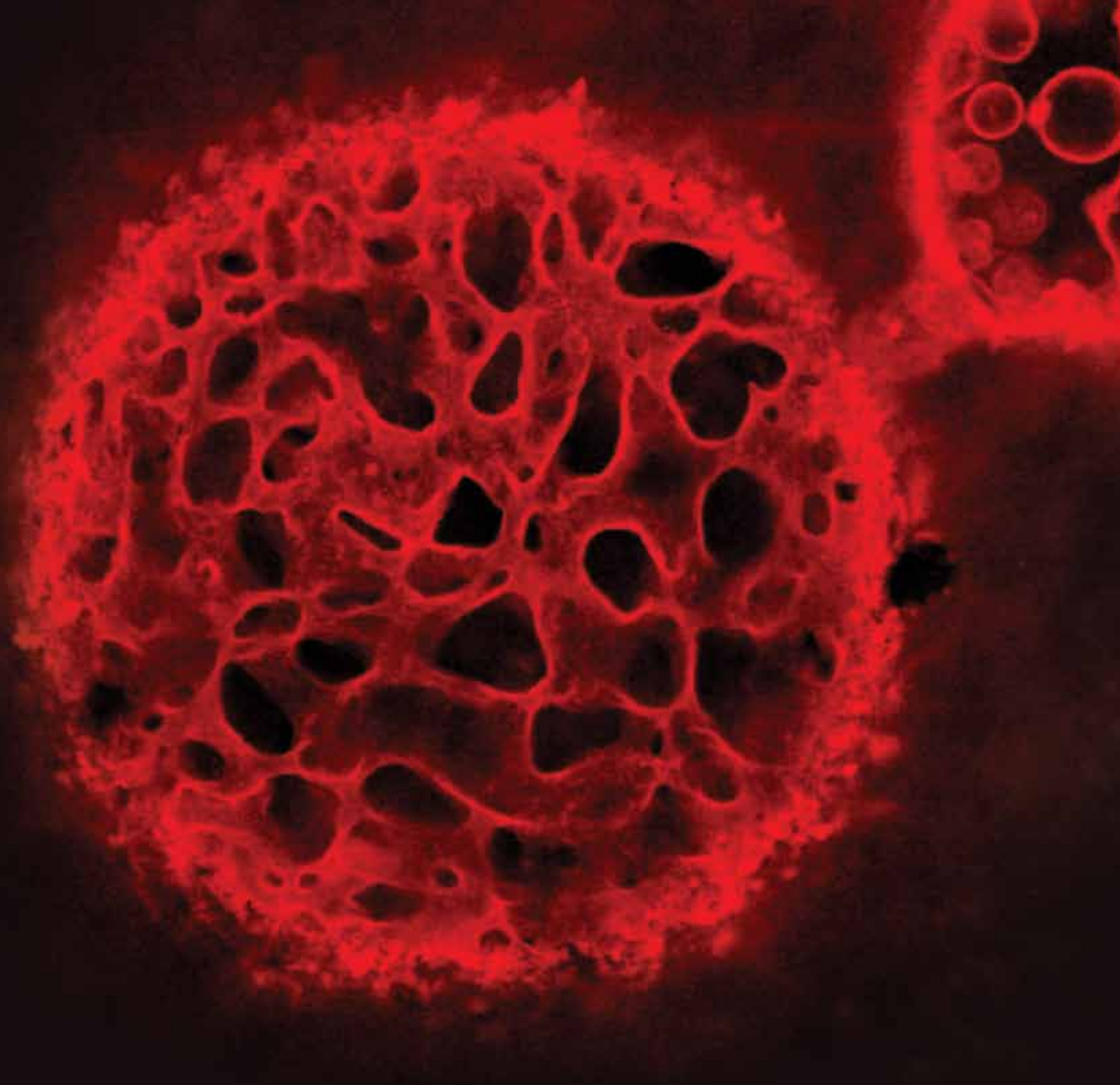

Trustees' report and financial statements

For the year ended 31 March 2013

THE ROYAL SOCIETY

Trustees
The Trustees of the Society are the members of its Council, who are elected by the Fellowship. Council is chaired by the President of the Society. During 2012/13, the members of Council were as follows:

President
Sir Paul Nurse

Foreign Secretary
Professor Martyn Poliakoff CBE

Physical Secretary
Professor John Pethica

Biological Secretary
Dame Jean Thomas DBE

Treasurer
Sir Peter Williams *
Professor Anthony Cheetham **

Members of Council
Professor Gillian Bates
Professor Andrew Blake *
Professor Geoffrey Boulton OBE **
Sir John Beddington CMG **
Dr Simon Campbell CBE
Professor John Collinge CBE
Professor Athene Donald DBE **
Professor Peter Donnelly *
Professor Carlos Frenk **
Professor Alexander Halliday
Professor Judith Howard CBE
Professor Frances Kirwan **
Professor Ottoline Leyser CBE **
Dr Robin Lovell-Badge
Professor John McWhirter *
Professor Kim Nasmyth *
Professor Roger Owen **
Dame Linda Partridge *
Professor Timothy Pedley **
Professor Trevor Robbins *
Professor Wilson Sibbett *
Sir Christopher Snowden *
Professor Nicholas Tonks
Professor John Wood **
* up to 30 November 2012
** since 1 December 2012

Executive Director
Dr Julie Maxton

Statutory Auditor
BDO LLP
55 Baker Street
London
W1U 7EU

Bankers
The Royal Bank of Scotland
1 Princess Street
London
EC2R 8BP

Investment Managers
Rathbone Brothers PLC
1 Curzon Street
London
W1J 5FB

Internal Auditors
PricewaterhouseCoopers LLP
Cornwall Court
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Birmingham
B3 2DT

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Registered Address
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London SW1Y 5AG

royalsociety.org

Cover: Bicontinuous, interfacially jammed emulsion gel capsule. Courtesy of Dr Paul Clegg, Industry Fellow.

Contents

President's foreword

It has been an exciting year for the Royal Society. As a biologist I was very proud that we appointed the first Sir Henry Dale Fellowships, bringing together the might of the Wellcome Trust and the Royal Society to back some of the most highly valued young scientists in the world.

Together with the Royal Academy of Engineering, we made a major contribution to the debate on fracking. Our report on openness and transparency in science will help shape the future of the scientific endeavour. Working with the Department for International Development we have established a £15.3 million programme to help strengthen research and training capacity across sub-Saharan Africa.

We played host to Professor Brian Cox talking about how to make Britain the best place to do science and the Chancellor of the Exchequer, George Osborne MP, outlined his vision for long term sustainable economic growth with science and innovation at its heart. I had the chance to revisit that with the Chancellor when I was guest editor on BBC Radio 4's *Today* programme.

Our new Supplemental Charter will make our governance more robust and we have launched our 'Year of Science and Industry' to make sure that all parts of the UK's scientific ecosystem are working together.

These are just some of my highlights and this report summarises the full range of the activities the Society has undertaken to deliver our five year strategy for recognising and supporting excellence in science, providing scientific advice to policy makers, fostering international collaboration, stimulating public engagement with science, and generally promoting science and its benefits.

The Society is at the heart of promoting science and the place of science in national life. That is because of our position as an authoritative, independent body at the centre of British science. We owe that to the many volunteers, within and beyond the Fellowship, who give their time freely to the Society and to our staff.

President,
Sir Paul Nurse

Executive Director's report

Following a period of consultation with Fellows and Foreign Members in 2011 the Society launched its strategic plan for 2012 – 2017 to emphasise its commitment to the highest quality science. I am pleased to report we are making strong progress in all areas towards delivering the strategic priorities laid out in the plan.

One highlight of the year included the designation of a 'Year of Science and Industry', with an extensive series of events and activities to showcase excellence in UK industrial science and to strengthen links between the Royal Society, industry, academia and the public.

Speaking at the Society in November 2012 the Chancellor set out eight future technologies in which the government believes the UK has the potential to be world-leading. Via the science and industry programme and other initiatives, the Society recognises that world class research and development in UK industry is essential for transforming innovative ideas into commercially successful products, economic growth, and securing the science base.

The strategic plan highlights the Society's dedication to strengthening its links with existing partners as well as fostering new relationships. Throughout the year, the Society collaborated on a number of issues with its four sister academies. Joint work included publication of a report on human enhancement and the workplace, co-hosted policy discussions at the autumn party conferences and working together to highlight the importance of research to health, wellbeing, economic and social progress in the UK.

The appointment of the first Sir Henry Dale Fellowships in 2012 with the Wellcome Trust represents a highly valued opportunity for scientists – providing support for outstanding post-doctoral scientists wishing to address an important biomedical question.

Science is a global activity and the Society has continued to develop its international policy work by engaging with a range of intergovernmental fora and bodies such as the UN Convention on Biodiversity, the UN Conference on Sustainable Development and contributing to the work of the European Academies Science Advisory Council on biofuels, climate change and direct-to-consumer genetic testing. The Society continued its efforts in capacity building in Africa and engaged with the Commonwealth and some of the emerging economies, notably China and Russia.

Executive Director,
Dr Julie Maxton

Ensuring everyone has the opportunity to engage with science, whether through formal education or through other resources and events, is a priority for the Society. In 2013 the Society's first Public Engagement Committee was established to oversee a significant step-change in how the public may be involved with science and activities the Society is involved in, including policy advice.

The backbone of the Society is its Fellowship and this year a new programme of events has been designed for Fellows, including research weekends at the Kavli Royal Society Centre at Chicheley Hall, scientific meetings in London and regional meetings with the President. I would like to thank all those who have given their time to take part and to send us their feedback.

Thanks are also due to the Fellows, staff and wider scientific community for their dedication in making this year such a success.


Digiti lingua: a celebration of British Sign Language and Deaf Culture
THE ROYAL SOCIETY

Trustees' Report

The Royal Society

The Royal Society of London for Improving Natural Knowledge, commonly known as the Royal Society, is a self-governing Fellowship of many of the world's most distinguished scientists drawn from all areas of science, engineering, and medicine. The Society's fundamental purpose, reflected in its founding Charters of the 1660s, is to recognise, promote, and support excellence in science and to encourage the development and use of science for the benefit of humanity.

The Society is the national Academy of science in the UK, and its core is its Fellowship and Foreign Membership. The Fellowship comprises the most eminent scientists of the UK, Ireland, and the Commonwealth. Fellows are elected through a peer review process on the basis of their excellence in science. There are approximately 1,350 Fellows and a further 150 Foreign Members, including more than 80 Nobel Laureates. It is from the eminence of its Fellowship and Foreign Membership and its independence from government and particular interests that the authority of the Society in scientific matters derives. Fellows and Foreign Members are invited to fulfil a range of responsibilities for the Society on a voluntary basis. Many others, scientists and non-scientists, also contribute to the work of the Society on a voluntary basis. The Fellowship is supported by staff based mainly in London.

A major activity of the Society is identifying and supporting the work of outstanding scientists. The Society supports researchers through a range of schemes funded by government, foundations, trusts, research councils, industrial organisations, gifts, and from the Society's own resources. The Society facilitates interaction and communication among scientists via its discussion meetings and disseminates scientific advances through its journals. The Society also engages beyond the research community, through independent policy work, the promotion of high quality science education, and communication with the public.

The Society has six strategic priorities, detailed in the strategic plan 2012 – 2017:

- Promoting science and its benefits
- Recognising excellence in science
- Supporting outstanding science
- Providing scientific advice for policy
- Fostering international and global cooperation
- Education and public engagement

Clockwise: Professor Brian Cox receives the Royal Society Faraday Prize from Sir Paul Nurse; networking at a Pairing scheme event; the Society's Summer Science Exhibition 2012; Partnership Grant holders Trinity C of E High School in Manchester at the Summer Science Exhibition; Dr Paddy Lad and Professor Bencie Woll at *Digita Lingua: a celebration of British Sign Language and deaf culture* at the Society.


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Promoting science and its benefits

The Society will work with all those doing science in industry, the public sector and universities to highlight the importance of research to our health and wellbeing as well as to our economic and social progress.

Science and industry

The Royal Society is committed to innovative science, recognising that world class research and development in UK industry is essential for transforming innovative ideas into commercially successful products, economic growth and securing the science base.

The Society is highlighting innovation through a 'Year of Science and Industry'. Launched at the Society's Labs to Riches event at the end of 2012, the programme brings together industry, academia and the public across a range of events. These include scientific meetings, prize lectures, workshops and industrial symposia – all of which are contributing to a better understanding of industrial research and development and a greater appreciation for the quantity and quality of innovative scientific research taking place throughout the UK.

Following a meeting of Industry Fellows in November 2012, the Industry Fellows College, an online network of former and current Royal Society Industry Fellows and their hosts and partner organisations, was established to bring together researchers from both academia and industry with an interest in translational research to share learning, disseminate good practice, promote strategic debate, and to develop and provide opportunities for greater cross-sector collaboration. All past and current Industry Fellows have been contacted and invited to join.

Pairing scheme

This year's Pairing scheme, which builds bridges between parliamentarians, civil servants and some of the best research scientists in the UK, saw 30 pairs take part, with 18 scientist-civil servant pairs and 12 scientist-MP pairs. The Society held its first alumni event bringing together a number of previous participants to share their experiences and involvement with science since they took part in the scheme.

Dr Elaine Gosling, Research Associate at the Loughborough Design School of Loughborough University, took part in the Pairing scheme in 2012.

"I wanted to thank you and your team for the opportunity the scheme has provided me. I have continued to meet up with Nicky Morgan MP in Loughborough and we email and 'tweet' each other regularly. I have also been invited back down to London in June for Prime Minister's Questions (PMQs) and to have a catch up.

The scheme has been a fantastic experience professionally and personally. It has facilitated in my 'being noticed' amongst academics within the School and the University. I have also been given a fantastic boost of confidence to have been selected to be part of the scheme.

Personally I have become much more interested in politics and policy and find myself watching PMQs wishing I was back there. I also have a greater appreciation as to why and how decisions are made.

It was for me an experience I would like again, next time with a civil servant. I hope that my career in academia continues and that one day I can re-apply and see changes in sharing of information to help decision makers."

Clockwise from top left: Professor Russell Morris receives the Brian Mercer Award for Innovation from HRH The Duke of York; attendees at the Society's annual Labs to Riches event; panel members at a Pairing scheme event; OrganOx Ltd present their innovative new device at Labs to Riches; the Society's 'Year of Science and Industry'.

Discussion meetings

Almost 2,000 people attended Royal Society discussion meetings during the year, selected from an open call for proposals to the scientific community. Discussing the big questions and latest findings in the topic, they bring together the leading scientists and engineers from around the world. Topics included *Achieving food and environmental security – new approaches to close the gap* and *Characterising exoplanets: detection, formation, interiors, atmospheres and habitability*. Discussion meetings are often followed by a more focused, residential meeting at the Kavli Royal Society Centre at Chicheley Hall.

"[The meeting was] a real landmark in progress. One we will all remember."

Professor Bill Martin, Heinrich Heine University, organiser of the *Energy transduction and genome function* discussion meeting.

Enterprise Fund

The Society's Enterprise Fund supports outstanding translational science which has potential commercial benefit by providing funding and advice. Recognition provided by the Society helps the companies raise additional support. Currently the Society is supporting four companies.

World first in liver transplants

The world's first 'warm liver' transplant using a liver kept 'alive' at body temperature took place in February 2013, supported by a Royal Society Enterprise Fund portfolio company, OrganOx Ltd. Donor livers are currently kept on ice between organ retrieval and transplantation procedures, meaning many become damaged as a result. OrganOx Ltd, a start-up company partially funded by the Royal Society, has developed a device that keeps the liver functioning outside the human body by providing the blood flow, oxygen, nutrients and temperature required by the liver.

This is expected to revolutionise organ transplantation and significantly increase the number of livers available for life saving transplantation procedures. The technique, carried out at the liver transplant centre at King's College Hospital, is the result of 15 years of collaboration between a biomedical engineer and a transplant surgeon at Oxford University.

Sir Peter Williams FRS, Treasurer of the Royal Society until 30 November 2012, said: "With almost 2000 livers being retrieved and then discarded each year and a waiting list of 30,000 in Europe and the US, there's an obvious need for the technology that OrganOx is working on. The Royal Society Enterprise Fund is very pleased to join OrganOx's investors and we look forward to the results of their clinical studies later this year. This is exactly the sort of company that the fund was set up to support."

Above: Flyers promoting the Royal Society scientific programme events; the OrganOx device to keep livers functioning outside the human body.

Publishing

During the year an outline framework for the 350th anniversary of the launch of *Philosophical Transactions* in 2015 was developed. Through a series of events and activities, the anniversary programme will raise the profile of Royal Society publishing to scientists.

Philosophical Transactions was the first journal devoted to science. It introduced two key concepts essential for the scientific enterprise, namely peer review and scientific priority. Today, over 20,000 journals are based in some way on these concepts. This anniversary is an opportunity to showcase the on-going pioneering work of the Society and its journals.

The Society's Publishing and Library teams are collaborating on an initiative to digitise and index the Society's most influential archive documents, including the printed volumes of the *Philosophical Transactions* (and other Society publications) to mark the journal's 350th anniversary in 2015. For years scholars have had to visit the Society to access and search materials not yet digitised, and this project aims to provide the first comprehensive online resource with greater opportunities for scholarship and collaboration.

Open access

In 2011 the government established a working group chaired by Dame Janet Finch to examine the question of expanding access to published research findings. The government accepted the recommendations of the *Finch Group Report* in July 2012 and set a policy direction requiring all publicly-funded research to be published in open access mode from April 2013. Shortly afterwards Research Councils UK (RCUK) revised their policy on open access to take account of this requirement. All Royal Society journals are fully compliant with the RCUK open access policy.

Above: Images from the archives of the Society's *Philosophical Transactions*, which celebrates its 350th anniversary in 2015. Top right: The joint *Open access* event held at the Society in February 2013, chaired by Dame Janet Finch.

More than **2,000** people attended ten Royal Society prize lectures during the year

Recognising excellence in science

The Society rewards the excellence and creativity of scientists no matter who they are and where they are from, electing the best to be Fellows and Foreign Members and giving awards to those scientists who are making a major contribution to society.

The Fellowship

Forty-four Fellows and eight Foreign Members were elected to the Society in April 2012. New Fellows and Foreign Members were admitted at a three-day event in July during which each gave a seminar on their research. At 31 March 2013, there were 1,368 Fellows and 150 Foreign members.

In 2012 the Society launched a new programme of events specifically for Fellows, research weekends at the Kavli Royal Society Centre at Chicheley Hall, scientific meetings in London and regional meetings with the President. The Society is grateful to Fellows who have taken part, the positive feedback they have provided and the take-up of invitations to organise and host future events.

As part of the Fellowship programme, the Society has already held regional events in Manchester, Durham and Cardiff, two research weekends at the Kavli Royal Society Centre and a scientific meeting at the Royal Society, involving around 250 Fellows.

"Having these relatively small general, curiosity-driven meetings rekindles what I assume to be part of the original ethos of the Fellowship – meetings of like-minded individuals to discuss and ponder aspects of natural philosophy for its own sake. The venue for this meeting added to the sense of history and long traditions of the Society."

Professor Alun Davies FRS FMedSci, Distinguished Research Professor, Cardiff School of Biosciences, Cardiff University following his attendance at the Fellows research weekend at Chicheley Hall in December 2012.

