: translating SHE and ethics from industry into the engineering curriculum - the development of case studies	PETROINEOS
Dr Gillian Ragsdell	University of Loughborough	Engineering knowledge management: adding value to the energy sector	The Energy Technologies Institute
Dr Donal Reay	Heriot-Watt University	Lab-in-a-box hands-on DSP teaching materials for ARM cortex M4	ARM Holdings Ltd
Dr Andrea Da Ronch	University of Southampton	Industrial aircraft design	Airbus Operations Ltd
Dr Antoaneta Serguieva	University College London	Computational intelligence and knowledge engineering approaches to modelling systemic risk	Bank of England

Name	University	Project title	Host
Dr Siraj Shaikh	Coventry University	Automotive cybersecurity	MIRA Ltd
Dr Jenna Tudor	Northumbria University	Sensor improvement on in-line inspection tools	GE: PII Pipeline Solutions
Dr Rafael Viviescas	University of Leicester	Test of constrained multi-objective control for future helicopter rotor technologies	AgustaWestland (Yeovil)
Professor Jiangzhou Wang	University of Kent	Wireless in-building distributed antenna systems (WI-DAS)	Hutchison 3G UK Ltd
Dr Zena Wood	University of Exeter	Gaining insight from data collected from emerging technologies	IBM UK Ltd

ENGINEERING LEADERSHIP ADVANCED AWARDS

This award funds ambitious engineering undergraduates to undertake an accelerated personal development programme in order to move into a leadership position soon after graduation.

The Academy has 108 awardees currently being funded, from the following universities:

Aberdeen, Bath, Bristol, Cambridge, Cardiff, Durham, Edinburgh, Glasgow, Imperial College London, Loughborough, Manchester, Queen's University Belfast, Robert Gordon University, Sheffield, Southampton, Strathclyde, Surrey, University College London, York.

VISITING PROFESSORS

The Visiting Professor programme is currently supporting over 50 Visiting Professors at more than 30 UK Universities through placing senior industrialists into universities to enhance the teaching and learning as well as employability and skills of UK undergraduate engineering students.

Name	University
Nicholas Anott	University of Surrey
Malcolm Bailey	University of Surrey
Sam Beale	University of Cambridge
Greg Beattie	Liverpool University
Ron Bell	Liverpool John Moores University
Dr Rick Bradford	University of Bristol
Dr Andrew Bradley FREng	Loughborough University
Keith Carter	University of Leicester
Doug Cartwright	University of Durham
Steve Clark	University of Hull
Keith Clarke	Aston University
Dr Ashish Darbari	University of Southampton
Neil Downie	University of Surrey
Penny Endersby	University of Southampton
David Falzani	University of Nottingham
Dr Shaun Fitzgerald FREng	University of Cambridge
Stefan Gabriel	University of Huddersfield

Name	University
Chris Goff	University of Kent
Jacob Hacker	University College London
Dr John Haine	University of Bristol
Dr Erol Hepsaydir	University of Kent
Jack Hynds	Aston University
Philip Sams	Northumbria University
Paul Jennings	University College London
Gareth Jones	Imperial / Royal College of Art
Pieter Knook	University of Cambridge
James Lamb	Brunel University
Stephen Legg	University of Surrey
Scott Lockyer	Loughborough University
John Mackey	University of Surrey
Professor Norman MacLeod	University of Leeds
Ed McCann	University College London
Barry Mills	University of Derby
Tim Milne	University of Leicester
Rick Mitchell	University of Cambridge
Chris Newbold	University of Surrey
John Nolan	University of Birmingham
Crispin Oakman	University of Nottingham
Gavin Proctor	Northumbria University
Paul Rawlinson	University of Manchester
Dr Mei Juan Ren	University of Manchester
Dorte Rich Jorgensen	Heriot Watt University
Paul Rijks	University of East Anglia
Franck Robert	Coventry University
Peter Robery FREng	University of Birmingham
Jonathan Sands	University of Huddersfield
Martin Simpson	University of Salford
Daniel Steenstra	Cranfield University
Adrian Stokes	Northumbria University
Keith Towell	University of Southampton
Simon Vaitkevicius	Bournemouth University
Hugh Varilly	University College London
Dick Whittington FREng	University of York
Paul Withey	University of Birmingham
Mike Wood	University of Sheffield
Darren Woolf	Loughborough University

SAINSBURY MANAGEMENT FELLOWSHIPS

This scheme seeks to enhance the national potential of UK engineering industry by providing a human resource pool of high career potential chartered engineers who have complemented their technical training and knowledge with an MBA degree from a leading international business school.

