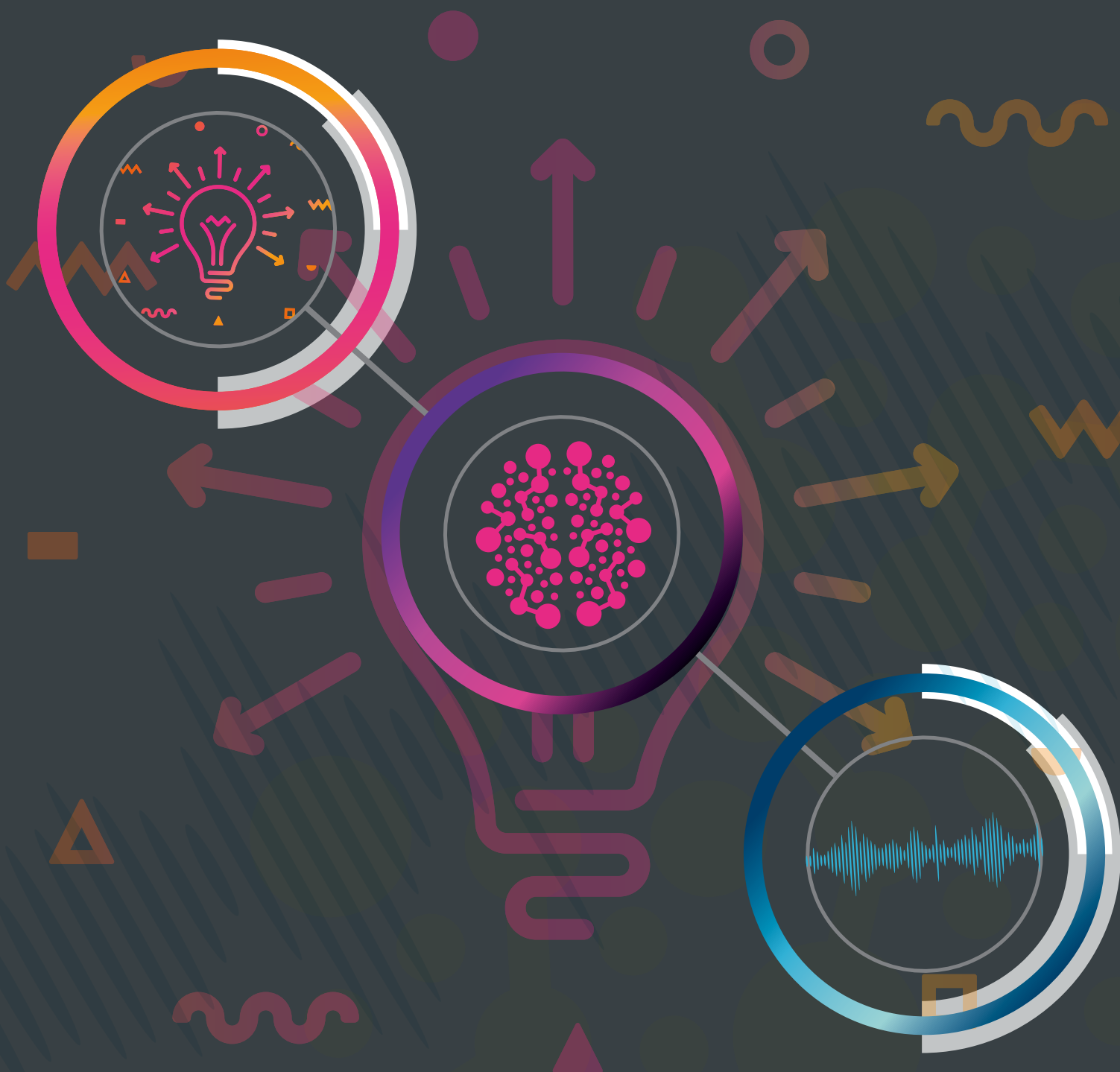




TRUSTEES' REPORT AND FINANCIAL STATEMENTS 2019



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WELCOME FROM THE CHIEF EXECUTIVE OFFICER

It is a real pleasure, as acting CEO, to introduce our trustees' report for 2019: a year of growth and impact for the Royal Society of Chemistry. It is an account of just some of our impact in a very successful year – and just some of what we have learned, which will help us to achieve even more for the chemical sciences community in the future.