Medals and awards

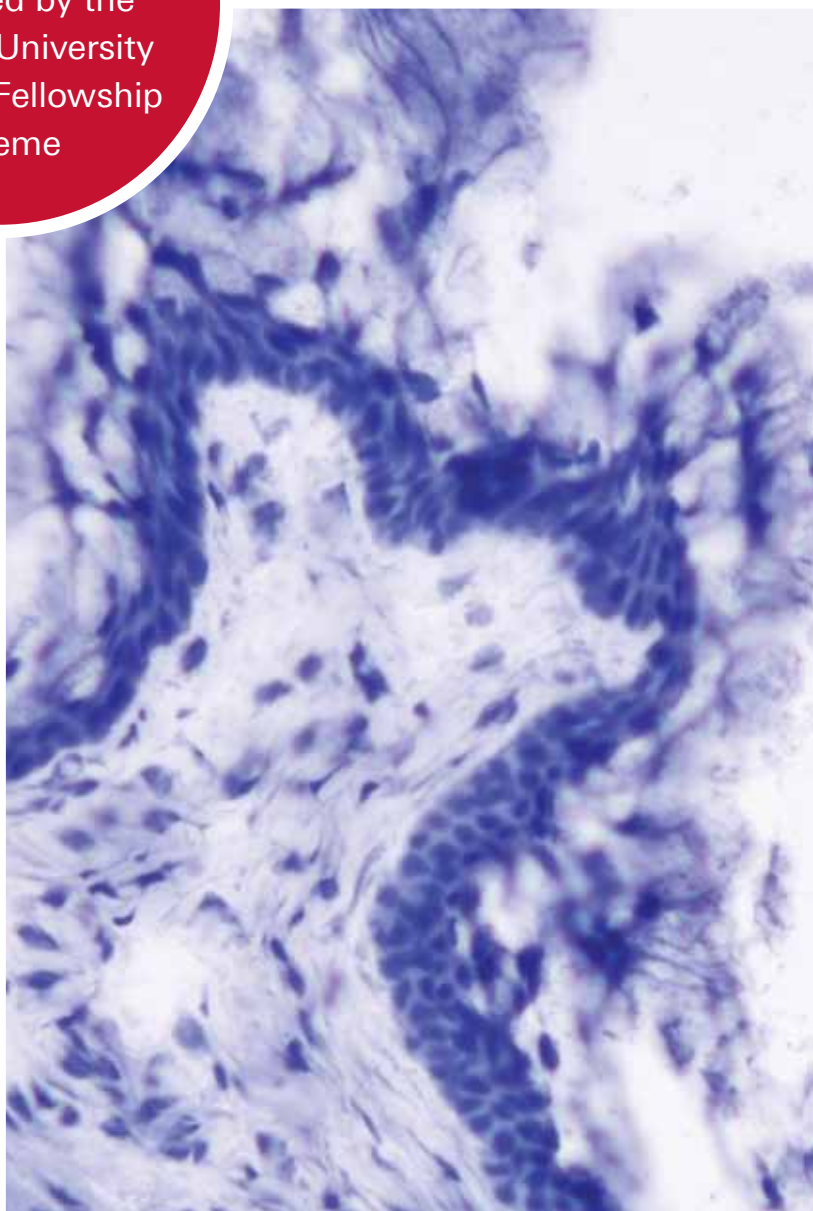
The Royal Society Pfizer Award celebrated not only the winner Dr Samuel Kariuki from the Kenyan Medical Research Institute, for his research into invasive salmonella infections (and so emphasising the importance of supporting outstanding science in Africa), but also for the first time the Royal Society awarded a second prize, the Royal Society Pfizer Exceptional Merit Award. This has been awarded to Dr Martin Ota from the Medical Research Unit in The Gambia for his research into invasive pneumococcal diseases. These awards are designed to select and nurture dynamic African scientists, at the outset of their career, who are working in the biological and health sciences.

Brian Mercer Awards

The Brian Mercer Awards were established in 2001 as the result of a generous bequest received from the late Dr Brian Mercer. Dr Mercer was an enthusiastic inventor and entrepreneur and these awards provide support for researchers who wish to develop an already proven concept or prototype into a commercial product. The awards are presented in the areas of the built environment, clean technology and energy and nanotechnology. One Innovation Award of up to £250,000 is supported by the Society, and several Feasibility Awards (each worth £30,000) are funded by the Engineering and Physical Sciences Research Council (EPSRC). A further Feasibility Award is supported by the ERA foundation and given in the field of electro-technology (including telecommunications and IT systems). The Society is grateful for the ongoing support of the ERA Foundation which has committed to further funding for this scheme over the next five years. In 2012/13 Professor Russell Morris of the University of St Andrews received the Brian Mercer Award for Innovation and Dr Jason Davis of the University of Oxford and Dr Peter Demian of Loughborough University received Brian Mercer Feasibility Awards.

Clockwise from top left: Brian Mercer Award winner Dr Peter Demian of Loughborough University with Professor Martyn Poliakoff CBE FRS; Brian Mercer Award winner Dr Jason Davis of the University of Oxford; a member of the research team of Dr Martin Ota (Royal Society Pfizer Exceptional Merit Award winner); Royal Society Pfizer Award winner Dr Samuel Kariuki shows his findings to his team; Dr Martin Ota.

285
scientists are supported by the Society's University Research Fellowship scheme



Supporting outstanding science

The Royal Society funds outstanding scientists and offers them more freedom to follow their research interests. The Society's focus is on the most exceptional and creative individuals rather than on particular disciplines.

Sir Henry Dale Fellowships

The appointment of the first Sir Henry Dale Fellowships in 2012 is a landmark event in UK science. Using the reputation of the Society in the scientific world and the standing of the Wellcome Trust in the medical sphere, these Research Fellowships represent some of the most highly-valued early to mid-career opportunities in the UK and internationally. They support outstanding post-doctoral scientists wishing to address an important biomedical question and they enable the best researchers to build their own independent research career in a UK-based research institution. The scheme will support individuals who would have previously applied for a 'biomedical' Royal Society University Research Fellowship. The first two rounds of awards were made in 2012/13 and 19 scientists are currently supported under this scheme.

Industry Fellowships

These Research Fellowships are funded by the Royal Society, the Engineering and Physical Sciences Research Council, the Biotechnology and Biological Sciences Research Council, the Natural Environment Research Council, Rolls-Royce plc and BP. They support knowledge transfer between industry and academia. 24 Industry Fellows were appointed in 2012/13, bringing the total number of scientists supported to 47.

- **37** new Research Fellows were appointed to the Society's University Research Fellowship scheme in 2012/13, joining a total of 285 scientists supported under the scheme.
- **6** Dorothy Hodgkin Fellows were appointed in 2012, joining a total of 40 scientists supported under the scheme, providing a first step into an independent research career for excellent scientists for whom career flexibility is essential.

Dr Claire Spottiswoode, Dorothy Hodgkin Fellow, Department of Zoology, University of Cambridge

"My research looks at coevolution in brood parasitic birds, which exploit other species to bear the costs of raising their young. Parasitic birds such as cuckoos can become locked in coevolutionary struggles with their hosts, each to stay one step ahead of the other.

Brood parasitism is seen not only in cuckoos, and my field research in Central Africa focuses on two other independent events where a parasitic lifestyle has evolved in birds. I also study the evolutionary history of these interactions using genetic approaches, and have found them to be remarkably ancient.

My research aims to add to our understanding not only of brood-parasitic adaptations, but also of broader coevolutionary dynamics involving one parasite and multiple hosts or host genetic strains: there are parallels, for example, with the interactions between ourselves and the pathogens that cause our diseases.

It is not an exaggeration to say that my Dorothy Hodgkin Fellowship has changed my life and allowed me to progress in my field research and career in ways that otherwise would have been out of reach. The Royal Society's warm support, generosity and trust have also made these last few years the happiest period of my scientific life so far."

Clockwise: *Honeyguide fieldwork* in Zambia by Dr Claire Spottiswoode, Dorothy Hodgkin Fellow; *Cervical epithelial cells localising before labour*, Dr Guillermina Girardi, Wolfson Research Merit Award holder; *Protein crystals of a pro-phage encoded poltsaccharide lyase*, Dr Edward Taylor, University Research Fellow; *Plasma electrolysis in action*, Dr James Curran, Industry Fellow.

- **3** new Research Professors, internationally recognised scientists of outstanding achievement, were appointed, bringing the total number supported to 16.
- **72** Royal Society Wolfson Research Merit Awards were made in 2012/13, meaning 196 scientists are now supported under this scheme to attract to or retain in the UK researchers with great potential or outstanding achievement.

Professor Matthew Rosseinsky FRS, Department of Chemistry, University of Liverpool

Professor Rosseinsky's research concentrates on the chemical synthesis of new materials. He leads a research group that works to enhance both the fundamental knowledge of physical and chemical properties of new materials, and to improve the performance of materials for applications including energy storage and generation, communications and catalysis. One of the group's current projects is the development of porous materials with nanometre-sized openings, which have applications in the storage of energy gases such as methane and hydrogen, molecular separation and purification, and the delivery of drugs and medical gases.

"The materials I work on are crystalline solids whose regular structures involve the ordered assembly of millions of atoms. This produces quite different chemical challenges to those involved in making small molecules. We need new scientific methods to allow us to assemble the materials we need systematically, rather than relying on the small number of what are 'lucky punches' that form the basis of so much of modern technology.

The Royal Society Research Professorship will allow me to work on this problem of the chemical control of the structure and properties of extended solids, together with many colleagues whose skills and insight will be needed to meet it."

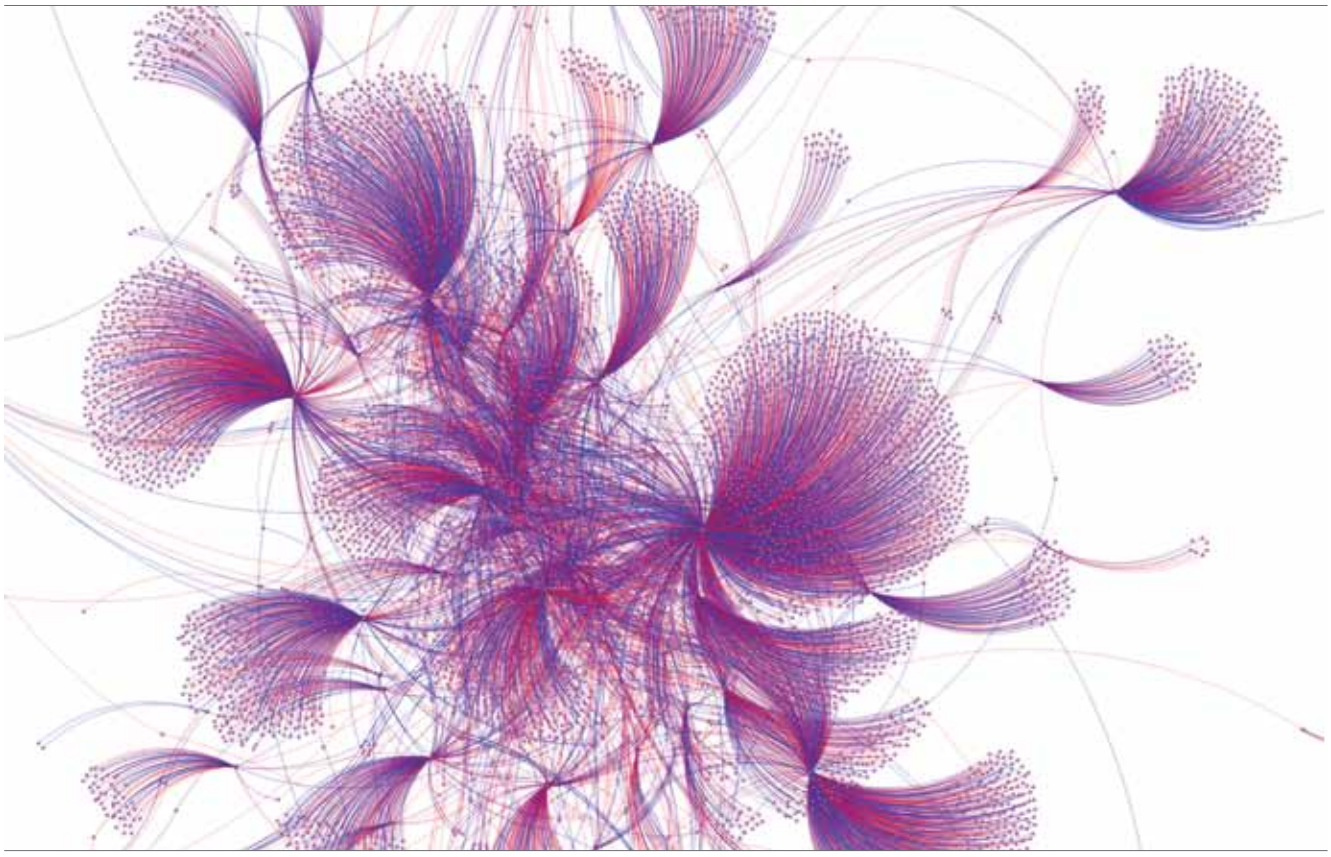
Professor Philip Torr, Wolfson Research Merit Award Holder, Department of Computing, Oxford Brookes University

In the past 40 years, computers and digital cameras have increased in both power and prevalence. But how do we make computers see the way we see? Humans make sense of the movement, colours, objects and people we see in our environment, and Professor Torr's research is dedicated to transferring this visual interpretation to the world of computers.

There has already been a large amount of research in computer vision, leading to an in-depth understanding of functions like feature detectors, tracking, camera calibration, and segmentation, but there has been only a limited amount of research on putting all this together into a framework that would allow the computer or camera to recognise the objects in the scene and be able to describe their shape. Such a framework could have wide-ranging applications – a recent example being complex computer software which Professor Torr's team has developed with Sony PlayStation, which brings books to life by allowing players to control their computer through natural hand gestures.

Other grants

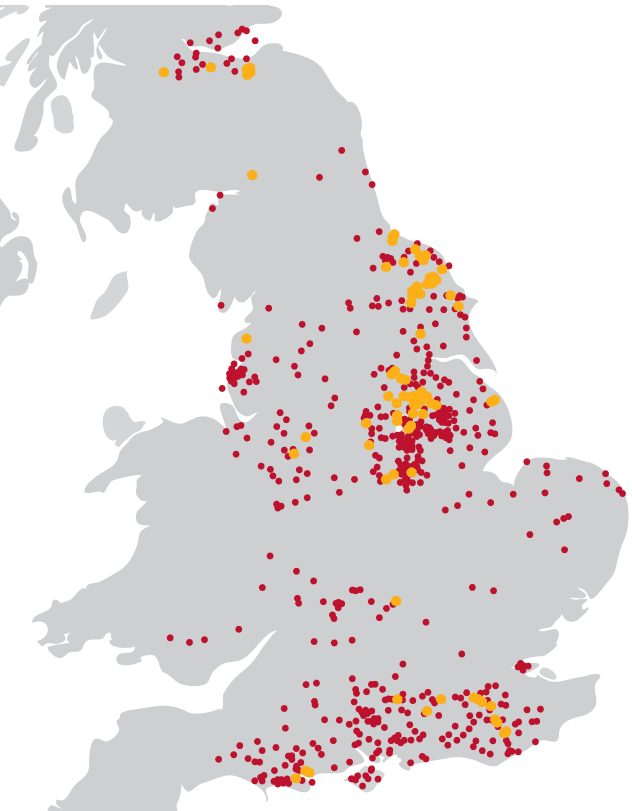
- **7** Royal Society Leverhulme Trust Senior Research Fellows were appointed, to provide opportunities for academic researchers to be relieved of all their teaching and administrative duties to concentrate on full-time research for up to one year.
- **6** awards were made to the Paul Instrument Fund, supporting scientists in the UK who want to design and construct a novel instrument to measure phenomena in the physical sciences.
- **155** small Research Grants were awarded, providing 'seed corn' funding to enable young scientists to initiate new projects.
- **16** Research Grants for Research Fellows were awarded (Research Fellows in the first year of their Fellowship can apply for up to £150k over three years).
- **7** awards were made to the Wolfson Laboratory Research scheme (funded by the Wolfson Foundation), to improve the existing physical infrastructure in UK universities to promote high-quality scientific research.



Twitter activity: a snapshot of tweeter-follower interactions as a conversation grows by D. J. Higham, Royal Society Wolfson Research Merit Award holder from the University of Strathclyde, P. Laflin, F. Ainley, A. Otley from Bloom Agency, A. V. Mantzaris from the University of Strathclyde and Bloom Agency, and P. Grindrod from the University of Reading.

133

media references to *Shale gas extraction in the UK*, a joint report with the Royal Academy of Engineering



Providing scientific advice for policy

Through the Science Policy Centre, the Society aims to ensure the government has access to impartial, expert advice to inform debate and guide good decision-making.

During 2012/13, priorities ranged from population change and consumption to open data and open access publishing, synthetic biology to science and mathematics education in schools, investment in science and innovation to shale gas. The backbone of the Society's policy work remains the detailed report, analysing the scientific evidence related to an issue over 12 to 18 months and making policy recommendations. However, the project that produced the report *Shale gas extraction in the UK: a review of hydraulic fracturing*, required adaptation to tried and tested ways of working to respond to a fast moving and sensitive policy issue.

Throughout the year the Society collaborated with its sister academies. The four national academies (the British Academy, the Royal Society, the Academy of Medical Sciences and the Royal Academy of Engineering), published a joint report on human enhancement and the workplace, co-hosted policy discussions at the autumn party conferences and continued to work together to highlight the importance of research to health, wellbeing, economic and social progress in the UK.

During 2012/13 the Royal Society continued to increase the reach, impact and influence of its policy work with UK, European and international decision-makers. In 2012, Science Policy Centre report launches were accompanied by private briefings for ministers and senior officials in the UK and overseas and the Society hosted major speeches by several Cabinet members including the Chancellor of the Exchequer, Business Secretary, Environment Secretary and International Development Secretary.

In November 2012 the Chancellor of the Exchequer, George Osborne MP, delivered his first major speech on science at the Royal Society to highlight his commitment to supporting research and explain his take on the role that scientific excellence plays in fuelling the UK economy. He recognised the importance of curiosity driven research and was fulsome in his praise of the Society's support for scientists today.

Undertaking a variety of activities on wide-ranging topics and engaging many countries, the Society produced major reports and statements, held events and workshops and participated in international conferences. The Society's series of policy labs included *The carbon crunch: how we're getting climate change wrong – and how to fix it*, *Negative emissions technologies: what are they, and what is their potential for managing climate change?*, *Meeting the challenge: science, technology and multilateral collaboration* and *Valuing nature: an audience with the Natural Capital Committee*, which included a keynote speech by Owen Paterson, MP, Secretary of State for Environment, Food and Rural Affairs.

The Society had a presence at the each of the autumn Party Political Conferences, holding fringe events on the themes of *To frack or not to frack?: the risks and benefits of shale gas extraction in the UK*, *People and the planet: the impacts of population and consumption on the global environment* and *Labs to riches: science and research as drivers of economic growth*. Speakers included David Willetts MP, Minister for Universities and Science, Rushanara Ali MP, Shadow Minister for International Development, Sir John Sulston FRS and Dame Julia King FREng, Vice Chancellor, Aston University.