Ten fellowships were awarded during the year, the recipients being:

Name	Business school	Name	Business school
Nicholas Allen	IMD, Switzerland	Nikhil Sachdeva	Harvard Business School
Andrew Buckley	London Business School	Hersh Shah	IMD, Switzerland
Jorgina Busquets	London Business School	Farid Singh	INSEAD
Christopher Mannion	MIT	Charles Sudborough	London Business School
Kwok-Gam Ng	London Business School	Mengyi Wu	INSEAD
Philip Price	London Business School		

AEROSPACE MSC BURSARY SCHEME

The government, leading companies in the aerospace sector, the Royal Academy of Engineering (RAEng) and the Royal Aeronautical Society (RAeS) have developed an initiative to boost the supply of aeronautical engineering skills to the UK economy.

The main purpose of the scheme is to bring new talent, knowledge and skill into the UK aerospace sector. It is designed for people who would not otherwise be able to finance their MSc studies. It also provides MSc funding to upskill certain categories of employee already working in the UK aerospace sector.

In 2014-2015, 229 students were supported under this scheme at the following universities:

Aston, Bath, Brunel, Cardiff, City University London, Cranfield, Derby, Exeter, Glasgow, Glasgow Caledonian, Glyndwr, Hertfordshire, Huddersfield, Imperial College London, Kingston, Lancaster, Leeds, Liverpool, Loughborough, Manchester, Manchester Metropolitan, Newcastle, Open University, Oxford, Portsmouth, Queen's University Belfast, Queen Mary, University of London, Salford, Sheffield, Southampton, Staffordshire, Strathclyde, Swansea, University College London, Ulster, University of South Wales, University of West England, Warwick, York.

PETROFAC FELLOWSHIPS FOR THE ENHANCED GRADUATE ENGINEER

The enhanced graduate engineer is developed through a combination of an appropriate full-time postgraduate master's level degree coupled with additional learning and development opportunities provided by Petrofac.

In 2014-15 the following students were supported by these fellowships:

Name	University	Name	University
Mustapha Aljaf	University of Aberdeen	Chukwuka Maduekah	University of Sheffield
Karim Elrify	University of Aberdeen	Sean McKirdy	University of Aberdeen
Huroon Khan	Cranfield University	Harris Rana	Imperial College London
Hadi Khubeize	Cranfield University	Syed Shah	University of Sheffield
Andreas Koumouris	Heriot Watt University	Abdul Zafar	Imperial College London

SIR ROBERT MALPAS BURSARY

The enhanced graduate engineer is developed through a combination of an appropriate full-time postgraduate master's level degree coupled with additional learning and development opportunities provided by Petrofac.

In 2014-15 the following students were supported by these fellowships:

Robert Stiff	Aston University
Matt Tomlinson	Aston University

PANASONIC TRUST FELLOWSHIPS

The Panasonic Trust supports graduate engineers to acquire skills in environmental technology by supporting full-time study of appropriate master's courses.

Name	University	Name	University
Jack Barrie	University of Cambridge	Peter Renfrew	Heriot Watt University
Stephen Cressey	Loughborough University	Daniel Smith	University of Cambridge
Timothy Hull-Bailey	University of Cambridge	James Sweeny	University of Strathclyde
Timothy Liptrot	University of Birmingham	Jake Tudge	Imperial College London

HERTHA MARKS AYRTON FELLOWSHIP

This prestigious award was established by the Panasonic Trust to encourage members of underrepresented groups to reach their full technical potential by supporting them to study a full-time master's course in a new technology subject.