I am proud of how we welcome, champion and celebrate an ever-wider diversity of chemistry professionals within our community. We have accredited more company training schemes, awarded more professional registrations for science technicians, and significantly broadened our support and recognition for chemists with technical qualifications and roles. This reflects our ambition for everyone in the chemical sciences: that no matter who you are and what you do, you are able to achieve your potential.

We have done more than ever to connect chemical scientists with each other and the wider world: from Beijing to Bangalore and beyond, our staff, members and wider community have led events and initiatives that brought thousands of chemical scientists together to share ideas and spark new collaboration. Our actions to drive a transition to open access chemistry publishing are making even more high quality research freely available. And I'm sure our collaborative effort with worldwide partners to found the Federation of Commonwealth Chemistry Societies will prove a valuable long-term force for good.

Through 2019 we have aimed to be a bolder, more confident organisation; we have addressed significant and controversial issues within chemistry and in wider society, from bullying to Brexit, by offering clear opinions informed by well-researched evidence and insight. As a voice for the chemical sciences, we have become more assured and assertive, increasing our influence with decision-makers and our impact on the decisions they make.

In a remarkable year it has been difficult to select just a few highlights to include in the report – but I hope it makes clear that we are working hard to advance the chemical sciences, and I am proud of what we have achieved as a global community: advancing chemistry, together.



WELCOME FROM THE PRESIDENT

In the second and final year of my presidential term, I'm pleased to reflect on an organisation that was in a strong, successful position when I took office, and that will be stronger still when I proudly hand over to my successor.

2019 stood out in many ways, but perhaps none more publicly for chemistry than it being designated the UN International Year of the Periodic Table of Chemical Elements (IYPT), in honour of the 150th anniversary of the publication of Dmitri Mendeleev's first periodic table. Celebrating this chemistry icon has been fun and inspiring, with people all over the world taking part in a huge range of activities – and particular thanks and recognition goes to our RSC members in dozens of countries who created and led the vast majority of those activities.

IYPT inspired much of our own campaigning, including drawing attention to the “endangered” elements used to make personal electronics that should be recycled once retired, rather than left to languish in drawers. Making clearer the link between chemical science and the sustainability of our lifestyles is hugely important in engaging the public with chemistry – and to helping policymakers to create sound, evidence-informed policy.

As a researcher myself, I notice all the ways the RSC has made my life easier - this year making it much quicker to publish work, giving back time for research, for one – but also the significant initiatives to make academia more equal. It was brave and important to publish our report into gender bias in publishing – noting the collective biases against women – and I hope other publishers take the lead and investigate their own systems to reduce, and eventually eliminate, bias. And I welcome wholeheartedly the launch of the RSC's bullying and harassment support line, which I hope will help many people affected, and contribute to a fairer, more inclusive academic culture.

All of this achievement – and much more, as we can only capture a glimpse in this report – relies on the hard-working RSC staff and members, in many countries around the world. I consider myself privileged to serve as president of an organisation with such a talented and dedicated team of employees and volunteers who, as one RSC, work together for the benefit of the chemical science community. I thank you all for your commitment, and commend you on your collective success.



ABOUT US

CHEMISTRY IS AT THE CENTRE OF EVERYTHING YOU CAN SEE, SMELL, TOUCH AND TASTE.

Whether studying the chemistry of life, or developing the advanced science behind modern technology, chemical scientists use their expertise to improve our health, our environment and our daily lives.