Vince Cable MP, Secretary of State for Business, Innovation and Skills leads a session on *UK research: building bridges, building prosperity* at the Society; the Sociey's *Science as an open enterprise* report; George Osborne MP, Chancellor of the Exchequer giving a speech on science at the Society; diagram from the report *Shale gas extraction in the UK: a review of hydraulic fracturing*; attendees at *UK research: building bridges, building prosperity* at the Society.

Policy reports published

People and the Planet was launched in late April 2012 with a keynote speech from Andrew Mitchell MP, then Secretary of State for International Development. The report explored how population variables will affect and be affected by economies, environments, societies and cultures over the next 40 years and beyond. The Chair of the study Sir John Sulston FRS, presented at the United Nations (UN) Rio+20 negotiations in New York, where he headed up the UN Secretary General's daily media briefing and met with negotiators and Ambassadors. In June the Society held three events to meet with negotiators and delegates at the Rio+20 Earth Summit. Follow-up events have been held in the UK, USA, Japan, Germany and Kenya.

Highlights included the Society hosting the UN Secretary General's High-Level Panel on Post-2015 Development's first global civil society outreach day in November, where Sir John Sulston joined one of six roundtable discussions. The Society has also been asked by the UN Population Fund to nominate individuals for the Sustainable Development Goal expert panel and to take part in their work on the integration of population dynamics in the Post-2015 Development Agenda.

Science as an open enterprise was launched in June 2012 and described as a "landmark report" (*The Observer*) and a "major contribution" (RCUK). The main messages have been presented in a series of meetings with stakeholders in the UK, Brussels, Brazil and Taipei.

The Royal Society, Academy of Medical Sciences, British Academy and Royal Academy of Engineering published a joint workshop report on *Human enhancement and the future of work* in November 2012. The report explored potential enhancements arising from advances in science and engineering that are likely to impact on the future of work.

The Royal Society and the Royal Academy of Engineering's *Shale gas extraction in the UK: a review of hydraulic fracturing* was launched in June 2012. This study, commissioned by the Government Office for Science, looked at the major risks associated with hydraulic fracturing as a means to extract shale gas in the UK, including geological risks, such as seismicity, and environmental risks, such as the groundwater contamination and whether these risks can be effectively managed. Senior policymakers were briefed including Sir John Beddington FRS and departmental Chief Scientific Advisers; Secretaries of State Caroline Spelman MP (Environment) and Ed Davey MP (Energy and Climate Change); and regulators, including Lord Chris Smith (Chairman, Environment Agency) and Geoffrey Podger (Chief Executive, Health and Safety Executive).

Launch of *Science as an open enterprise* report.

Speaking about *Shale gas extraction in the UK*, Sir John Beddington FRS, former Government Chief Scientific Adviser said:

"Dialogue with the national academies has also reached a new level. Last year's joint report by the Royal Society and Royal Academy of Engineering on the risks associated with hydraulic fracturing to access shale gas illustrates how a relatively rapid response by the academies to a well posed question can directly inform government decision-making."

In December 2012, when announcing that hydraulic fracturing ('fracking') could continue in the UK, Ed Davey MP said [that he has]:

"had the benefit of the comprehensive and authoritative review of the risks of fracking by the Royal Society... the government accepts all the recommendations of the academies' report. Work is already in hand to implement these recommendations."

Ongoing policy work

In July 2012 the Society hosted a joint event with the Academy of Medical Sciences, the British Academy and the Royal Academy of Engineering with Vince Cable MP, Secretary of State for Business, Innovation and Skills, on *UK research: building bridges, building prosperity*. The emphasis was on the value of openness in science, highlighting the Society's work on science as an open enterprise.

Following up the Society's report *Fuel cycle stewardship in a nuclear renaissance*, in February 2013 the Society funded a workshop organised by the European Academies Science Advisory Council and Joint Research Centre in Belgium. The workshop brought experts from European countries to discuss issues about fuel cycle decision making that were highlighted in the Royal Society's 2011 study to discuss the study's recommendations about improving nuclear regulation in the UK.

In February 2013, the Society held a seminar in The Hague to inform preparations for the third Review Conference of the Chemical Weapons Convention. The seminar brought together leading scientists, policy experts, diplomats and senior officials, including the Director-General of the Organisation for the Prohibition of Chemical Weapons, to discuss the main findings of the Society's 2012 report *Brain Waves 3: Neuroscience, conflict and security*.

Brain waves 3: Neuroscience, conflict and secruity cover image.

Education policy

The Society seeks to ensure that government policy for science education is informed by robust advice, working in partnership where appropriate and in particular with ACME (the Advisory Committee on Mathematics Education) and SCORE (Science Community Representing Education).

The purpose of ACME, established in 2002 by the Royal Society and the Joint Mathematical Council of the UK with the explicit backing of all major mathematics organisations, is to enable an effective and constructive partnership between government and the mathematics community. It aims to inform and advise the Department for Education in order to assist in its drive to raise standards and promote mathematics at all levels within education.

SCORE is a partnership of science organisations. It aims to improve science education in schools and colleges in England by supporting the development and implementation of effective education policy. The SCORE committee works on priority areas of 5 – 19 education including curriculum, qualifications and assessment, the school and college workforce and the wider learning experience.

ACME (Advisory Committee on Mathematics Education)

ACME aims to influence government strategy and policies to improve the outcomes of mathematics teaching and learning in England and secure a mathematically enabled population. In 2012 ACME was asked by the Department for Education to lead on gathering the views of the mathematics community on the National Curriculum and followed this up by responding to a public consultation on draft programmes of study for all National Curriculum subjects in February 2013.

ACME's reports *Post-16 Mathematics: improving provision and participation* and *Post-16 Mathematics: planning for success* resulted in an announcement from the government that one of the recommendations, a new set of qualifications now known as 'Core Mathematics', will be in place by 2015.

In December 2012, ACME published *Raising the bar: developing able mathematicians*. The report highlighted that young people with the potential to successfully study mathematics at A level and beyond are being let down by a system that fails to allow them to develop a deep understanding of the subject.

Above left: ACME *Post-16 Mathematics* project session. Above right: students at Queen Mary's School of Physics and Astronomy, part of the South East Physics Network (SEPnet).

"ACME is right. Learning maths, indeed any subject, must not be a treadmill of revision and exams. Young people must gain a deep understanding. This is what will produce the mathematicians of the future."

A Department for Education spokesman speaking to the BBC regarding *Raising the Bar* in December 2012.

"The government is committed to ensuring that all young people in this country have a thorough grounding in maths by the age of 19, and we believe that maths is an essential part of every child's educational armoury."

Nick Gibb MP, ACME Annual 2012 conference.

SCORE (Science Community representing Education)

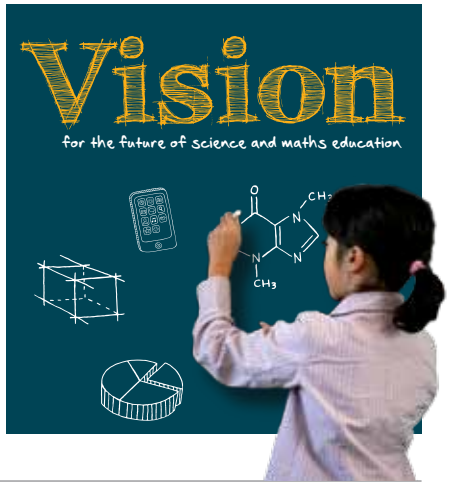
The Royal Society is one of the five science organisations that work together as SCORE, providing advice and input to government on science education policy. In 2012/13, SCORE provided advice on a range of subjects, including the National Curriculum in England, the content of qualifications at Key Stage 4, and A level reform. SCORE's proposal for national subject committees, to ensure appropriate engagement in the reform of A levels, has had considerable impact. In addition, the Education Select Committee featured SCORE's position in the report of an inquiry into how examinations for 15 – 19 year olds should be run and took great interest in SCORE's response to the Key Stage 4 consultation, inviting SCORE to discuss the issues raised.

One of the strengths of operating as SCORE, as well as being able to respond effectively to policy initiatives from government, is the ability to carry out proactive research on issues that impact on all three core school sciences. In April 2012, SCORE launched a report on mathematics in the A level sciences, which highlighted issues with the extent and type of assessment of mathematical ideas in A level question papers in physics, chemistry and biology. The research continues to have influence, and was cited by the Education Select Committee in their report on the administration of examinations.

Vision project

The Royal Society is undertaking an ambitious project to set out a vision for how the UK can develop an inspiring and high performing science and mathematics education system over the next 15 – 20 years, which will report in 2014. The project's Steering Committee have developed their ideas and have consulted widely on what others think of their vision and how it can be developed. The Committee is reviewing how the UK can create a system which provides all young people with an inspirational and relevant science and mathematics education by 2030. It is asking questions about our educational institutions, teaching workforce, curriculum and assessment and accountability mechanisms.

The Society's work in education outreach is covered in the section 'Education and public engagement' on page 30.



44

Fellows were appointed to the Newton International Fellowship

Fostering international and global cooperation

Science is an international activity and the Society is strengthening links with academies, funders and governments in Europe, the US and beyond, as well as supporting countries who are building their own scientific strength, particularly in Africa.

The Society is committed to extending the reach, scale, visibility and impact of current international activities and to explore new ways of working. In 2012/13 this has included building capacity in science in Africa, and engaging with the Commonwealth and some of the emerging economies, notably China and Russia.

Recognising the challenges in meeting the Society's international ambitions, in November 2012 Council commissioned the preparation of an international strategy, under the lead of the Foreign Secretary, Professor Martyn Poliakoff FRS, to be presented to Council in July 2013.

Working in partnership on global issues

The Royal Society continues to practice international leadership in science and science policy, through its membership of multilateral organisations, its central role in their governance and its participation in international meetings. Important partnerships this year have included The International Council for Science (ICSU) and UNESCO, as official co-organising partners of the science and technology community for Rio+20, and IAP (the global network of science academies) working on a joint statement that builds on the policy messages of the *People and the Planet* report. This report was also showcased at the annual Science and Technology in Society (STS) Forum in Japan, where Sir John Sulston FRS led a session on population and consumption.

Working in partnership with other academies around the world has been a strong theme this year. The Society actively contributed to the IAP triennial General Assembly and Conference (on grand challenges) held in Brazil, attended by 54 academies, where the Society ran a session on open data. Running alongside the biennial Royal Society-US National Academy of Sciences Joint Officers' meeting, this year's Sackler Forum was on *Integrated assessment models and the future needs of climate change research*. The final meeting of the UK-US-China synthetic biology symposia series took place in Washington, the culmination of two years of work on this unique six-academy project. Under the US's G8 Presidency, 15 academies worked together on three policy statements on *Links between water and energy security*; *Building resilience to natural and technological disasters*; and *Improving knowledge of emissions and sinks of greenhouse gases*. The statements were presented to John Holdren, Senior Adviser to President Obama on Science and Technology.

Strengthening links with European academies, funders, and governments

Noting the significance of European regulation for UK legislation and policy-making and the importance of European funding for science, the Society is engaging more fully at European level in matters of science policy. It is a member of the European Academies Science Advisory Council (EASAC), a grouping of the academies of science of the EU27 nations that produces reports and statements to members of the European Council, Parliament, Commission and other agencies. EASAC has issued a number of reports this year, including *Carbon capture and storage*, *Biofuels* and *Direct-to-consumer genetic testing*.

Clockwise: Foreign Secretary Professor Martyn Poliakoff FRS in Brazil; the IAP General Assembly and Conference in Brazil; Professor Christopher Whitty speaking at the launch of the Royal Society-DFID Africa Capacity Building Initiative at the Royal Society; a session at the UK-Russia *Frontiers of Science* event held in Russia; an 1829 map showing Russia (from the Royal Society collection).

Activities where science is growing

During the year, Council approved a new stream of work on a biennial Commonwealth Science Conference series, the first to take place in November 2014, which will bring together the Commonwealth's leading scientists to build strong and sustainable networks in research and policy.

Relations with leading emerging scientific nations were strengthened over the year. The Society organised a *Frontiers of Science* event (an international meeting of outstanding early-career scientists organised in conjunction with national academies and scientific organisations around the world), with the Russian Academy of Sciences and Academy of Sciences of the Republic of Tatarstan. A reciprocal programme of *Frontiers* meetings is in development with China and India – the first of these being held in Beijing in May 2013, in partnership with the Chinese Academy of Sciences (CAS).

This biennial *Frontiers* meeting with China was one of three initiatives agreed between Sir Paul Nurse and Professor Bai Chunli, President of CAS, in May 2012. They also agreed to develop a joint statement on the importance of investment in scientific research and to collaborate on the assessment and evaluation of research.

The Foreign Secretary, Professor Martyn Poliakoff FRS, has been leading efforts to develop stronger relations with Brazil, including a *Frontiers* meeting in 2014 and to forge closer cooperation with the Brazilian Academy of Sciences and FAPESP, the major research funding agency in Brazil.

A case study on *Science and innovation in Egypt* was published under the *Atlas of Islamic-World Science and innovation* project in December 2012 with a successful launch at the Bibliotheca Alexandrina, and further reports on Jordan, Indonesia and Senegal, along with a final report, are taking place.

Building capacity in science in Africa

The Royal Society, the Network of African Science Academies (NASAC) and Pfizer (US) have been working in partnership to build capacity in the national science academies of Ghana, Tanzania and Ethiopia, and the Foreign Secretary visited the latter two during the year. Secondees from all three academies visited the Society for two weeks in March 2013 to learn about science policy, communications, engaging with the media and fundraising. New funds were secured from Pfizer for a further year of African academy mentoring and programme support. The Foreign Secretary visited the French Académie des Sciences in December to help bridge capacity building efforts between Anglophone and Francophone countries, and hosted a workshop at the Society for eleven African academies alongside the Pfizer Award event.

Above left: Session at the UK-Russia *Frontiers of Science* meeting. Above right: *Science and innovation in Egypt* report.

With support from the Department for International Development (DFID), the Society has set up a flagship programme aimed at strengthening research and training capacity across sub-Saharan Africa by creating sustainable scientific networks, the Royal Society-DFID Africa Capacity Building Initiative. DFID will provide £15.3 million towards this scheme which will consist of two phases of awards, the first phase will provide funding to facilitate the assembly of research consortia and the second will support these consortia consisting of African groups and one UK-based laboratory. The scheme officially launched in November 2012 with a call for applications for the first phase of the awards (to be made in summer 2013).

During the year, five awards were made under the Leverhulme Royal Society Africa Award, which supports UK-Ghana and UK-Tanzania research collaborations, aiming to strengthen the research and training capacity at institutions in either African country. The awards offer support of up to £180,000 over three years for bi-lateral collaborations between researchers in the UK and Ghana or Tanzania. The award now covers PhD scholarships for students based in those countries following continued consultation with award holders.

Enhancing mobility

Through its wider grants programme, the Society continues to provide mechanisms for outstanding scientists to collaborate.

- **44** Research Fellows were appointed to the Newton International Fellowship to attract the very best early stage post-doctoral researchers from around the world to UK research institutions. This scheme is run in partnership with the British Academy and covers the broad range of natural and social sciences, engineering and the humanities.
- **21** awards were made to the International Scientific Seminar scheme, allowing Royal Society Research Fellows to organise two-day scientific seminars at the Kavli Royal Society Centre.
- **156** awards were made to the International Exchanges scheme for scientists in the UK who want to undertake collaboration with scientists overseas.
- The Royal Society and the Department of Science and Technology in India made **16** jointly-funded awards to the India-UK scientific seminars in 2012/13 which fund the organisation of a small three-day scientific meeting to bring together groups of early to mid-career scientists from India and the UK for the purpose of scientific discussion.

International scientific meetings

The programme at the Kavli Royal Society Centre at Chicheley Hall included six Theo Murphy International Meetings and 12 Research Fellows International Scientific Seminars.

The Research Fellows International Scientific Seminars are selected from a pool of applications from scientists funded by the Society. The programme is organised by the researchers bringing together specialists from around the world for a two-day, intensive residential meeting and in total 256 people attended during the year.

11,120
people attended the 2012 Summer Science Exhibition

Education and public engagement

The Society is committed to ensuring that everyone has the opportunity to appreciate the value of and engage with science, whether through top quality formal education or through other resources and events.

Summer Science Exhibition

The 2012 Summer Science Exhibition, the Society's flagship event, enjoyed a total audience of 11,120 visitors, with over 1,000 members of the public attending the opening day alone. The exhibition provides an opportunity for large numbers of the general public to interact in-depth with the scientists who are making new discoveries across the whole range of scientific disciplines.

20 exhibits of cutting-edge UK-based scientific research were displayed, selected by the Summer Science Exhibition Committee from 91 proposals received from an open call. Additionally, La Sainte Union School (funded through the Royal Society's Partnership Grants scheme) exhibited and the Society reflected the impact of the London Olympics 2012 with *Science and sport*, a showcase of the sporting talents of some of the Fellowship. In her Jubilee year, *Sovereign Science* was a celebration of scientific achievement during the reign of Her Majesty The Queen.

- **75%** of students felt that the Exhibition had made them more interested in science and more interested in the possibility of a science-based career.
- Almost **1,500** school students aged 14 to 18 years old from across the UK attended the exhibition.
- Nearly **98,000** visits were made to the 2012 Exhibition website (up 78% on 54,639 in 2011).

"Thank you so much for inviting myself and my colleague to the Summer Science Exhibition. We were both very excited about attending and the experience far surpassed our expectations. It was an evening of sheer inspiration. What a wonderful event you all put on – it is the best training I have been on in 15 years of teaching. Thank you – I now love my subject even more!"

Jill Spencer Formaggia, a Royal Society Associate Schools teacher at King Henry VIII School, Abergavenny.

Clockwise: Attendees at the Summer Science Exhibition 2012; the Royal Society Faraday Prize Lecture; Helen Sharman, the first female British cosmonaut gives the *Rocket Science! UK and Russia in orbit* talk (organised in association with the Science and Innovation Network – Russia); above Summer Science Exhibition 2012.

Public communication

The Society's café scientifique events provide a forum for the discussion of scientific ideas, where audience members join scientists and other specialists to explore current issues. The programme showcases the work of Royal Society funded scientists.

In March 2013 the Royal Society hosted a café on *Is growing old an illness?* where 100 members of the public joined Dr Matthew Piper to explore current research and discuss the options available in the near and distant future. Dr Matthew Piper is a Royal Society University Research Fellow at the Institute of Healthy Ageing, University College London. His research focuses on the effect of nutrition on health and the ageing process.

Over 2,000 people came to nine Society events held around the UK including the Edinburgh, Cheltenham and Manchester Science Festivals and the Hay Literature Festival – where over 800 people came to hear Lord Rees FRS talk about *The limits of science*.

- Over **5,000** people attended 29 public lectures, debates and café scientifiques run by the Society during 2012/13.

"There is hardly an example of 20th Century innovation that is not indebted to basic scientific thought."

Professor Brian Cox OBE, giving the Royal Society Faraday Prize and Lecture 2012 for his work in communicating science

Extraordinary achievement in popularising science

Professor Brian Cox's lecture on *Making Britain the best place to do science* explained the inspiration behind his passion for science and why the public communication of science is so vital. While 575 people were able to attend, hundreds more queued for hours outside the Society in the hope of listening to Professor Cox (many watched on television in dedicated overflow rooms), and thousands more watched live via the web on royalsociety.tv. The Prize Lecture was one of the most tweeted events ever held at the Society.