Emily Lewis	Imperial College London
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SIR ANGUS PATON BURSARY

The Panasonic Trust continued to award the Sir Angus Paton Bursary on behalf of the Academy. Enabled by an endowment in 1986 from Sir Angus Paton CMH FREng FRS, this annual bursary recognises excellence and seeks to inspire a suitably qualified engineer to study a full-time master's course related to water engineering.

Sefinat Otaru	Imperial College London
Heather Purshouse	University of Leeds

Queen Elizabeth Prize for Engineering

The Queen Elizabeth Prize for Engineering is a global award which 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.

QEPrize panel of judges

Name	Job title	
Lord Alec Broers FREng FRS	Chair of Judges, Past President, The Royal Academy of Engineering	UK
Professor Sir Christopher Snowden FREng	Deputy Chair and Chair Elect of Judges, President and Vice-Chancellor University of Surrey	UK
Professor Frances Arnold	Professor of Chemical Engineering, Bioengineering and Biochemistry at Caltech, USA	USA
Professor Brian Cox OBE	Royal Society Research Fellow, University of Manchester	UK
Professor Lynn Gladden CBE FREng FRS	Pro Vice Chancellor for Research, Shell Professor of Chemical Engineering at University of Cambridge	UK
Professor John Hennessy	President, Stanford University	USA
Professor Dr hc Reinhard Huettl	President, German National Academy of Science and Engineering (acatech)	Germany
Dr Chen Jining	Minister of Environmental Protection	China
Professor Calestous Juma HonFREng FRS	Professor of the practice of international development, Director of the Science, Technology and Globalisation Project, Harvard University	Global
Professor Hiroshi Komiyama	President, Engineering Academy Japan	Japan
Dr C D (Dan) Mote, Jr	President, U.S. National Academy of Engineering; Regents Professor, University of Maryland, USA	USA
Narayana Murthy CBE	Founder, Infosys	India
Professor Choon Fong Shih	Professor, National University of Singapore	Singapore
Professor Dr Dr hc Viola Vogel	Head of Laboratory of Applied Mechanobiology, ETH Zurich	Switzerland
Paul Westbury FREng	Group Technical Director, Laing O'Rourke	UK

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 the funding for the prize.

Lord Browne of Madingley FREng FRS (Chairman)
Professor Dame Ann Dowling DBE FREng FRS
Mala Gaonkar
Sir Paul Nurse HonFREng PRS
Sir John Beddington CMG HonFREng
Sir Mark Walport, Chief Scientific Adviser to UK Government, is adviser to the board.

Development and fundraising

QEPRIZE DONORS

The Queen Elizabeth Prize for Engineering Foundation extends its gratitude to the corporate donors whose generosity has funded an endowment to enable the continuing development of the Queen Elizabeth Prize. Support has been received from the following:

Founding donors

BAE Systems plc	Jaguar Land Rover	Sony
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BP plc	Shell UK Ltd	Tata Consultancy Services
GlaxoSmithKline	Siemens UK	Toshiba

Donors

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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 and seeking intelligence of emerging areas of accomplishment and innovation; and assisting in the search for nominations.

Name	Job title	
Professor Sir William Wakeham FREng	Chair of Search Group	UK
Professor Stephen Williamson FREng	Deputy and Chair Elect of Search Group, Former Deputy Vice-Chancellor Research and Innovation, University of Surrey	UK
Professor David Balmforth	Senior Vice President and President Elect ICE	UK
Dr David Clarke FREng	CEO Energy Technologies Institute	UK
Professor Carlos Henrique de Brito Cruz	Scientific Director of Fapesp (São Paulo Research Foundation)	Brazil
Professor Dave Delpy FREng FRS FMedSci	Former CEO EPSRC, Chair of DSAC (Defence Scientific Advisory Council)	UK
Professor Dr Igor Emri	Chairman of The Scientific Committee for Engineering Sciences, Chair of the ICR	Slovenia
Dr Alan Finkel AM FTSE FIE Aust	President of Australian Academy of Technological Sciences and Engineering (ATSE) and Chancellor of Monash University	Australia
Professor Il Soon Hwang	Seoul National University, Director, Nuclear Transmutation Energy Research Centre of Korea (NUTRECK).	South Korea
Dame Julia King DBE FREng FEI	Vice-Chancellor Aston University, Universities UK, EPSRC	UK
Professor Venkatesh Narayanamurti	Director of the Science, Technology and Public Policy Program at the Belfer Center for Science and International Affairs at the Harvard Kennedy School	USA
Professor Bjorn O Nilsson	President of the Academy Royal Swedish Academy of Engineering Sciences (IVA)	Sweden
Dr Baldev Raj	President, Indian National Academy of Engineering, Director Indira Gandhi Centre for Atomic Research (IGCAR)	India