The Royal Society of Chemistry is an international not-for-profit organisation connecting chemical scientists with each other, with other scientists, and with society as a whole. Founded in 1841 and based in London, UK, we have an international membership of over 50,000. We use the surplus from our global publishing and knowledge business to give chemical scientists the support and resources required to make vital advances in chemical science.

We develop, recognise and celebrate professional capabilities, and we bring people together to spark new ideas and new partnerships. We support teachers to inspire future generations of scientists, and we speak up to influence the people making decisions that affect us all. We are a catalyst for the chemistry that enriches our world.

Why chemistry matters

Chemistry is the science of change. Chemical scientists investigate how and why atoms and molecules react, and use that knowledge to design and build new products useful to humankind, like medicine, fuel and advanced materials. Society uses these new products to improve our health and the way we live our lives. Modern chemistry is guided by principles of sustainability; the drugs and fuels of the future will be made with renewable starting materials and used with minimal environmental impact.

Understanding chemistry is essential in so many aspects of life. Public safety depends on evidence-based assessments of chemical risk, and science-informed policy and regulation. Eating a healthy diet means choosing the right balance of nutrients, vitamins and minerals – the chemical fuel of life. Feeling confident to participate in important societal conversations about climate change and sustainability relies on a memorable and inspiring chemistry education.

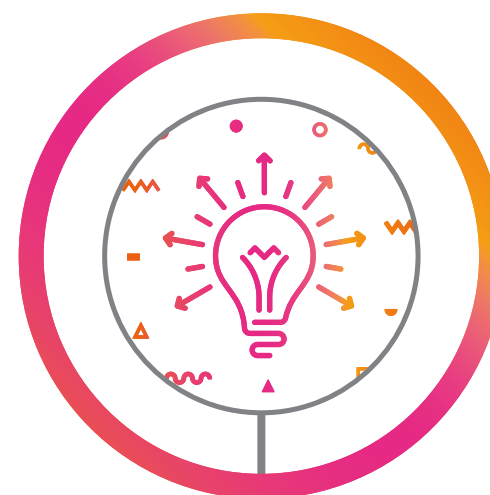
Our charitable work supports all chemical scientists – whether they're working on ensuring sustainable supplies of clean water, food and energy, advanced treatments and therapies for better health, using specialist skills to detect and remove contaminants, or answering the fundamental questions that unlock unforeseen new technologies – as they use chemistry to create a better future.



OUR CHARTER

Our Royal Charter states that the object for which we are constituted is the general advancement of chemical science and its application and for that purpose:

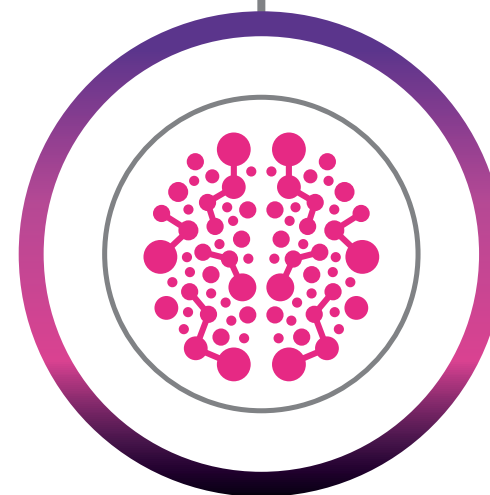
- to foster and encourage the growth and application of such science by the dissemination of chemical knowledge;
- to establish, uphold and advance the standards of qualification, competence and conduct of those who practise chemistry as a profession;
- to serve the public interest by acting in an advisory, consultative or representative capacity in matters relating to the science and practice of chemistry; and
- to advance the aims and objectives of members of the Society so far as they relate to the advancement of the science or practice of chemistry.



CHAMPION THE CHEMISTRY PROFESSION

As the UK's professional body for chemists, we establish, uphold and advance professional standards, and inspire the next generation.

- set and maintain professional standards
- support practising chemists
- enrich the teaching and learning of chemistry



DISSEMINATE CHEMICAL KNOWLEDGE

As a knowledge provider, we accelerate the growth, dissemination, application and impact of chemical science knowledge.