Professor Brian Cox is introduced by Sir Paul Nurse ahead of the Society's Faraday Prize Lecture; queues outside the Society to hear Professor Cox.

Education outreach

The Royal Society, through its work with young people, schools and colleges, and teachers, aims to:

- Inspire young people with the excitement and relevance of STEM (science, technology, engineering and mathematics) to their lives, and encourage a greater appreciation of the role of critical thinking, experimentation and the scientific method in decision making;
- Encourage young people to study STEM and related subjects at post-14, post-16 and beyond;
- Recognise and promote excellence in STEM education.

The Partnership Grants scheme provides funding for schools to run innovative projects in partnership with a professional scientist or engineer. Primary and secondary schools and colleges can apply for up to £3,000 to fund their project. This year the Society funded projects in areas of science including astronomy, food technology, engineering, forensic science, climate change and human biology, awarding 36 grants to schools across the UK totalling £72,000.

The Associate Schools and Colleges scheme is a UK network of teachers who share their experience and work with the Society to promote excellence in science and mathematics teaching. In 2012/13 Associate Schools and Colleges teachers were able to get involved in a range of Royal Society activities – joining Royal Society Committees including the Young People's Book Prize Judging Panel and the Partnership Grant Judging Panel. Teachers offered input to the Royal Society's work on the National Curriculum review consultation, which was then included into the SCORE response to the consultation.

The Society's work in education policy is covered under the section 'Providing scientific advice for policy' on pages 22 – 23.

Partnership Grants in action

Lockerbie Academy

The application of the science involved is integral to Partnership Grants projects. Students from Lockerbie Academy have been awarded a grant to work with road crash investigators to learn more about the experience of a road crash investigator, using science and maths skills to analyse a simulated crash.

Inspector Neil Hewitson of Dumfries and Galloway Road Policing Unit said: "Our project will bring to life what pupils learn about in the classroom and help them to understand the impact of science and engineering upon their day-to-day activities and focus this around a road safety message."

North Curry Primary School

The North Curry Primary School in Somerset are currently involved in an important piece of research into the affect of rainfall on river flow and flooding on the Somerset Levels, with help from a Met Office scientist.

Dr Will Lang, the scientist working on the project, said: "The Somerset Levels are a unique and ever-changing environment, and weather and flooding has a direct impact on the lives of the children at the school and their families, particularly in recent months. So our Royal Society-funded project, involving both the Met Office and the Environment Agency, aims to combine their experiences with observations of rainfall and river levels to explore the underlying scientific principles which affect their daily lives."

The stages of growth of a fig leaf from *Vegetable Staticks*, by Stephen Hales, 1727.

Improving accessibility

The introduction of sign language interpretation for public events marks the start of an important cultural shift in striving to make the Society's activities even more accessible to the widest range of people. The Michael Faraday Prize Lecture with Professor Brian Cox included a British Sign Language (BSL) interpreter. To celebrate the tenth anniversary of the formal recognition of BSL as a language in its own right, the Society organised *Digita Lingua: a celebration of British Sign Language and deaf culture* in February 2013 to explore some of the history, language and cultures of this community. Other public events which incorporated speech-to-text transcription included café scientifiques, and this programme will be rolled out more widely in the future.

Science book prizes

The 2012 Royal Society Book Prize for Young People went to *Science Experiments* by Robert Winston and Ian Graham (published by Dorling Kindersley). 115 judging panels of young people across the UK reviewed the shortlist and voted for the winner. The books were discussed at events at the Jorvick Viking Centre in York, the Newcastle Centre for Life and at the Summer Science Exhibition at the Society.

"Looking at these books made us think that science is interesting. If we had good books like this in class it would be more fun."

Bo'ness Academy, Falkirk

- *The Information* by James Gleick won the 2012 Royal Society Winton Prize for Science Books, selected from 101 entries.

Public engagement

The Society, its Fellows and Research Fellows have long engaged public audiences with science. The range of activities the Society currently undertakes includes lectures, debates, exhibitions, webcasts and regional events. Following consultations with the President, Officers and Council, the Society is aiming for a significant step-change in how it engages the public with science.

A new plan for public engagement is in development to integrate initiatives so that they are more tightly coupled with wider Royal Society activities, including policy advice. There will be a new focus to deliver more public engagement activities online and a greater emphasis on regional, inter-academy and cross-sector partnerships.

A Public Engagement Committee, chaired by Professor Russell Foster FRS of the University of Oxford, has been established to oversee work in this area.

Above: A British Sign Language interpreter at the Society's Faraday Lecture. Right: Science Book Prize winners 2012.

Safeguarding and promoting the history of science

Major exhibitions at the Society featured displays of artwork, beginning with an exhibition of Henry Moore sculptures and their mathematical roots. *Intersections: Henry Moore and stringed surfaces* ran from April to June 2012, followed by *Edward Lear and the scientists* from August to October.

The *Broadcasting science* exhibition from July to November celebrated Fellows' achievements on the BBC and including the loan of an extinct 'elephant bird' egg from Madagascar, courtesy of Sir David Attenborough FRS. This was in place for the Society's Summer Science Exhibition and was followed by *Romantic chemistry*, which launched in November 2012.

Diversity

Considerable activity has taken place at the Society during the year to promote and support diversity. In addition to further developing our *Leading the way: Increasing diversity in the scientific workforce* programme and the work of EDAN (Equality and Diversity Advisory Network), the Society has been involved in innovative events including a very successful Wikipedia 'edit-a-thon' in 2012 which focused on improving the online records of women in science using the Royal Society archives and library.

In October 2012 the Society launched its first online feature for Black History Month 2012, highlighting ethnicity and the history of the Royal Society as well as the perspectives of scientists the Society works with today.

In February 2013 the Royal Society, as a member of the STEM Disability Committee, hosted the *STEM Disability Committee Spring Conference: Supporting Disabled Students in STEM*. The conference brought together those working in academia to identify practical solutions to barriers faced by disabled students specifically studying for careers in science, technology, engineering and maths.

Above left: Volunteers during the Wikipedia 'edit-a-thon' at the Society. Above right: Photograph of Ugandan lab assistants featured on the Royal Society website as part of Black History Month 2012.

Science in the media

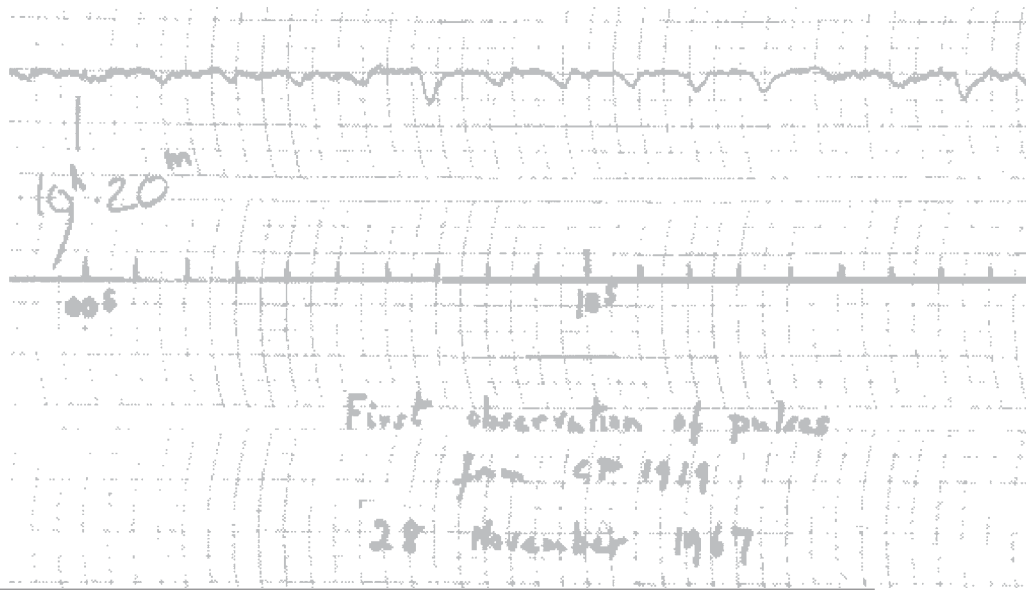
Great British Innovation Vote

The Royal Society worked with the Cabinet Office, the GREAT campaign, the Science Museum and a range of other science organisations to stage an online vote to find the most popular British scientific innovation from the last 100 years. The partner organisations worked together to compile a list of around 90 innovations that were put to a public vote. The site, topbritishinnovations.org, had over 80,000 visits with over 50,000 votes cast including that of the Prime Minister. The Society created additional content to complement the vote with articles from a range of University Research Fellows writing about how the innovation has influenced the work they are doing today. The project will have a lasting legacy as an accessible educational resource on the history of British innovation.

Sir Paul Nurse as guest editor of BBC Radio 4's *Today* programme

Sir Paul Nurse had the opportunity to guest edit one of the most influential of the BBC's news programmes in December. He chose to tackle issues ranging from the importance of experimentation in school science classes, to the interaction of science and literature and the importance of science to driving a long-term, sustainable economic recovery. The President interviewed author Ian McEwan and Chancellor of the Exchequer, George Osborne MP, who reinforced his commitment to supporting investment in UK science.

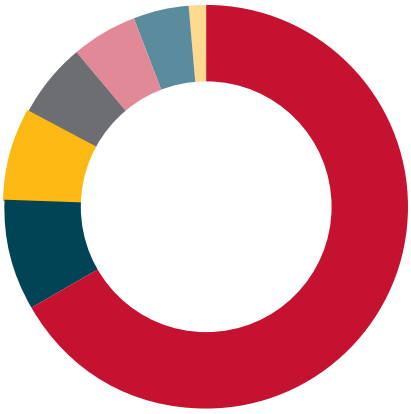
- **2.1 million** visitors came to the Royal Society website during the year.
- **40,000** people follow the Society on Twitter
- **15,000** people follow the Society on Facebook.



Top left: Dame Jocelyn Bell Burnell DBE FRS at the Mullard Radio Astronomy Observatory at Cambridge University, 1968. The 'Discovery of Pulsars' was voted as one of the top five 'Great British Innovations'. Image credit © Daily Herald Archive/National Media Museum / Science and Society Picture Library. Top right: A teacher and pupils from De Bohun Primary School in London, a member of the Society's Partnership Grants scheme. Above: first observation of pulsars, 1967.

Financial review

Total income 2012/13 £70.6m (2012: £70.8m)



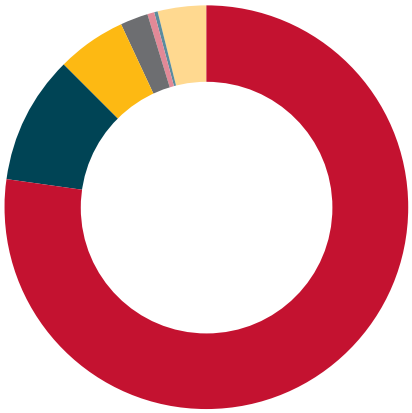
BIS grant	£47.1m
Grant income	£6.3m
Publishing income	£5.2m
Investment income	£4.2m
Donation income	£3.7m
Conferencing income	£3.3m
Other income	£0.8m

The Society's total funds have increased in the year by £8.4m from £229.1m to £237.5m. Total income of £70.6m and expenditure of £68.2m have remained in line with 2012 giving an operating surplus of £2.5m before gains, losses and revaluations.

Despite a period of volatility in the markets the investment portfolio has performed well with an unrealised gain of £22.5m compared to a loss of £4.8m in 2012. Total investments at the balance sheet date were valued at £186.0m. These gains have mitigated the impairment of Chicheley Hall of £12.2m (see below) and the defined benefit pension scheme loss of £4.4m. The pension scheme liability has been valued by Barnet Waddinham in line with FRS17; the loss recorded in this financial year has increased the total liability to £11.9m. The pension scheme is currently under review.

The Society's income of £70.6m is made up predominantly of grant income which supports 80% of the Society's charitable expenditure. Trading activities performed well during the year with Publishing income growing by £0.7m to £5.2m and Conferencing income by £0.4m to £3.3m. Gifts, donations and legacies fell by £1.5m to £3.7m as the Society did not run any major appeals during the year. The Society is planning to reinvigorate the fundraising function in the coming financial year with a new Director of Development due to join the Society in the autumn of 2013. Investment income increased by £0.2m to £4.2m.

Expenditure (excluding impairment) 2012/13 £68.2m (2012: £68.2m*)



Supporting outstanding science	£47.1m
Fostering international cooperation	£6.3m
Education and public engagement	£5.2m
Providing scientific advice	£4.2m
Promoting science	£3.7m
Recognising excellence in science	£3.3m
Other	£0.8m

* 2011/12 expenditure has been reanalysed to align with 2012/17 strategic activity headings.

Supporting outstanding science £52.9m (2012: £52.5m)

The appointment of the first Sir Henry Dale Fellowships in 2012 is a landmark event in UK science. Using the global reputation of the Society in the scientific world and the exceptional standing of the Wellcome Trust in the medical sphere, these Research Fellowships represent some of the most highly-valued early to mid-career opportunities anywhere in the world. For further information see page 15.

Fostering international and global cooperation £6.9m (2012: £7.7m)

The Society is committed to extending the reach, scale, visibility and impact of current international activities and to explore new ways of working. In 2012/13 this has included building capacity in science in Africa, and engaging with the Commonwealth and some of the emerging economies, notably China and Russia. For further information see page 25.

Education and public engagement £3.8m (2012: £3.5m)

The 2012 Summer Science Exhibition enjoyed a total audience of 11,120 visitors. The exhibition is the only event of its kind in the country where large numbers of the general public of all ages and backgrounds have the opportunity to interact with the scientists making exciting new discoveries across the whole range of disciplines. For further information see page 29.

Providing scientific advice for policy £1.5m (2012: £1.7m)

During 2012/13, priorities ranged from population change and consumption to open data and open access publishing, synthetic biology to science and mathematics education in schools, investment in science and innovation to shale gas. For further information see page 19.

Promoting science and its benefits £0.5m (2012: £0.5m)

Professor Brian Cox OBE gave the Royal Society Faraday Prize and Lecture for 2012 to hundreds in a packed lecture theatre and thousands more online for his work in communicating science. *Making Britain the best place to do science* explained the inspiration behind his passion for science and why the public communication of science is so vital. For further information see page 9.

Recognising excellence in science £0.2m (2012: £0.3m)

In 2012 the Society launched a new programme of events specifically for Fellows, research weekends at the Kavli Royal Society Centre at Chicheley Hall, scientific meetings in London and regional meetings with the President. For further information see page 13.

Grants

Expenditure on Supporting Outstanding Science was £52.9m (2012: £52.5m). Grant awards for the year totalled £48.4m (2012: £49.7m).

The grants made by the Society fall into two broad classes: (1) fellowships and (2) research grants. They can be further classified into: (1) early-career fellowships, Professorships and Senior Fellowships, and support for innovation: and (2) research grants, collaboration and travel grants, capacity-building grants, and education-related grants. Grants applications are assessed by means of a peer-review process and consideration by a panel of experts comprising Fellows of the Society and other senior scientists. Each panel is chaired by a Fellow of the Society. Further information is available at royalsociety.org/grants/applications.

The primary purposes of the Society's grant-giving activities are to support the work of outstanding individual scientists at various stages of their careers, primarily in the UK, and to encourage collaborations between UK scientists and scientists throughout the world. In 2012/13 this included the establishment of a flagship programme by the Society with support from the Department for International Development (DFID), aimed at strengthening research and training capacity across sub-Saharan Africa by creating sustainable scientific networks, the Royal Society-DFID Africa Capacity Building Initiative. On 31 March 2013 the Society was providing support for 1270 individuals, including 744 Fellowship holders and 526 award holders across the Society's other grants schemes.

More detailed information on all the Society's grants schemes is given under the section 'Supporting outstanding scientists' on pages 15 – 17.

The Kavli Royal Society Centre at Chicheley Hall

Chicheley Hall is a part Grade I and part Grade II listed property which was acquired by the Royal Society in 2008. Following its subsequent refurbishment the Royal Society has operated Chicheley Hall primarily as a centre for scientific and academic conferences with additional income derived from non-scientific activity such as hosting weddings and corporate events.

To date, the commercial activities have not subsidised the scientific activities to the extent originally anticipated in the original business plan in 2008/09. Although Chicheley Hall has not been operated solely on a commercial basis the extent of the losses has made it necessary to outsource the management of the property to a specialist contractor to run the property whilst maintaining its availability for scientific and academic uses. De Vere Venues were appointed on the 1 February 2013. As part of the new arrangement the Society is seeking C1 permission for the property so that it can be used as a hotel as and when appropriate. It is envisaged that Chicheley Hall will break even within three years.

As part of the review process the Society used Savills to gauge the current market value of Chicheley Hall. The valuation reflects the ongoing economic challenges and the anticipated prolonged recovery in conferencing business in the UK. Savills estimated the current market value of Chicheley Hall at £4.8m. As Kavli is subject to VAT the net value is £4.0m and the property has been written down from its carrying value of £16.2m. The write-down charged to the statement of financial activities in the year is therefore £12.2m.

Reserves Policy

The Society holds free reserves so that it can respond to unforeseen charitable opportunities and continue to honour existing commitments in the event of a shortfall of income. The Society's policy is to review its income streams and expenditure commitments on an annual basis, assess the main financial risks faced by the Society, quantify those risks in the worst case and calculate a target level of freely available reserves based on estimates that take into account also judgements about the likelihood of the risks being realised. Having conducted this annual review the Society has calculated a target free reserves level of £9.5m.

Freely available reserves are calculated by taking total unrestricted funds and deducting unrestricted tangible fixed assets and the heritage assets. At the balance sheet date the value of the Society's free reserves was £16.2m, which was above the target level. The Society is currently looking at a long term strategy to increase its charitable activities in a sustainable way in order to reduce the reserves level in line with the target. Immediate priorities include to extend the reach, impact, and influence of the Society nationally, internationally, and globally; to run a vibrant programme of public engagement and to galvanise the business, government, public, and academic sectors to bring about a step-change in support for science in the UK.

Investment policy

The Society's investment policy is to hold assets to maximise overall return with an appropriate level of risk, when considered alongside the Society's strategic plan and its level of reserves. The Society maintains an investment portfolio in order to: provide long-term growth in the Society's endowment in excess of underlying inflation; provide a source of cash to support the Society's operations to an appropriate sustainable level; and provide a source of liquidity to the Society. The Society makes investment decisions under the advice of the Investment Committee, chaired by the Treasurer, whose members have investment or commercial background and experience.

The Society's investment portfolio normally comprises leading UK and international companies, Unit and Investment Trusts including those investing in major international markets, fixed interest, venture capital, hedge funds, private equity funds, and property funds. A broad asset allocation of 80% equities, 20% fixed interest is a default position with variation as advised and monitored by the Investment Advisory Committee. Investment managers have a general discretion over asset allocation and selection. The Society is an ethical investor and judges its investments appropriately. Such judgements will be consistent with the Trustees' powers and fiduciary responsibilities and with the Society's charitable objects. The Society's Enterprise Fund invests directly in innovative early-stage businesses emerging from the science base in the UK and elsewhere.