DEVELOPMENT AND FUNDRAISING 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. Board members are:

Ian Barlow - Chair	Dr Tony Hayward FRSE (from July 2014)
Ayman Asfari FREng (from July 2014)	Steve Holliday FREng
Professor Haroon Ahmed FREng	Fred Kindle
Malcolm Brinded CBE FREng	Dr Mike Lynch OBE DL FREng FRS
Iain Conn FREng FRSE	Roberto Quarta (until February 2015)
Vivienne Cox	Simon Robey (until January 2015)
Andrew Gould	David Thomlinson FREng
Dr David Grant CBE FREng FLSW (until July 2014)	

CONTRIBUTORS TO ACADEMY PROGRAMMES

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 in the UK, and its engineering capacity-building work in sub-Saharan Africa. In the financial year support was received from the following:

ABB Ltd	The Entrepreneurs Fund	Mott MacDonald Group Ltd
Airbus Group NV	The ERA Foundation	National Grid plc
The Anglo American Group Foundation	The Sir John Fisher Foundation	NATS Ltd
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The Blavatnik Family Foundation	GKN plc	Rolls-Royce plc
The Douglas Bomford Trust	The Helsington Foundation	Royal Commission for the Exhibition of 1851
Robert Bosch Ltd	IBM UK Ltd	Sir Robin Saxby FREng
BP plc	Jaguar Land Rover Ltd	Shell Centenary Scholarship Fund
Malcolm Brinded CBE FREng	Johnson Matthey plc	Shell International Ltd
BT plc	The Leverhulme Trust	Urenco Ltd
The Commercial Education Trust	Dr Mike Lynch OBE FREng FRS	URS Corporation
ConocoPhillips Nigeria	Lady MacFarlane & family	Weir Group plc
Consolidated Contractors Company	Sir Robert Malpas CBE FREng	The Worshipful Company of Engineers
EDF Energy Nuclear Generation Ltd	The Motorola Solutions Foundation	

THE ROYAL ACADEMY OF ENGINEERING 2014 ANNUAL FUND

In November 2014 the Academy launched its third Annual Fund appeal to its Fellowship. The Academy would like to thank the following* including and also those Fellows who have made regular gifts for some years:

William Baker FREng	Dr John Lazar FREng	Dr Robert Sansom FREng
David Ball FREng	Professor Robert Mair CBE FREng FRS	Professor Sarah Springman CBE FREng
Peter Carr FREng	Trevor Massey OBE FREng	Professor Roger Wootton FREng
John Evans OBE JP FREng	William McAlonan FREng	Faith Wainwright MBE FREng
Dr Cecil French FREng	Professor John McWhirter FREng FRS FLSW	Dr Christoph Wiesner FREng

*a further eight Fellows wished their gifts to remain anonymous.

The Academy also wishes to acknowledge a gift from Mrs Pauline Rowe in memory of Professor Peter N Rowe FREng

The Academy would also like to thank those Fellows who in opting for Emeritus status, made a donation to the Academy in place of an annual subscription.

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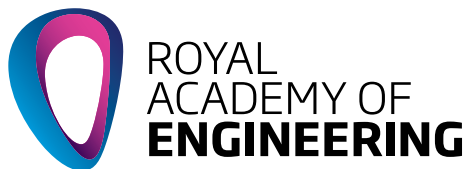
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