Review of the Society's funds and prior year restatement

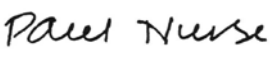
The Society manages four main trust funds, which were formed by the Charity Commission Scheme dated 3 December 2008; the General Support Trust Fund, Life Sciences Fund, Mathematics and Physical Sciences Fund and the International Fund. The aim of the Scheme was to amalgamate a number of funds existing at that time so that the Society could make better use of the resources available to it in achieving its charitable objectives. The purposes of these funds are set out in Note 19 in the Financial Statements.

The amalgamation exercise has been reviewed, including the underlying fund restrictions, and the assumptions underlying the Charity Commission Scheme. The review revealed that a number of inaccurate assumptions were made in the execution of the amalgamation exercise. The majority of inaccuracies relate to the classification of restricted income funds as expendable endowments. To correct these inaccuracies the following 'fund adjustments', as shown in the table below, have been made as a prior year adjustment.

It should be noted that all adjustments comply with the Scheme amalgamation i.e. no adjustment proposes a transfer to a different trust fund as this would contradict the Scheme's direction. Further information on the reallocation of funds can be found in note 19. Due to the size of the adjustments the accounting treatment for the 31 March 2013 accounts is to restate the opening balances as a prior period adjustment.

Prior year adjustment

	Balance at 31/12/12 £'000	Fund adjustment £'000	Balance as restated £'000
Permanent Endowment	91,131	(8,088)	83,043
Expendable Endowment	40,498	(17,470)	23,028
Restricted Funds	14,093	19,051	33,144
Unrestricted Funds	83,369	6,507	89,876
Total Funds	229,091	0	229,091



Paul Nurse
President

25 September 2013

Fundraising and development

During 2012/13 the Society continued to review its fundraising activities, including an external assessment to assist the formulation of a new strategy. This strategic review was accompanied by work to engage existing donors and cultivate potential new supporters. The Society is planning to reinvigorate the fundraising function in the coming financial year with a new Director of Development due to join the Society in the autumn of 2013. The Society would like to thank all of its donors in 2012/13. Income is generated from a diverse portfolio of individuals, companies, trusts and other organisations. In 2012/13 the Society signed seven significant pledges with a range of companies and trusts to support its work. These are worth almost £1 million over the next five years. These pledges included:

- In July the pharmaceutical company Pfizer extended their sponsorship of The Royal Society Pfizer Award for a further year. The Annual Award rewards scientists based in Africa at the outset of their career and help foster international and global cooperation in the developing world.

- The Sino-British Fellowship Trust, the Society's longest continuous supporter, supported the Society's strategic priority of fostering global cooperation by pledging to support UK-China collaborations for the next five years. The agreement supports Chinese scientists who are at an early stage of their research career and who wish to conduct research in the UK.

- Rolls Royce pledged a further £150,000 to the Industry Fellowships scheme over the next three years. The scheme recognises scientific excellence in industry and academia and aims to enhance knowledge transfer in science and technology between the two. Rolls-Royce has supported the Industry Fellowship scheme for over 15 years.

- The Society entered into an agreement with the Society of Chemical Industry (SCI) to fund three new Industry Fellowship PhD studentships. These are worth £195,000 over a three year period. The Andrew Studentships are named in memory of Dr Sydney Andrew FRS, an industrial chemical engineer who left a legacy to SCI to support neglected science. Areas covered by the Studentships include: Food and Bio-renewables, Water, Waste and Environment, Energy, Materials and Manufacturing and Health and Wellbeing.

Governance

The Society was founded in 1660 and incorporated by Royal Charter. The governing body of the Society is its Council, whose members are elected by and from the Fellowship. The Society is a registered charity and the members of the Council are its Trustees. Under the Society's Charters, the Council 'shall and may have full authority, power, and faculty from time to time to draw up, constitute, ordain, make, and establish such laws, statutes, acts, ordinances, and constitutions as shall seem to them, or to the major part of them, to be good, wholesome, useful, honourable, and necessary, according to their sound discretions, for the better government, regulation, and direction of the Royal Society aforesaid, and of every Member of the same, and to do and perform all things belonging to the government, matters, goods, faculties, rents, lands, tenements, hereditaments, and affairs of the Royal Society aforesaid.'

In the first change to the Society's governing documents since the 1660s, the Society was granted a Supplemental Charter by Her Majesty the Queen in July 2012. The Society had petitioned for that Charter as part of a programme to modernise and improve its governance arrangements. A pivotal change effected by the new Charter was that the term of Council membership is now three years, rather than the one or two years specified in the original Charters. The change will give members longer to become familiar with and contribute to Council's affairs, and will strengthen its corporate memory. Council may now have between 20 and 24 members; there were 21 in the year. Council is chaired by the President of the Society, and among its members are four Officers: the Treasurer, the Physical Secretary, the Biological Secretary, and the Foreign Secretary. The President and the Officers serve five-year terms. They are not remunerated for holding these offices.

In the year, changes in the membership of Council took place as usual on Anniversary Day, which is 30 November. New members of Council attended a bespoke induction session at which the Internal Audit Engagement Partner and a solicitor who specialises in charity law gave presentations on trustee duties in general and on membership of Council in particular. Relevant training was provided to trustees during the year in the context of their consideration of specific matters. Council has had regard to the guidance on public benefit published by the Charity Commission when reviewing the Society's activities.

During the year, Council undertook a major review of its policies and procedures and of its committee system. The governing body is supported by a range of committees, including the following which report directly to it.

The Audit Committee examines the Society's arrangements for governance, risk management, internal control, and value for money, and advises Council on the adequacy and effectiveness of those arrangements. The Committee comprises both Fellows and non-Fellows.

The Board comprises the President and the Officers. Its duties include guiding and overseeing implementation of Council decisions, considering matters that require urgent attention between Council meetings or that do not fall within the remit of any other committee, and providing advice and guidance to the Executive Director.

The Education Committee advises Council on the Society's education programme.

The Finance Committee advises Council on financial matters generally. Its remit includes financial strategy, revenue and capital budgets and performance against them, advice to Investment Committee on cash-flow needs, advice to Council on remuneration policy, and oversight of financial aspects of the Society's trading operations and associated subsidiary undertakings.

The Investment Committee advises Council on investment policy and investment objectives, determines investment strategy, takes certain decisions in consultation with the Society's investment managers, and determines benchmarks and reviews performance against them.

The Nominations Committee advises Council on the strongest candidates for election as members of Council, and for appointment as chairs of Sectional Committees.

The Public Engagement Committee advises Council on the Society's strategy and activities concerning public engagement with science.

The Science Policy Advisory Group advises Council on the work programme of the Science Policy Centre.

The Sectional Committees, of which there are ten spanning the scientific disciplines, select short lists of candidates for consideration by Council for election to the Fellowship.

Operations

The Society has approximately 130 staff. Council delegates responsibility for day-to-day management of the Society to the Executive Director. Following some organisational changes, the Society's staff activities are grouped into a strategic division, an operations division, the Science Policy Centre, and directorates concerned with Fellowship and scientific affairs and with commercial operations. During the year, senior appointments were made to lead the strategy and operations divisions and the finance, human resources, and IT departments, those three departments were reconstructed, and major programmes to improve HR policies and procedures and to strengthen IT infrastructure were initiated. The Society introduced new arrangements for managing in-house projects, and continued to work to embed sustainability considerations in its operations.

Statement of Trustees' responsibilities

The Council members (who are the trustees of the Society) are responsible for preparing the trustees' annual report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Charity law requires Council to prepare financial statements for each financial year that give a true and fair view of the state of affairs of the group and the parent charity and of the incoming resources and application of resources of the group for the year. In preparing those financial statements the trustees are required to:

- select suitable accounting policies and then apply them consistently
- observe the methods and principles in the Charities SORP
- make judgements and accounting estimates that are reasonable and prudent
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

Council is responsible for keeping accounting records that are sufficient to show and explain the charity's transactions and disclose with reasonable accuracy at any time the financial position of the group and parent charity and enable them to ensure that the financial statements comply with the Charities Act 2011 and regulations made thereunder. Council is also responsible for safeguarding the assets of the group and the parent charity, and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Council is responsible for the maintenance and integrity of the financial information included on the charity's website. Legislation in the United Kingdom governing the preparation and dissemination of the financial statements and other information included in annual reports may differ from legislation in other jurisdictions.

Risk assessment

Council is responsible for ensuring that proper arrangements are in place for risk management and control. Council relies principally on the Audit Committee, supported by the Internal Auditors, to assess those arrangements and to advise it accordingly. During the year, Council revised the Society's risk-management policy, adopted a new top-level risk register, and then reviewed that register's contents and progress in implementing actions specified in it. Audit Committee regularly received and considered reports on management of the major risks facing the Society. Further work is being done to embed a strengthened culture of risk management throughout the Society.

Independent auditors report to the Trustees of the Royal Society

We have audited the financial statements of the Royal Society for the year ended 31 March 2013 which comprise the consolidated statement of financial activities, the group and charity balance sheets, the consolidated cash flow statement and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

This report is made solely to the charity's trustees, as a body, in accordance with the Charities Act 2011. Our audit work has been undertaken so that we might state to the charity's trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's trustees as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of trustees and auditor

As explained more fully in the Statement of Trustees' Responsibilities, the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

We have been appointed as auditors under section 144 of the Charities Act 2011 and report in accordance with regulations made under section 154 of that Act. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the Financial Reporting Council's website at frc.org.uk/auditscopeukprivate

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the group's and the parent charity's affairs as at 31 March 2013, and of the group's incoming resources and application of resources for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

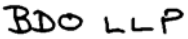
Opinion on other matter as required by BIS grant letter

In our opinion, in all material aspects, the grant payments received from the Department for Business, Innovation and Skills (BIS) has been applied for the purposes set out in the Grant Letter and in accordance with the terms and conditions of the grant.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Charities Act 2011 requires us to report to you if, in our opinion:

- the information given in the Trustees' Annual Report is inconsistent in any material respect with the financial statements; or
- sufficient accounting records have not been kept; or
- the parent charity financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.



BDO LLP
Statutory Auditor
London, United Kingdom

18 October 2013

BDO LLP is eligible to act as an auditor in terms of section 1212 of the Companies Act 2006.

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

Consolidated statement of financial activities

For the year ended 31 March 2013

	Notes	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	2013 total funds £'000	2012 (restated) total funds £'000
INCOMING RESOURSES							
Incoming resources from generated funds							
Voluntary income	1	546	2,136	-	1,000	3,682	5,204
Investment income	2	1,113	3,105	-	-	4,218	4,046
Trading through Subsidiary	3	641	-	-	-	641	563
		2,300	5,241	-	1,000	8,541	9,813
Incoming resources from charitable activities							
Grants for charitable activities	4	1,060	52,373	-	-	53,433	53,733
Trading in furtherance of charitable objectives	3	7,945	663	-	-	8,608	7,157
		9,005	**53,036**	**-**	**-**	**62,041**	**60,890**
Other income		31	13	-	-	44	135
Total incoming resources		**11,336**	**58,290**	**-**	**1,000**	**70,626**	**70,838**
RESOURCES EXPENDED							
Costs of generating funds							
Costs of generating voluntary income		348	-	-	-	348	549
Investment management costs	15	96	93	51	206	446	418
Trading through Subsidiary	3	561	-	-	-	561	377
Total costs of generating funds		**1,005**	**93**	**51**	**206**	**1,355**	**1,344**
Charitable activities							
Promoting science and its benefits		130	327	-	-	457	515
Recognising excellence in science		173	30	-	-	203	265
Supporting outstanding science		7,626	45,260	-	-	52,886	52,490
Providing scientific advice for policy		637	843	-	-	1,480	1,655
Fostering international and global cooperation		368	6,512	-	-	6,880	7,722
Education and public engagement		1,662	2,118	-	-	3,780	3,484
Write down of fixed asset	12	12,205	-	-	-	12,205	-
Total for cost of charitable activities	**5**	**22,801**	**55,090**	**-**	**-**	**77,891**	**66,131**

	Notes	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	2013 total funds £'000	2012 (restated) total funds £'000
Governance costs	8	1,113	1	-	-	1,114	743
Total resources expended		**24,919**	**55,184**	**51**	**206**	**80,360**	**68,218**
Net (outgoing)/incoming resources before transfers		**(13,583)**	**3,106**	**(51)**	**794**	**(9,734)**	**2,620**
Net loss from associated company	15	-	-	-	-	-	(7)
Gross transfers between funds	19	(19)	19	-	-	-	-
Net (outgoing)/incoming resources before other recognised gains and losses		**(13,602)**	**3,125**	**(51)**	**794**	**(9,734)**	**2,613**
Net gains/(losses) on investments	15	4,951	4,052	2,607	10,929	22,539	(4,770)
Actuarial losses on defined benefits pension scheme	21	(4,412)	-	-	-	(4,412)	(4,952)
Net movement in funds		**(13,063)**	**7,177**	**2,556**	**11,723**	**8,393**	**(7,109)**
Total funds brought forward at as previously reported		**83,369**	**14,093**	**40,498**	**91,131**	**229,091**	**236,200**
Prior year adjustment		6,507	19,051	(17,470)	(8,088)	-	-
Total funds brought forward as restated		**89,876**	**33,144**	**23,028**	**83,043**	**229,091**	**236,200**
Total funds carried forward		**76,813**	**40,321**	**25,584**	**94,766**	**237,484**	**229,091**

All of the above results are derived from continuing activities. There are no other gains or losses other than those stated above.

A Statement of total recognised gains and losses is not required as all gains and losses are included in the Statement of financial activities.

Incoming resources of the Charity during the year were £70,065,000 (2012: £70,461,000) less resources expended by the Charity at £79,801,000 (2012: £67,841,000) led to a deficit of £9,736,000 (2012: £2,620,000 surplus). All incoming resources, resources expended and resulting net movements in funds are derived from continuing activities.

Prior year amounts have been restated to reflect the impact of a management review of the Society's funds – see note 19.

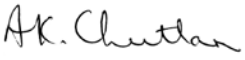
Comparative figures have been restated to show a like for like comparison with the new five year strategy – see note 5

Consolidated balance sheet

As at 31 March 2013

	Notes	Group 2013 £'000	Group (restated) 2012 £'000	Charity 2013 £'000	Charity (restated) 2012 £'000
Fixed assets					
Tangible assets	12	15,728	29,186	15,719	29,186
Heritage assets	14	47,250	47,219	47,250	47,219
Investment in associated company	15	-	243	-	243
Investments	15	185,996	159,391	185,996	159,391
		248,974	**236,039**	**248,965**	**236,039**
Current assets					
Stock		31	35	26	35
Debtors receivable within one year	16	5,586	5,237	5,929	5,407
Debtors receivable after one year	16	2,000	2,700	2,000	2,700
Cash at bank and in hand		4,655	5,702	4,172	5,485
		12,272	**13,674**	**12,127**	**13,627**
Creditors: amount due in one year	17	(11,714)	(13,318)	(11,561)	(13,271)
Net current assets		**558**	**356**	**566**	**356**
Total assets less current liabilities		**249,532**	**236,395**	**249,531**	**236,395**
Creditors: amount due after one year	17	(129)	(181)	(129)	(181)
Net assets before pension scheme liability		**249,403**	**236,214**	**249,402**	**236,214**
Defined benefits pension scheme: liability	21	(11,919)	(7,123)	(11,919)	(7,123)
Total net assets		**237,484**	**229,091**	**237,483**	**229,091**
Permanent endowment funds	19	94,766	83,043	94,766	83,043
Expendable endowment funds	19	25,584	23,028	25,584	23,028
Restricted funds	19	40,321	33,144	40,321	33,144
Unrestricted funds					
Revaluation reserve	19	46,036	46,036	46,036	46,036
Defined benefit pension reserve	19	(11,919)	-	(11,919)	-
Unrestricted income funds		42,696	43,840	42,695	43,840
	19	**237,484**	**229,091**	**237,483**	**229,091**

The financial statements were approved and authorised for issue by Council and signed on its behalf on 25 September 2013.



Professor Anthony Cheetham
Treasurer

Consolidated cash flow statement

For the year ended 31 March 2013

RECONCILIATION OF NET INCOMING RESOURCES TO NET CASH INFLOW FROM ACTIVITIES

	Notes	2013 £'000	2012 £'000
Net movement in funds		8,393	(7,109)
Actuarial losses on defined benefits pension scheme		4,412	4,952
Unrealised (gains)/losses on investments	15	(22,251)	4,770
Investment income	2	(4,218)	(4,046)
Interest paid		-	125
Depreciation charges	12	13,667	1,489
Investment management fees charged to portfolio	15	446	418
Decrease in stocks		4	1
Decrease/(increase) in debtors		351	(404)
Decrease in creditors		(1,656)	(2,349)
Exchange gain on investment portfolio	15	(55)	(74)
Share of loss in associated company	15	-	7
Recognition of Wolfson assets	1	(1,054)	-
Donated heritage assets	14	(30)	(27)
Difference between pension charge and cash contributions	21	384	(117)
Net cash outflow from operating activities		**(1,607)**	**(2,364)**

CASH FLOW STATEMENT

	Notes	2013 £'000	2012 £'000
Net cash outflow from operating activities		**(1,607)**	**(2,364)**
Returns on investments and servicing of finance			
Investment income	2	4,218	4,046
Interest paid		-	(125)
Net cash inflow from returns on investments and servicing of finance		**4,218**	**3,921**
Capital expenditure and financial investment			
Net purchase of tangible fixed assets	12	(209)	(318)
Purchase of heritage assets	14	(1)	(2)
Purchase of investments	15	(11,714)	(13,740)
Proceeds from sale of investments	15	8,265	16,191
Net (increase)/decrease in endowment investments	19	(743)	228
Net cash (outflow)/inflow from capital expenditure and financial investment		**(4,401)**	**2,359**
Acquisitions			
Purchase of associated company	15	-	(250)
Net cash outflow from acquisitions		**-**	**(250)**
Net cash outflow before management of liquid resources and financing		**(1,790)**	**(3,666)**
Financing			
Net increase/(decrease) in endowment investments	19	743	(228)
Net cash inflow/(outflow) from financing activities		**743**	**(228)**
(Decrease)/increase in cash		**(1,047)**	**3,438**
Cash at 1 April		5,702	2,264
Cash at 31 March		4,655	5,702

Analysis of change in net funds

	As at 31 March 2013 £'000	Cash flow £'000	As at 31 March 2012 £'000	Cash flow £'000	As at 31 March 2011 £'000
Cash in hand and at bank	4,655	(1,047)	5,702	3,438	2,264
Total cash	**4,655**	**(1,047)**	**5,702**	**3,438**	**2,264**
Debt due within one year	-	-	-	(7,000)	7,000
Total change in net funds	**4,655**	**(1,047)**	**5,702**	**(3,562)**	**9,264**

Liquid resources comprise short-term deposits with banks which mature within 12 months of the date of inception and current asset investments that are traded in an active market.

Accounting policies

The principal accounting policies adopted in the preparation of these Financial Statements are as follows:

The significant accounting policies adopted are described below and are consistent with previous years, except that there has been a restatement of the funds balances as explained in note 19. This change has been adopted as a prior year adjustment and comparative amounts in respect of the year ended 31 March 2012 have been restated where relevant. The adjustments have not had a financial impact on the prior year net incoming resources or total net assets brought forward.

Basis of preparation

The Financial Statements have been prepared under the historical cost convention, with the exception that certain investments are valued at mid-market prices as at the Balance Sheet date and heritage assets are valued in accordance with the heritage assets policy. They are also prepared in accordance with applicable accounting and financial reporting standards in the United Kingdom, the requirements of the Charities Act 2011 and the Statement of Recommended Practice – Accounting and Reporting by Charities (revised 2005) ('the SORP'). The financial statements are prepared on a going concern basis.

Group Financial Statements

The Society has two wholly owned subsidiary companies: The Royal Society Enterprise Fund Limited, and The Royal Society Trading Limited. The Society also owns the share capital of The Royal Society (Australia) Pty Limited which is the trustee of the Royal Society Theo Murphy (Australia) Fund. During the year The Society became the sole trustee of the Wolfson Research Professorship.

The results of each of these subsidiary undertakings (see Note 22) have been incorporated into these consolidated Financial Statements under the heading 'Group' on a line-by-line basis, adopting uniform accounting policies. Their objectives contribute to those of the Royal Society Group strategy, and under the tests of control they are deemed to be charitable subsidiaries of the Society. The Royal Society Trading Limited and The Royal Society Enterprise Fund Limited gift aid their profits to the Royal Society.

The Society invests in innovative early-stage businesses emerging from the science base in the UK and elsewhere through its Enterprise Fund. In February 2013, the Society's share of the called-up share capital of Sphere Fluidics Limited decreased from 25.9% to 18.4%. Where the Society's investment in a company exceeds 20% of the voting rights and the Society considers that it exercises significant influence over the operating and financial policy of the company, the Society, in accordance with FRS9, accounts for the investment as an associated undertaking. Where the Society does not consider that it exercises significant control, the Society holds the investment at cost or market price where available.

No separate Statement of Financial Activities (SOFA) has been presented for the Charity alone, as permitted by paragraph 397 of the SORP.

Fund accounting

Unrestricted funds comprise accumulated surpluses and deficits on general funds that are available for use at the discretion of the Trustees in furtherance of the general objectives of the Charity.

Restricted and endowment funds are subject to specific restrictions imposed by the donor.

Transfers between funds may arise when there is a charge from unrestricted funds to other funds or there is a release of restricted funds to unrestricted funds.

Incoming resources

Donated goods and services are included at the value to the Society where these can be quantified. No amounts are included in these Financial Statements for the services donated by volunteers or Fellows. Income from trading in subsidiary undertakings is transferred to the Society by covenanting the profits

of those undertakings. Donations are accounted for as soon as their amount and receipt is certain. Donations include Gift Aid based on amounts recoverable at the accounting date.

Legacy income is recognised on a receivable basis when there is sufficient evidence to provide necessary certainty that it will be received and the value of the incoming resources can be measured with sufficient reliability. Council has determined that it does not regard a legacy as receivable until probate has been granted in respect of the estate.

Fellows' Annual Contributions are recognised in the year in which they become due. Fellows' Annual Contributions may be compounded into a single payment which is fully recognised in the year it is paid.

Investment income and interest on deposits is recognised on an accruals basis. Investment income arising on endowment funds is credited to the appropriate fund in accordance with the prescribed conditions.

Grants are credited as income in the year in which they are receivable. Grants are recognised as receivable when all conditions for receipt have been complied with. Where donor-imposed restrictions apply to the timing of the related expenditure as a precondition of its use, the grant is treated as deferred income until those restrictions are met. Grants received for specific purposes are accounted for as restricted funds

Grants receivable in respect of expenditure on tangible fixed assets are treated as income of either a restricted fund or an unrestricted fund as applicable. A transfer is made annually to general purposes funds in equal instalments on the same basis as the depreciation charge applicable to the asset concerned.

Charitable expenditure

Charitable expenditure includes all expenditure incurred on grants awarded and on other schemes run in pursuance of the Society's objectives under its Charter, including Fellowship activities and primary purpose trading. The Society adopted a new five year strategy in 2012 and the charitable activities of The Society have been reported under the six main strategic objectives. The comparative figures have been restated to show a like for like comparison. The direct costs of supporting these activities, including staff, establishment, and other overhead costs, are separately analysed and shown as support costs under this heading. Expenditure, including irrecoverable VAT, is accounted for on an accruals basis.

Development expenses include those costs incurred in raising donations and legacies.

Governance costs are incurred in relation to the running of the Society. This includes strategic planning and attending to the Society's statutory affairs.

Expenditure on staff, establishment, and operating costs are allocated to charitable activities, governance and fundraising on the basis of the staff costs of each activity.

Grants are recognised as a liability when the Society is under a legal or constructive obligation to make a transfer to a third party. Where grants are time-related to future periods and are to be financed by specific grants receivable in those future periods, they are treated as liabilities of those periods and not as liabilities at the Balance Sheet date. Such grants are disclosed as future commitments.

Foreign currency

Transactions in foreign currencies are translated into sterling using a weekly rate of exchange ruling at the date of the transaction. Assets and liabilities in foreign currency are translated into sterling at the rate of exchange ruling on the Balance Sheet date.

Leased assets
All operating leases and rental expenses are charged to the SOFA as incurred over the term of the lease on a straight line basis.

Tangible fixed assets
Expenditure on tangible fixed assets is capitalised if the cost of the total asset exceeds £5,000. Additions of smaller value may be capitalised if forming part of a larger asset. The cost of other items is written off as incurred.

Depreciation is calculated, on all assets excluding freehold land and assets under construction, to write off the cost of tangible fixed assets on a straight line basis over their expected useful lives as follows:

Freehold property and improvements:
20 – 30 years

Leasehold improvements:
20 – 30 years

Computers and AV equipment:
3 – 5 years

Other equipment:
10 – 20 years

Fixed assets are subject to review for impairment when there is an indication of a reduction in their carrying value. Any impairment is recognised in the SOFA in the year in which it occurs.

Heritage assets
Heritage assets are included on the Balance Sheet using a historical valuation based on a fair market / replacement value in 2003 and 2004 as stated in Note 14. The assets were included in the valuations based on the information catalogued at the time they were carried out; in the case of the printed books and archives the valuations were based on those items detailed in A Guide to the Archives and Manuscripts of the Royal Society (Moore and Sampson, 1995), which was the basis of their previous valuation in 1995.

Additions to heritage assets are made by purchase or donation. Purchases are initially recorded at cost and donations are recorded at a current value where available. The cost of obtaining an annual value outweighs the value of any resultant benefit. The Society holds and retains these assets as a long-term policy for use in its charitable purposes and has no intention of disposing of any of these items.

The Trustees do not consider that reliable cost or valuation information can be obtained for a large part of the archives collection and the Society does not therefore recognise these assets on its Balance Sheet. The Society was founded in 1660 and the collection has been built up throughout its existence. Reliable and relevant information on the cost of many of the assets is therefore not readily available. The number of un-capitalised assets held in the collection is extensive and their nature diverse; accordingly efforts to obtain costs or values would be prohibitively expensive compared with any benefits arising from the exercise. Added to this, there is a lack of comparable market values. Therefore any value attributed to these assets would be purely speculative and of limited practical use.

Investments

Investments listed on a recognised stock exchange, including Investment and Unit Trusts, are stated at mid-market value at the Balance Sheet date.

Net investment gains / losses for the year are credited / charged in the Statement of Financial Activities. Unlisted investments comprise directly held investments of the Enterprise Fund and Private Equity and Venture Capital funds managed by third party investment fund managers. These investments are held at fair value (market value) in accordance with the International Private Equity and Venture Capital Valuation Guidelines. Where a reliable estimate of fair value is not available, investments are held at cost. Investments held at cost are reviewed annually for impairment. No adjustment for impairment of the value of unlisted investments was considered necessary in the year.

Investment-management fees are charged proportionately against the funds under investment.

The investments in subsidiary undertakings are held at cost on the Society's balance sheet. The investment in an associated undertaking is valued at the Society's share of the fair value of the assets at the date of acquisition. The difference between that valuation and the price paid for the shares acquired is accounted for as goodwill and included in the value of the investment on the balance sheet.

Amortisation of goodwill

The Society's policy is to consider its treatment of goodwill on a case-by-case basis. The investment in Sphere Fluidics Limited was not a long-term participating interest and the amortisation was reversed when Sphere Fluidics ceased to be treated as an associated company.

Pension costs

The Society operates a Pension Scheme providing defined benefits for its employees. The assets of the Scheme are held separately from those of the Society, in separate trustee-administered funds. Pension Scheme assets are measured at fair value and liabilities on an actuarial basis using the projected unit method and discounted at a rate equivalent to the current rate of return on a high-quality corporate bond of equivalent currency and term to the Scheme liabilities. The actuarial valuations are obtained triennially and updated under FRS17 rules at each Balance Sheet date. Any surplus or deficit is shown in the Balance Sheet as an asset or liability.

The charge to the Statement of Financial Activities is calculated so as to spread the cost of pensions over employees' working lives with the Society. The charge comprises the current service cost computed by the actuary under FRS17 and gains and losses on settlements and curtailments. Past-service costs are recognised immediately if the benefits have vested. If the benefits have not vested immediately, the costs are recognised over the period until vesting occurs. The interest costs and the expected return on assets are shown as a net amount of other finance costs or credits charged or credited to the Statement of Financial Activities. Actuarial gains and losses are recognised immediately under the description 'Actuarial losses on defined benefits pension scheme'.

Taxation

The Society is a Registered Charity and as such is entitled to certain tax exemptions on income and profit from investments and surpluses on any trading activities carried out in furtherance of the Charity's primary objectives. These profits are applied solely for charitable purposes.

Notes to the financial statements

For the year ended 31 March 2013

1. VOLUNTARY INCOME

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	2013 Total funds £'000	2012 Total funds £'000
Gifts and donations	270	1,106	-	-	1,376	1,511
Acquisition of Wolfson assets	-	1,054	-	-	1,054	-
Legacies	36	(24)	-	1,000	1,012	3,475
Fellows' contributions	240	-	-	-	240	218
Total	**546**	**2,136**	**-**	**1,000**	**3,682**	**5,204**

2. INVESTMENT INCOME

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	2013 Total funds £'000	2012 Total funds £'000
Dividends - UK equities	748	2,116	-	-	2,864	2,324
Dividends - overseas equities	233	659	-	-	892	1,243
Interest - UK fixed interest securities	6	19	-	-	25	-
Interest - overseas fixed interest securities	86	242	-	-	327	387
Bank deposit interest	21	16	-	-	38	92
Other gains and loan interest	19	53	-	-	72	-
Total	**1,113**	**3,105**	**-**	**-**	**4,218**	**4,046**

3. TRADING

	2013				2012			
	External income £'000	Recharged internal lettings £'000	Gross expenditure £'000	2013 Net surplus/ (deficit) £'000	External income £'000	Recharged internal lettings £'000	Gross expenditure £'000	2012 Net surplus/ (deficit) £'000
Incoming resources from generated funds								
Lettings through Subsidiary - Kavli Royal Society International Centre	641	54	561	134	563	-	377	186
Trading in furtherance of charitable activities								
Publishing	5,213	-	3,100	2,113	4,519	-	2,997	1,522
Lettings in furtherance of objectives - Carlton House Terrace	2,651	1,163	2,811	1,003	2,362	1,051	2,350	1,063
Lettings in furtherance of objectives - Kavli Royal Society International Centre	2	314	854	(538)	-	440	1,271	(831)
Other	742	(1)	-	741	276	-	-	276
	8,608	**1,476**	**6,765**	**3,319**	**7,157**	**1,491**	**6,618**	**2,030**
Total	**9,249**	**1,530**	**7,326**	**3,453**	**7,720**	**1,491**	**6,995**	**2,216**

The costs of the Society's publishing operation and the costs associated with the lettings in furtherance of charitable objects are included in 'Supporting outstanding science' on the face of the SOFA, the costs of lettings through the Subsidiary are included in the costs of generating funds.

The Society was exempt from income tax, corporation tax and capital gains tax on income derived from its primary purpose trading and charitable activities.

4. GRANTS FOR ACTIVITIES

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	2013 Total funds £'000	2012 Total funds £'000
From government and other public bodies:						
Grant from the Department of Business, Innovation and Skills	1,060	46,041	-	-	47,101	47,830
Other grants from government and public bodies	-	1,395	-	-	1,395	1,286
From other external bodies:						
Contribution to charitable activities	-	4,937	-	-	4,937	4,617
Total	**1,060**	**52,373**	**-**	**-**	**53,433**	**53,733**

Details of the income to and movement on individual funds are disclosed in note 19.

5. ANALYSIS OF COSTS OF CHARITABLE ACTIVITIES

	Staff costs	Grant costs £'000 (Note 9)	Other direct costs £'000	Support costs £'000 (Note 6)	2013 Total £'000	2012 (restated) Total £'000
Charitable activities						
Promoting science and its benefits	10	246	189	12	457	515
Recognising excellence in science	8	-	186	9	203	265
Supporting outstanding science	2,214	42,781	5,398	2,493	52,886	52,490
Providing scientific advice for policy	566	-	277	637	1,480	1,655
Fostering international and global cooperation	327	4,972	1,213	368	6,880	7,722
Education and public engagement	935	389	1,404	1,052	3,780	3,484
Write down of fixed asset (see note 12)	-	-	12,205	-	12,205	-
Total for costs of charitable activities	**4,060**	**48,388**	**20,872**	**4,571**	**77,891**	**66,131**

Following the introduction of the new five year strategic plan the charitable activities have been restated in line with the six strategic objectives shown above. The comparative figures have also been restated to show a like for like comparison.

6. SUPPORT COSTS

	Press and public relations £'000	Facilities and building management £'000	Support services £'000	2013 Total £'000	2012 (restated) Total £'000
Costs of generating funds	14	56	84	154	262
Charitable activities					
Promoting science and its benefits	1	4	7	12	8
Recognising excellence in science	1	3	5	9	58
Supporting outstanding science	220	912	1,361	2,493	1,865
Providing scientific advice for policy	56	233	348	637	677
Fostering international and global cooperation	32	135	201	368	670
Education and public engagement	93	385	574	1,052	1,026
	403	**1,672**	**2,496**	**4,571**	**4,304**
Governance	10	41	60	111	161
Total support costs	**427**	**1,769**	**2,640**	**4,836**	**4,727**

Facilities and building management comprises the rent and running costs (depreciation, insurance, cleaning and security) of Carlton House Terrace.

Support services comprises finance, IT, HR, pensions and corporate management.

Support costs are allocated using departmental salary costs as a base.

7. STAFF COSTS

	2013 £'000	2012 £'000
Salaries	5,666	5,821
Social Security costs	499	507
Pension costs	815	946
Total	**6,980**	**7,274**

The following numbers of employees received total emoluments within the bands shown.

	2013	2012
Number of employees earning £60,000 pa or more:		
£60,001 - £70,000	5	2
£70,001 - £80,000	1	2
£80,001 - £90,000	-	3
£90,001 - £100,000	2	2
£140,001 - £150,000	-	2
£150,001 - £160,000	1	-
£180,001 - £190,000	-	1
£190,001 - £200,000	1	-
£210,001 - £220,000[1]	1	-
£330,001 - £340,000[2]	-	1

Of the 11 employees above, 9 are accruing benefits under a defined benefits pension scheme.

[1] Includes severance payments

[2] Includes back-payments of a bonus to the Chief Executive of the Royal Society Enterprise Fund Ltd

Of the number of staff disclosed in the table above, the Society made payments on behalf of 9 (2012: 11) employees in respect of the Pension and Life Assurance Plan of the Royal Society.

The total amount of employer contributions paid in respect of these employees was £122,027 (2012: £137,103)

The average number of employees, analysed by function was:

	2013	2012
Generating funds	2	5
Charitable activities	92	95
Support and governance	41	38
Total	**135**	**138**

Of which the average full time equivalent was 133 (2012: 136)

8. GOVERNANCE COSTS

	2013 Total £'000	2012 (restated) Total £'000
Fellowship costs	129	126
Council and committee expenses	54	38
Auditor's remuneration:		
Audit fee	35	35
Audit fee - (over)/under provision prior year	4	(4)
Non audit services	1	6
Internal audit	24	22
Legal and professional fees	658	200
Staff costs	98	159
Allocated support costs	111	161
Total	**1,114**	**743**

9. GRANTS

	Grants to institutions £'000	Grants to individuals £'000	2013 Total £'000	2012 Total £'000
Fellowships				
University Research Fellowships	-	30,428	30,428	31,735
Dorothy Hodgkin Fellowships	-	3,558	3,558	3,815
Newton International Fellowships	-	2,212	2,212	1,721
Wolfson Research Merit Award	2,644	-	2,644	2,575
Leverhulme Trust Senior Research Fellowships	-	298	298	272
Royal Society Research Professorships	-	2,253	2,253	2,499
Industry Fellowships	-	1,423	1,423	1,151
International Fellowship Grants	-	136	136	-
Sir Henry Dale Fellowships	-	224	224	-
Education Schemes				
Education Research Fellowships	-	198	198	167
Partnership grants scheme	72	-	72	119
Other education grants	-	77	77	81
Other Grant Programmes				
Brian Mercer Awards	-	246	246	345
Paul Instrument Fund	-	363	363	149
Wolfson Laboratory Refurbishment grants	1,416	-	1,416	1,193
Leverhulme Royal Society Africa Awards	-	1,012	1,012	915
India-UK Scientific Seminars	-	69	69	171
International Exchanges	-	1,394	1,394	2,424
Theo Murphy Blue Skies Awards	-	(39)	(39)	26
Athena SWAN	-	25	25	20
DAIWA joint projects	-	23	23	48
Foundation for Science and Technology	20	-	20	18
International Council for Scientific Unions	-	-	-	16
JD Birchall Grant	-	2	2	-
Kavli Scientific	-	88	88	42
Other awards and prizes	-	246	246	168
Total	**4,152**	**44,236**	**48,388**	**49,670**

9. GRANTS (CONTINUED)

	Number	2013 Total £'000	2012 Total £'000
Recipients of institutional grants			
Imperial College London	32	437	726
University of Glasgow	11	330	188
University of Sheffield	3	268	-
University of Bristol	22	256	304
University College London	21	250	233
University of Oxford	23	205	242
University of Salford	1	175	75
University of Southampton	9	171	-
King's College London	3	167	-
University of Edinburgh	8	152	150
University of Cambridge	9	143	196
University of Birmingham	4	122	289
University of St Andrews	7	105	85
University of Bath	7	95	-
Swansea University	2	92	-
University of Leicester	6	82	74
University of Nottingham	8	79	63
University of Warwick	8	75	-
University of Manchester	7	58	87
University of Leeds	6	56	65
University of York	6	54	-
University of Durham	5	50	54
Other organisations	91	730	1,090
Total	**299**	**4,152**	**3,921**

Grants are generally awarded to particular individuals, although the actual award is made to the host organisation.

Detail of individual grants awarded during the year analysed by organisation are available from the finance department on request.

9. GRANTS (CONTINUED)

	2013 Total £'000	2012 Total £'000
Reconciliation of grants payable		
Liability at 1 April	586	221
New grants awarded in year	49,831	50,805
Grants paid in year	(47,819)	(49,305)
Grants refunded to the Society	(1,443)	(1,135)
Liability at 31 March	**1,155**	**586**

All grants payable fall due within one year.

10. PAYMENTS TO TRUSTEES

	2013 Total £'000	2012 Total £'000
Remuneration	-	-
Expenses: travel and subsistence	**38**	**34**

Expenses were reimbursed to 26 trustees (2012: 24 trustees)

Indemnity insurance
With the consent of the Charity Commission the Society has taken out trustees' indemnity insurance. The cost of this insurance for the year was £2,500 (2012: £2,500). No claims have been made under this policy.

Grants and awards
Professor John Wood is a holder of a Wolfson Research Merit Award. The amount paid to the University College London in respect of the award in the year was £24,982.

Professor Anthony Cheetham is a holder of a Wolfson Research Merit Award. The amount paid to the University of Cambridge in respect of the award in the year was £7,479

Professor Alex Halliday had a no-cost extension to his Theo Murphy Blue Skies Award, which finished in July 2012. No payments were made in the last financial year.

Professor Judith Howard finished her Joint Project in June 2012. No payments were made in the last financial year.

Other
Sir Paul Nurse, President of the Royal Society, has use of the President's flat at Carlton House Terrace.

11. FINANCIAL MEMORANDUM WITH THE DEPARTMENT OF BUSINESS, INNOVATION AND SKILLS AND DEPARTMENT FOR INTERNATIONAL DEVELOPMENT

	2013 Total £'000	2012 Total £'000
Business, Innovation and Skills Grant		
Income	47,102	47,830
Expenditure	(47,101)	(47,789)
Total	**1**	**41**

	2013 Total £'000	2012 Total £'000
Department for International Development Grant		
Income	169	-
Expenditure	(169)	-
Total	**-**	**-**

12. TANGIBLE FIXED ASSETS

	Chicheley Hall freehold property and improvements £'000	Chicheley Hall computers and other equipment £'000	Leasehold improvements £'000	Computers and other equipment £'000	2013 Total £'000	2012 Total £'000
Cost:						
At 1 April 2012	17,304	642	16,629	3,793	38,368	38,050
Additions	84	9	122	28	243	364
Disposals	(26)	-	(2)	(6)	(34)	(46)
At 31 March 2013	**17,362**	**651**	**16,749**	**3,815**	**38,577**	**38,368**
Depreciation:						
At 1 April 2012	768	183	4,881	3,350	9,182	7,693
Charge for year	12,594	93	754	226	13,667	1,489
At 31 March 2013	**13,362**	**276**	**5,635**	**3,576**	**22,849**	**9,182**
Net book value at 31 March 2013	**4,000**	**375**	**11,114**	**239**	**15,728**	**29,186**
Net book value at 31 March 2012	16,536	459	11,748	443	29,186	-

All tangible fixed assets are used for the support of charitable activities within the Society.

The Group and the Charity has freehold property with a net book value of £4.0 million (2012: £16.5 million). Chicheley Hall has been revalued by external valuers during the year and has a net market value of £4.0 million. An impairment charge of £12.2m has been recognised as accelerated depreciation during the year as a result.

13. CAPITAL COMMITMENTS

	2013 £'000	2012 £'000
Authorised and contracted for	83	15
Authorised but not contracted for	494	540
Total Commitment	**577**	**555**

At the balance sheet date, £173,000 of capital commitments was authorised for refurbishment of 6 – 9 Carlton House Terrace, of which £83,000 had been contracted for by the year end. A further spend of £204,000 had been authorised on audio visual upgrades and £200,000 on IT projects including digital strategy. No contracts for this expenditure had been signed by the year end. £42,000 had been authorised for the historic maintenance of Chicheley Hall, of which £10,000 has been contracted for by the year end.

14. HERITAGE ASSETS

The Society holds an extensive collection of heritage assets relating to the history of the Society itself and the wider history of scientific endeavour. The collection has four main components:

Printed works: The Library contains over 70,000 titles, published from the 1470s to the present day. The main strength of the collections is in the 17th and 18th centuries: from the 1680s to the mid-19th century, the policy of the Library was to acquire every important scientific publication.

Archives: These comprise an extraordinary and unrivalled record of the development of science that spans nearly 350 years. The archive collection is a unique resource for historians, particularly historians of science, containing over 250,000 items.

Pictures, sculptures, and other works of Art: The collection includes over 6,000 photographs, engravings, and paintings of past and present Fellows.

Other artefacts: The collection comprises approximately 150 items and includes scientific instruments, furniture and furnishings, and the Society's Charter Book.

The collections are accessible to scholars and the wider public through the Royal Society's History of Science Centre, which includes a reference library and an extensive on-line presence, including fully searchable catalogue and image library.

	2013 £'000	2012 £'000
Heritage assets		
Items included at valuation at 1 April	46,066	46,039
Items included at cost at 1 April	1,153	1,151
Additions at valuation	30	27
Additions at cost	1	2
Valuation or cost at 31 March	**47,250**	**47,219**
The heritage assets comprise:		
Printed books	13,239	13,238
Archives	22,838	22,808
Pictures, sculptures and other works of art	8,169	8,169
Other artefacts	3,004	3,004
Total	**47,250**	**47,219**

The printed books and archives were valued on 5 August 2003 by Roger Gaskell, a rare book dealer and the pictures and other artefacts by Weller King, Fine Art Dealers, in May 2004. The valuations are on a fair market / replacement basis on those parts of the collection where it is felt such a valuation can be reasonably made. The trustees consider there to be no material impairment on the present market values / replacement values compared to those stated.

There were no material additions or disposals to the heritage assets held by the Society in 2012/13.

14. HERITAGE ASSETS (CONTINUED)

Five year financial summary of heritage asset transactions:

	2012/13 £'000	2011/12 £'000	2010/11 £'000	2009/10 £'000	2008/09 £'000
Purchases					
Printed books	1	4	1	-	-
Archives	30	18	84	-	-
Pictures, sculptures and other works of art	-	7	70	-	-
Other artefacts	-	-	10	1	2
Total purchases	**31**	**29**	**165**	**1**	**2**

In 2010/11 the Society recognised £145,000 of donated heritage assets that it had received over the past five years. These assets had not previously been accounted for as only a small amount was received each year. The full amount was recognised in 2010/11. In subsequent years donations have been recognised in the year they were received.

There have been no disposals of heritage assets within the last five years.

Preservation and management

Expenditure which in the trustees' view is required to preserve or clearly prevent further deterioration of individual collection items is recognised in the 'Statement of financial activities' when it is incurred.

The Society has an on-going programme of conservation and restoration work, alongside a cataloguing project. This restoration work costs the Society approximately £10,000 each year.

The Society's major strategic facilities for the long-term preservation of its historic archives, manuscripts and printed books are environmentally-controlled store-rooms (conforming to British Standard 5454 ("Preservation of archival documents")).

The Society's modern records have been subject to a full audit, completed in April 2011. This process enabled the full-life management, destruction and permanent archiving of pertinent files. Conservation of damaged items is now underway, as is a more detailed cataloguing of individual collection elements.

Each of the Society's major collections (archives, modern records, printed books, pictures, journals, objects) has a designated member of curatorial staff and exhibited materials are looked after by an exhibitions manager. Collections are managed and recorded in discrete databases and according to the prevailing standard in each area (for example, ISAD for archival cataloguing, SPECTRUM for museum standards and picture control).

15. INVESTMENTS

	2013 Total £'000	2012 Total £'000
Valuation at 1 April	159,391	166,955
Reclassification from associate investment	243	-
Additions of investments	13,654	11,920
Recognition of Wolfson Professorship assets	1,054	-
Disposal of investments	(10,969)	(13,324)
Net change in cash invested for trades	(1,942)	1,820
Investment management costs	(446)	(418)
Net cash added / (removed)	2,704	(2,866)
Net unrealised gain / (loss) on valuation at 31 March	22,251	(4,770)
Exchange rate gains on valuation at 31 March	55	74
Valuation at 31 March	**185,996**	**159,391**

Total historical cost at the end of the year	136,197	133,355

	2013 £'000	2012 £'000
The valuation at 31 March comprises:		
Investments listed on a recognised stock exchange including investments and unit trusts:		
UK	116,724	100,179
Overseas	54,821	46,970
Other unlisted securities:		
UK	3,947	2,892
Overseas	9,271	8,260
Cash:		
UK	(88)	536
Overseas	1,320	554
Total	**185,996**	**159,391**

15. INVESTMENTS (CONTINUED)

Overseas investments comprise equities, unit/investment trusts and fixed interest funds.

The trustees believe that the carrying value of the investments is supported by their underlying net assets.

At 31 March 2013 no UK equity investments exceeded 5% by value of the invested portfolio (2012: nil)

The Society owns 100% of the issued share capital of The Royal Society Enterprise Fund Limited (note 22).

The principal activity of the company is providing advice to the Society in its application of the Enterprise Fund.

The Society owns 100% of the issued share capital of The Royal Society Trading Limited (note 22).

The principal activity of the company is conferencing activities at Chicheley Hall.

The Society owns share capital in the following companies which are investments of the Enterprise Fund:

Base4 Innovation Limited	7.20%
Nano-porus Solutions Limited	17.04%
Novacem Limited	18.93%
OrganOx Limited	5.00%
Sphere Fluidics Limited	18.40%

	2013 Total £'000	2012 Total £'000
Funds are invested:		
Specific investments – Enterprise Fund	2,691	1,783
Specific investments – Theo Murphy Australia Fund	3,749	3,252
Specific investments – Wolfson Research Professorship Trust	1,121	-
Pooled investments	178,435	154,356
Total	**185,996**	**159,391**

15. INVESTMENTS (CONTINUED)

Investments in associate companies

Following an external round of funding on 9 Feb 2013, the Society owns 18.4% of the issued share capital of Sphere Fluidics Limited and therefore this investment is no longer treated as an associate.

	2013 Total £'000	2012 Total £'000
The Society's investment in Sphere Fluidics is as follows:		
Valuation at 1 April	243	-
Share of net liabilities aquired during the year	-	(43)
Goodwill acquired during the year	-	293
Share of net loss since acquisition	-	(7)
Reclassification from associate company	(243)	-
Valuation at 31 March	**-**	**243**

Reconciliation of investment gains

	2013 Total £'000	2012 Total £'000
Unrealised gains/(losses)	22,251	(4,844)
Realised gains	233	-
Exchange rate gains on valuation	55	74
Net gains/(losses) on investments as per SOFA	**22,539**	**(4,770)**

16. DEBTORS

	2013 Receivable within one year £'000	2013 Receivable after one year £'000	2012 Receivable within one year £'000	2012 Receivable after one year £'000
Trade debtors	1,152	-	1,331	-
Grants receivable	700	2,000	700	2,700
Legacy receivable	3,045	-	2,812	-
Other debtors	111	-	71	-
Accrued income	371	-	142	-
Prepayments	207	-	181	-
Total	**5,586**	**2,000**	**5,237**	**2,700**

Included in the Group debtors are trade debtors of £191,000 (2012: £49,000) belonging to Royal Society Trading Ltd. All other debtors relate to the Charity.

The Charity holds a loan in respect of the Royal Society Trading Ltd of £534,000 (2012: £219,000).

17. CREDITORS

	2013 Due within one year £'000	2013 Due after one year £'000	2012 Due within one year £'000	2012 Due after one year £'000
Trade creditors	1,701	-	3,585	-
Publications advanced sales	3,036	-	2,836	-
Chicheley advanced sales	17	-	-	-
Grants payable	1,155	-	586	-
Other creditors	568	129	562	181
Accruals & deferred income	5,237	-	5,749	-
Total	**11,714**	**129**	**13,318**	**181**

Included in the Group creditors are other credtors of £153,000 (2012: £47,000) relating to Royal Society Trading Ltd. All other creditors relate to the Charity.

17. CREDITORS (CONTINUED)

Reconciliation of deferred income

	2013 £'000	2012 £'000
Deferred income as at 1 April	4,748	3,766
Income deferred in year	2,476	3,385
Income released to SOFA in year	(2,765)	(2,403)
Deferred income as at 31 March	**4,459**	**4,748**

18. ANALYSIS OF NET ASSETS BETWEEN FUNDS

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	2013 Total funds £'000	2012 Total funds £'000
Funds' balances at 31 March 2013 are represented by:						
Tangible fixed assets	13,407	2,321	-	-	15,728	29,186
Heritage assets	47,250	-	-	-	47,250	47,219
Investment in associated company	-	-	-	-	-	243
Investments	27,646	38,000	25,584	94,766	185,996	159,391
Net current assets	558	-	-	-	558	356
Creditors: Due after one year	(129)	-	-	-	(129)	(181)
Defined benefit pension scheme liability	(11,919)	-	-	-	(11,919)	(7,123)
Net assets	**76,813**	**40,321**	**25,584**	**94,766**	**237,484**	**229,091**

19. MOVEMENTS ON TRUST AND SPECIFIC FUNDS IN YEAR

	Brought forward 01/04/12 £'000	Prior year adjustment £'000	Revised balance at 01/04/12 £'000	Income £'000	Expenditure £'000	Transfers £'000	Investment and actuarial gain/(loss) £'000	Carried forward 31/03/13 £'000
Permanent endowment funds								
General Trust Fund	5,291	(3,223)	2,068	-	(5)	-	272	2,335
International Fund	1,102	-	1,102	-	(3)	-	145	1,244
Life Sciences Fund	15,054	(4,967)	10,087	-	(26)	-	1,328	11,389
Mathematics and Physical Sciences Fund	9,295	(42)	9,253	-	(24)	-	1,219	10,448
RW Paul Instrument Fund	9,921	-	9,921	-	(25)	-	1,307	11,203
The Crowley-Milling Fund	-	-	-	1,000	(1)	-	66	1,065
Project funds	6	-	6	-	-	-	-	6
Theo Murphy UK Fund	47,555	-	47,555	-	(122)	-	6,263	53,696
Theo Murphy Australia Fund	2,907	-	2,907	-	-	-	310	3,217
RS Pensioners Fund	-	144	144	-	-	-	19	163
Total permanent endowment funds	**91,131**	**(8,088)**	**83,043**	**1,000**	**(206)**	**-**	**10,929**	**94,766**
Expendable endowment funds								
General Trust Fund	20,064	(10,392)	9,672	-	(16)	-	848	10,504
International Fund	1,208	(943)	265	-	(1)	-	35	299
Life Sciences Fund	9,642	(3,730)	5,912	-	(15)	-	779	6,676
Mathematics and Physical Sciences Fund	9,584	(6,365)	3,219	-	(8)	-	424	3,635
Science Policy endowment	-	1,871	1,871	-	(5)	-	246	2,112
Education Policy endowment	-	1,069	1,069	-	(3)	-	141	1,207
GSK endowment	-	1,020	1,020	-	(3)	-	134	1,151
Total expendable endowment funds	**40,498**	**(17,470)**	**23,028**	**-**	**(51)**	**-**	**2,607**	**25,584**

19. MOVEMENTS ON TRUST AND SPECIFIC FUNDS IN YEAR (CONTINUED)

	Brought forward 01/04/12 £'000	Prior year adjustment £'000	Revised balance at 01/04/12 £'000	Income £'000	Expenditure £'000	Transfers £'000	Investment and actuarial gain/(loss) £'000	Carried forward 31/03/13 £'000
Restricted funds								
International Fund	3	943	946	62	(112)	(6)	121	1,011
Life Sciences Fund	1	7,678	7,679	583	(662)	(169)	966	8,397
Mathematics and Physical Sciences Fund	1	6,407	6,408	448	(368)	(49)	822	7,261
Science Policy endowment	-	-	-	44	-	(5)	-	39
Education Policy endowment	-	-	-	25	-	(3)	-	22
GSK endowment	-	-	-	24	-	(3)	-	21
RW Paul Instrument Fund	462	-	462	245	(368)	(26)	37	350
The Crowley-Milling Fund	-	-	-	12	-	(1)	-	11
Royal Society pensioners fund		17	17	4	-	-	2	23
Enterprise Fund	6,108	-	6,108	374	(273)	(23)	1,006	7,192
Andrew Fund	1,327	-	1,327	(3)	(3)	(3)	172	1,490
Noreen Murray Fund	2,000	-	2,000	47	(5)	(5)	263	2,300
Forrest Fund		1,497	1,497	35	(4)	(4)	197	1,721
Nutrition in old age fund	680	2,245	2,925	746	(8)	(8)	429	4,084
Project funds								
Wolfson Lab Refurbishment	-	-	-	1,427	(1,426)	(1)	-	-
Other	679	-	679	5,547	(5,096)	457	-	1,587
BIS Science and Research Grant	-	-	-	46,042	(46,041)	-	-	1
Deferred refurbishment funds	2,478	-	2,478	-	(157)	-	-	2,321
Theo Murphy UK Fund	-	-	-	1,259	(584)	(122)	(29)	524
Theo Murphy Australia Fund	354	264	618	281	(27)	(9)	-	863
The Wolfson Research Professorship of the Royal Society	-	-	-	1,088	(50)	(1)	66	1,103
Total restricted funds	**14,093**	**19,051**	**33,144**	**58,290**	**(55,184)**	**19**	**4,052**	**40,321**

19. MOVEMENTS ON TRUST AND SPECIFIC FUNDS IN YEAR (CONTINUED)

	Brought forward 01/04/12 £'000	Prior year adjustment £'000	Revised balance at 01/04/12 £'000	Income £'000	Expenditure £'000	Transfers £'000	Investment and actuarial gain/(loss) £'000	Carried forward 31/03/13 £'000
Unrestricted funds								
General Trust Fund	572	10,514	11,086	588	(586)	(591)	1,853	12,350
Deferred refurbishment funds	2,580	-	2,580	-	(114)	-	-	2,466
BIS Science and Research Grant	-	-	-	1,060	(1,060)	-	-	-
Revaluation reserve	46,036	-	46,036	-	-	-	-	46,036
Defined benefit pension	-	-	-	-	(384)	(7,123)	(4,412)	(11,919)
General purposes	34,181	(4,007)	30,174	9,688	(22,775)	7,695	3,098	27,880
Total unrestricted funds	**83,369**	**6,507**	**89,876**	**11,336**	**(24,919)**	**(19)**	**539**	**76,813**
Total for all trusts								
General Trust Fund	25,927	(3,101)	22,826	588	(607)	(591)	2,973	25,189
International Fund	2,313	-	2,313	62	(116)	(6)	301	2,554
Life Sciences Fund	24,697	(1,019)	23,678	583	(703)	(169)	3,073	26,462
Mathematics and Physical Sciences Fund	18,880	-	18,880	448	(400)	(49)	2,465	21,344
RW Paul Instrument Fund	10,383	-	10,383	245	(393)	(26)	1,344	11,553
The Crowley-Milling Fund	-	-	-	1,012	(1)	(1)	66	1,076
RS Pensioners Fund	-	161	161	4	-	-	21	186
Science Policy endowment	-	1,871	1,871	44	(5)	(5)	246	2,151
Education Policy endowment	-	1,069	1,069	25	(3)	(3)	141	1,229
GSK endowment	-	1,020	1,020	24	(3)	(3)	134	1,172
Enterprise Fund	6,108	-	6,108	374	(273)	(23)	1,006	7,192
Andrew Fund	1,327	-	1,327	(3)	(3)	(3)	172	1,490
Noreen Murray Fund	2,000	-	2,000	47	(5)	(5)	263	2,300
Forrest Fund	-	1,497	1,497	35	(4)	(4)	197	1,721
Nutrition in old age fund	680	2,245	2,925	746	(8)	(8)	429	4,084
Project funds								
Wolfson Lab Refurbishment	-	-	-	1,427	(1,426)	(1)	-	-
Other	685	-	685	5,547	(5,096)	457	-	1,593
BIS Science and Research Grant	-	-	-	47,102	(47,101)	-	-	1

19. MOVEMENTS ON TRUST AND SPECIFIC FUNDS IN YEAR (CONTINUED)

	Brought forward 01/04/12 £'000	Prior year adjustment £'000	Revised balance at 01/04/12 £'000	Income £'000	Expenditure £'000	Transfers £'000	Investment and actuarial gain/(loss) £'000	Carried forward 31/03/13 £'000
Deferred refurbishment funds	5,058	-	5,058	-	(271)	-	-	4,787
Theo Murphy UK Fund	47,555	-	47,555	1,259	(706)	(122)	6,234	54,220
Theo Murphy Australia Fund	3,261	264	3,525	281	(27)	(9)	310	4,080
The Wolfson Research Professorship of the Royal Society	-	-	-	1,088	(50)	(1)	66	1,103
Revaluation reserve	46,036	-	46,036	-	-	-	-	46,036
Defined benefit pension	-	-	-	-	(384)	(7,123)	(4,412)	(11,919)
General purposes	34,181	(4,007)	30,174	9,688	(22,775)	7,695	3,098	27,880
Total	**229,091**	**-**	**229,091**	**70,626**	**(80,360)**	**-**	**18,127**	**237,484**

* A management review of funds was completed during the year. The review concluded that some funds have been incorrectly classified as expendable and permanent endowments where they were restricted income funds and expendable endowments respectively. There has been no indication of unauthorised capital spend. Consequently the 1 April 2012 permanent endowment and expendable endowment funds were overstated and restricted income and unrestricted funds understated by the same amount. The prior year incorrect classification has been corrected by transfers indicated above. This has no overall effect on the total funds brought forward.

The objects of the General Fund are to promote and advance for the general benefit of the public, including the scientific (science, medicine, engineering and technology) community, the efficiency and effectiveness of the Royal Society and its Fellowship. This shall be done in particular by establishing, promoting, supporting and maintaining, for the general benefit of the public and the scientific community, its activities, premises, fixtures and fittings, equipment, libraries and archives, general publications and the history of science.

The objects of the International Fund are to promote and advance for the general benefit of the public, including the scientific (science, medicine, engineering and technology) community the study and investigation of, and research into all areas of science internationally. This shall be done in particular by promoting and carrying out international scientific collaboration, encouraging international interchange between scientists, advancing the engagement of the public in matters related to such international science, and providing the best possible scientific advice and information on international scientific policy.

The objects of the Life Sciences Fund are to promote and advance for the general benefit of the public, including the scientific (science, medicine, engineering and technology) community, the study and investigation of, and research into all areas of life sciences and other science at the interface between this area and other areas of science. This shall be done in particular by supporting scientists working in this area, advancing engagement of the public in all matters relating to such science and providing the best possible scientific advice and information to those making policy in the area of life science.

The objects of the Mathematics and Physical Sciences Fund are to promote and advance for the general benefit of the public, including the scientific (science, medicine, engineering and technology) community, the study and investigation of, and research into all areas of mathematics and physical sciences and other science at the interface between this area and other areas of science. This shall be done in particular by supporting scientists working in this area, advancing engagement of the public in all matters relating to such science and providing the best possible scientific advice and information to those making policy in the area of mathematics and physical science.

The objects of the RW Paul Instrument Fund are restricted to the provision of grants under the Paul Instrument Grants Scheme.

The Crowley-Milling Fund has been established following a generous legacy from Gladys and Michael Crowley-Milling. The income from this fund is restricted to the promotion and encouragement of research in the physical sciences and their application especially for the support of young scientists.

19. MOVEMENTS ON TRUST AND SPECIFIC FUNDS IN YEAR (CONTINUED)

The Theo Murphy Funds (in the UK and Australia) were created through a bequest from the estate of the late Theo Murphy. The funds "shall be used or applied to further scientific discovery in the fields of medicine, science, technology and engineering". The Australia Fund will carry out activities in Australia in accordance with the will.

The Royal Society Pensioners Fund was founded in 1919. By the wish of the original donors the capital is to remain intact and the income to be applied to the payment of pensions for servants of the Society and to make lump sum payments to Royal Society pensioners in need.

The Science Policy endowment has been established following donations received from Sir Tom McKillop FRS and the Kohn Foundation to support the Science Policy Centre.

The Education endowment has been established from a generous donation from the Gatsby Foundation to support the Society's education policy work.

The GSK endowment was established from donated funds to be held as an expendable endowment for the advancement of research in the field of medical science by the establishment of a Royal Society Professorship.

The Enterprise Fund was created by generous donations in support of the Society in making equity investments in innovative early-stage businesses emerging from the science base in the UK and elsewhere.

The Andrew Fund has been established following a generous legacy from Dr Sydney Percy Smith Andrew FREng FRS to be used for the purpose of promoting and establishing research for the advancement of natural knowledge particularly in interdisciplinary fields of understanding.

The Murray Fund has been established following a generous legacy from Lady Noreen Murray FRS for the support of research in neurological science.

The Forrest Fund has been established following a generous legacy for the support of British post doctorate electrical research in memory of Professor John Samuel Forrest.

The Society has accepted a donation to be applied to the study of nutrition among the elderly.

The Wolfson Laboratory Fund is a scheme funded by the Wolfson Foundation to provide grants for the renovation and modernisation of university laboratories for the conduct of high quality research.

The Society receives a Parliamentary Grant from the Department for Business, Innovation and Skills (BIS). This supports work on scientific excellence and innovation, science and mathematics education, international activities and science communication activities.

Other project funds comprise monies received to fund separate restricted projects in line with our charitable activites and are held as separate individual funds in our accounts.

Following the deed of retirement of the other trustees the investments of the Wolfson Research Professorship of the Royal Society were transferred to the sole remaining trustee being the Royal Society. The application of the income from the portfolio is restricted to support the Wolfson Research Professorship.

Deferred refurbishment funds consist of grant income received in past years in respect of capital projects at Carlton House Terrace. This income was recognised in full upon receipt, and designated / restricted funds created to the value of the relevant assets, which are now being reduced over time in line with the recommended treatment detailed in the SORP 2005.

The revaluation reserve relates to the revaluation of the heritage assets.

The transfers between projects and funds include administration charges of the investments held in the trusts, administration costs reclaimed from projects where applicable, notional interest paid to projects in respect of income held during the year and any income released to the general reserves at the end of projects (where allowed under the gift or grant agreement).

20. FINANCIAL COMMITMENTS

At 31 March 2013 the Society had the following commitments:

- an annual commitment for rent under a non-cancellable operating lease in respect of occupation of 6–9 Carlton House Terrace, London. The future commitment for rent is estimated at £495k (2012-£495k) per annum. The next rent review will be on 5 January 2025.
- agreements and commitments to fund research professorships/fellowships and other grants totalling £103m (2012: £98m). Of these, £40m (2012: £38m) are due in less than one year, and £63m (2012: £60m) in between two and five years. There are no grants payable in more than 5 years. All of these grants are treated as liabilities of future periods to which they are time related and will be financed by specific grants or other income receivable in those periods.
- the Society has entered into investment contract commitments totalling £1.7m (2012: £1.7m) payable at dates yet to be agreed.

21. PENSION OBLIGATIONS

The Royal Society ("the Employer") operates a defined benefit pension arrangement in the UK called the Pension and Life Assurance Plan of the Royal Society ("the Plan"), with assets held in a separately administered fund. The scheme provides retirement benefits on the basis of members' final salary. The Plan is open to new members, and provides benefits on a defined benefit basis.

The most recent valuation of the Plan under FRS 17 was carried out as at 31 March 2013. The valuation of the Plan used the projected unit method and was carried out by Barnett Waddingham, professionally qualified actuaries.

The FRS 17 liability does not include any allowance for discretionary benefits. The Employer expects to make contributions to the Plan during the year to 31 March 2014 of around £800,000.

Contributions payable by the Society during the year were at the rate of 16.3% of pensionable salaries. Members contributions were 7%. An additional contribution of £0.3m to reduce the deficit was paid into the Plan by the Society in December 2012 (December 2011: £0.5m). Life cover and dependents' pensions in respect of death in service are provided by additional insurance premiums.

The Principal assumptions used to calculate Scheme liabilities include:

	2013 % pa	2012 % pa
Inflation (RPI)	3.60	3.50
Inflation (CPI)	2.70	2.60
Salary escalation	4.60	4.50
Increase to pensions in payment*		
- subject to LPI minimum 4%	4.20	4.20
- subject to LPI	3.50	3.40
Statutory revaluation	2.70	2.60
Discount rate (pre-and-post-retirement)	4.00	4.70
Pre-retirement mortality table	S1NA	S1NA
Post-retirement mortality table	S1NA	S1NA
Post-retirement mortality projection	Long cohort based on individual year of birth	Long cohort based on individual year of birth
Tax free cash	0%	0%
Withdrawals	None	None

*Pensions in payment increase by the lesser of the annual increase in the retail price index or 5%. For service prior to 1 November 2001 this is subject to a minimum increase of 4%.

21. PENSION OBLIGATIONS (CONTINUED)

Under the mortality tables and projections adopted, the assumed future life expectancy at age 60 is as follows:

	2013	2012
Male currently aged 40	28.5 years	28.5 years
Female currently aged 40	31.1 years	31.1 years
Male currently aged 60	27.4 years	27.3 years
Female currently aged 60	30.1 years	30.1 years

The assets in the scheme and the expected rates of return were:

	Long term rate of return expected at 31/03/2013* % pa	Value at 31/03/2013 £'000	Long term rate of return expected at 31/03/2012* % pa	Value at 31/03/2012 £'000
Scheme's assets	4.7%		5.1%	
Equities	5.3%	22,498	5.6%	18,799
Bonds	3.4%	3,049	4.1%	2,841
Gilts	2.2%	1,078	2.5%	1,027
Cash	0.5%	411	0.5%	295
Annuity policies	4.0%	8,568	4.7%	8,127
Total market value of scheme assets		**35,604**		**31,089**
Present value of scheme liabilities		47,523		38,212
Deficit in the scheme		(11,919)		(7,123)
Related deferred tax asset / liability		-		-
Net pension liability		**(11,919)**		**(7,123)**

*The expected return on assets is a weighted average of the assumed long-term returns for the various asset classes.

The assets do not include any investment in shares of the Employer.

21. PENSION OBLIGATIONS (CONTINUED)

Reconciliation of present value of scheme liabilities

	Value at 31/03/2013 £'000	Value at 31/03/2012 £'000
1 April	38,212	32,696
Current service cost	1,023	878
Contributions by Scheme participants	233	247
Past service cost	-	186
Interest cost	1,799	1,789
Benefits paid	(1,104)	(1,672)
Actuarial loss (excluding the actuarial gain/(loss) on assets)	7,360	4,088
Change due to settlements or curtailments	-	-
31 March	**47,523**	**38,212**

Sensitivity analysis of the scheme deficit

The sensitivity of the present value of the scheme deficit to changes in the principle assumptions used is set out below.

	Change in assumption	Impact on scheme deficit £'000
Discount rate	-0.10%	993
Rate of inflation*	-0.10%	(563)
Rate of increase in salaries	-0.10%	(156)
Mortality	1% floor on mortality improvements	1,610

*Other assumptions linked to the rate of inflation are also assumed to change appropriately

21. PENSION OBLIGATIONS (CONTINUED)

Reconciliation of fair value of scheme assets

	Value at 31/03/2013 £'000	Value at 31/03/2012 £'000
1 April	31,089	30,408
Expected return on assets	1,585	1,787
Contributions by the Employer	853	1,183
Contributions by Scheme participants	233	247
Benefits paid	(1,104)	(1,672)
Actuarial gain/(loss) on assets only	2,948	(864)
Change due to settlements or curtaliments	-	-
31 March	**35,604**	**31,089**

The expected return on scheme assets is determined by considering the expected returns available on the assets underlying the current investment policy. Expected yields on fixed interest investments are based on gross redemption yields as at the balance sheet date. Equity returns are based on the selection of an appropriate risk premium above the risk-free rate which is measured in accordance with the yield on government bonds.

The actual return on scheme assets in the year was £4.5m (2012: £0.9m).

Analysis of the amount charged to the statement of financial activities – operations

	Value at 31/03/2013 £'000	Value at 31/03/2012 £'000
Current service cost	(1,023)	(878)
Interest cost	(1,799)	(1,789)
Expected return on assets	1,585	1,787
(Gains)/losses on settlements or curtaliments	-	-
Past service cost	-	(186)
Effect of limit on recognisable surplus	-	-
Total charge	**(1,237)**	**(1,066)**

21. PENSION OBLIGATIONS (CONTINUED)

Actuarial gains and losses

The cumulative amount of actuarial losses recognised in the SOFA is £4,412,000 (2012: £4,952,000)

Actuarial valuation

The full actuarial valuation at 1 January 2010 showed an increase in the deficit from £1,782,000 to £2,791,000. It has been agreed with the Trustees that contributions to make good the deficit will be payable as follows:

- £1,043,000 on or before 31 December 2010;
- £500,000 on or before 31 December 2011;
- £300,000 on or before 31 December 2012; and
- £236,000 on or before each 31 December in 2013 to 2019 inclusive.

Amounts for current and previous four periods

	2013 £'000	2012 £'000	2011 £'000	2010 £'000	2009 £'000
Defined benefit obligation*	47,523	38,212	25,084	23,202	15,774
Plan assets*	35,604	31,089	22,795	18,673	12,920
Deficit	**(11,919)**	**(7,123)**	**(2,288)**	**(4,529)**	**(2,854)**
Experience adjustments on plan assets:	2,948	(864)	1,212	3,372	(4,615)
Experience adjustments on plan liabilities:	(65)	(663)	589	975	(132)
Change in assumptions used to value plan liabilites:	(7,295)	(3,425)	(236)	(6,760)	2,157
Total amount recognised in the SOFA	**(4,412)**	**(4,952)**	**1,565**	**(2,413)**	**(2,590)**

*The liability and asset values for years ending on or after 31 March 2012 include the value of annuity polices held by the Scheme. These policies were not included in earlier accounting periods and these results have not been restated.

22. SUBSIDIARY UNDERTAKINGS AND ASSOCIATED COMPANIES

The Society owns 100% of the £1 called-up and issued share capital of The Royal Society Enterprise Fund Limited. The principal activity of that company is providing advice to the Society in its application of the Enterprise Fund. The Company traded exclusively with the Society in the period ended 31 March 2013.

The Society also owns 100% of the £1 called-up and issued share capital of The Royal Society Trading Limited. The Royal Society Trading Limited company has been set up to process the activities that occur at Chicheley Hall.

During the year ended 31 March 2012 the Society owned 25.9% of the £0.01 called-up and issued share capital of Sphere Fluidics Limited. During the current financial year the Society reduced its holding to 18.4%. This company's principal activity during the year was the research and development of discovery systems that can rapidly detect and isolate new cell strains and molecules from large background poulations. The Society has acquired this shareholding through the Enterprise Fund as part of it's investment in innovative early-stage businesses emerging from the science base in the UK and elsewhere.

Results of the Royal Society Enterprise Fund Limited year ended 31 March 2013;

	2013 £'000	2012 £'000
Trading income	496	800
Cost of sales	(496)	(800)
Result for the period	-	-
Total funds brought forward at 1 April	-	-
Total funds carried forward at 31 March	-	-

The Royal Society Enterprise Fund Limited has called up share capital of £1.

22. SUBSIDIARY UNDERTAKINGS AND ASSOCIATED COMPANIES

Results of the Royal Society Trading Limited year ended 31 March 2013

	2013 £'000	2012 £'000
Trading income	695	563
Cost of sales	(513)	(319)
Gross profit	**182**	**244**
Administrative expenses	(48)	(58)
Charitable donation to the Royal Society	(134)	(186)
Result for the year	**-**	**-**
Total funds brought forward at 1 April	-	-
Total funds carried forward at 31 March	**-**	**-**

Balance sheet of the Royal Society Trading Limited year ended 31 March 2013

	2013 £'000	2012 £'000
Fixed assets		
Assets under construction	9	-
Current assets		
Debtors	196	49
Cash at bank and in hand	483	217
	679	**266**
Creditors: amounts falling due within one year	(688)	(266)
Net current assets	(9)	-
Net assets	**-**	**-**
Capital and reserves		
Called up share capital	-	-
Profit and loss account	-	-
Shareholders' funds	**-**	**-**

The Royal Society Trading Limited has called up share capital of £1.

The Royal Society (Australia) Pty Limited is the trustee of the Royal Society Theo Murphy (Australia) Fund. It is an Australian company the shares of which are owned by the Society.

22. SUBSIDIARY UNDERTAKINGS AND ASSOCIATED COMPANIES

The Royal Society's interest in the results of Sphere Fluidics Limited from 1 April 2012 to 9 February 2013 (2012: 29 September 2011 to 31 March 2012)

	2013 £'000	7 months to 31 March 2012 £'000
Income	54	48
Total expenditure	(120)	(53)
Operating loss before interest and taxation	**(66)**	**(5)**
Interest receivable and tax on loss on ordinary activites	-	(2)
Result for the year	(66)	(7)
Total funds brought forward at 1 April	(7)	-
Total funds recognised	**(73)**	**(7)**

The Royal Society's interest in the balance sheet of Sphere Fluidics Limited as at 31 March 2013

	2013 £'000	2012 £'000
Fixed assets	-	2
Current assets	-	52
Creditors: amounts falling due within one year	-	(1)
Net current assets	**-**	**51**
Creditors: amounts falling due after one year	-	(64)
Net assets	**-**	**(11)**
Capital and reserves		
Share capital	-	-
Share premium account	-	84
Profit and loss reserve	-	(95)
Shareholders' funds	**-**	**(11)**

23. CONNECTED CHARITIES – THE WOLFSON RESEARCH PROFESSORSHIP OF THE ROYAL SOCIETY

	2013 £'000	2012 £'000
Restricted funds		
Incoming resources:		
Dividends and interest	33	41
Resources expended:		
Charitable grants to the Royal Society	(33)	(41)
	-	-
Permanent endowment funds		
Total funds brought forward at 1 April	1,047	1,042
Total funds carried forward at 31 March	**1,121**	**1,047**

Following the deed of retirement of the other trustees on 29 October 2012 the property and invesments of the Wolfson Research Professorship of the Royal Society were transferred to the sole remaining trustee being the Royal Society. These assets have been consolidated on a line by line basis in the group accounts.

24. OTHER FUNDS

The Society is the beneficiary of the following funds:

	2013 Investment market value £'000	2012 Investment market value £'000
Curl Fund The investments for this fund are held and managed by the New Zealand Public Trust Office	119	84
Horace Le Marquand And Dudley Bigg Trust The investments of the permanent endowment of the Trust are held and managed by Rensberg Sheppards. The Trustees are Investec Trust (Jersey) Limited.	474	431

The Royal Society

The Royal Society is a self-governing Fellowship of many of the world's most distinguished scientists drawn from all areas of science, engineering, and medicine. The Society's fundamental purpose, reflected in its founding Charters of the 1660s, is to recognise, promote, and support excellence in science and to encourage the development and use of science for the benefit of humanity.

The Society's strategic priorities are:

- Promoting science and its benefits
- Recognising excellence in science
- Supporting outstanding science
- Providing scientific advice for policy
- Fostering international and global cooperation
- Education and public engagement

For further information

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Founded in 1660, the Royal Society is the independent scientific academy of the UK, dedicated to promoting excellence in science

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