- increase our reputation for high quality impactful content supporting scientific priorities
- promote and enable the exchange of ideas
- facilitate collaboration across disciplines, sectors and borders



USE OUR VOICE FOR CHEMISTRY

As a trusted and authoritative voice, we ensure that chemistry has a recognised and influential role in science and society.

- engage and enable our diverse community
- influence decision-makers in areas that impact the chemical sciences
- connect the chemical sciences with the wider world

OUR STRATEGY: SHAPING THE FUTURE OF THE CHEMICAL SCIENCES

Chemistry changes the world

The chemical sciences are vital for the wellbeing of our world.

Chemical scientists change lives – and have been doing so in many ways, for many centuries.

They will enable enormous social and technological change in the future. The chemical sciences will change too. Current trends indicate that by 2030:

- Chemistry will need to become more global, more interdisciplinary, and more collaborative
- New technologies will mean less work is done physically in a laboratory or classroom, and more is simulated on a screen
- There will be an enormous growth in scientific data, as well as the tools to manage, interrogate and analyse it
- The drive for openness will enable greater collaboration, and disrupt existing business models and regulatory frameworks for knowledge dissemination
- Funding structures and institutions will adjust to changes in how science is done, as well as addressing the implications of the UK leaving the EU

Chemistry is changing

For the chemical sciences to make their maximum impact, they need to change with the world.

By 2025 we want to see that:

- Chemical scientists have made faster progress in tackling global and societal challenges
- New business models mean chemical sciences research is more openly available
- Accreditation is a recognised and valued measure of chemistry expertise
- The UK chemistry community has made a step change in diversity and inclusion with a strong future pipeline, more routes into the profession and enhanced cross-over between academia and industry
- The UK chemistry community's ethical framework is influencing global standards
- Teachers have the resources and services they need to give their students a rich and inspiring chemistry education
- The UK is still a thriving environment for education, research and innovation in the chemical sciences

This is the future we want for the chemical sciences.

We can enable that change

The Royal Society of Chemistry's purpose is to advance excellence in the chemical sciences – to improve the lives of people around the world now and in the future.

We are the professional body for chemists in the UK, with more than 50,000 members in 125 countries, and an internationally renowned publisher of high quality chemical science knowledge.

As a not-for-profit organisation, we invest our surplus income to achieve our charitable objectives in support of the chemical science community and advancing excellence in the chemical sciences.

When we create plans and activities, we are guided by a shared set of organisational values:

- We are **professional**, holding ourselves accountable for the outcomes of our activity and demonstrating authoritative, evidence-based thinking
- We are **dedicated**, making a personal difference in all that we do, and valuing the purpose and heritage of our organisation
- We are **enabling**, building productive relationships and empowering others to achieve the best for the chemical sciences
- We are **respectful**, recognising people's diverse skills, knowledge and experience, embracing different styles and maintaining the dignity of others

We have a plan to enable that change

Our strategy to shape the future of the chemical sciences is based on our three core roles:

CHAMPION THE CHEMISTRY PROFESSION

As the UK's professional body for chemists, we will establish, uphold and advance professional standards, and inspire the next generation.

- We will set and maintain professional standards
- We will support practising chemists
- We will enrich the teaching and learning of chemistry

DISSEMINATE CHEMICAL KNOWLEDGE

As a knowledge provider, we will accelerate the growth, dissemination, application and impact of chemical science knowledge.

- We will increase our reputation for high quality impactful content supporting scientific priorities
- We will promote and enable the exchange of ideas
- We will facilitate collaboration across disciplines, sectors and borders

USE OUR VOICE FOR CHEMISTRY

As a trusted and authoritative voice, we will ensure that chemistry has a recognised and influential role in science and society.

- We will engage and enable our diverse community
- We will influence decision-makers in areas that impact the chemical sciences
- We will connect the chemical sciences with the wider world

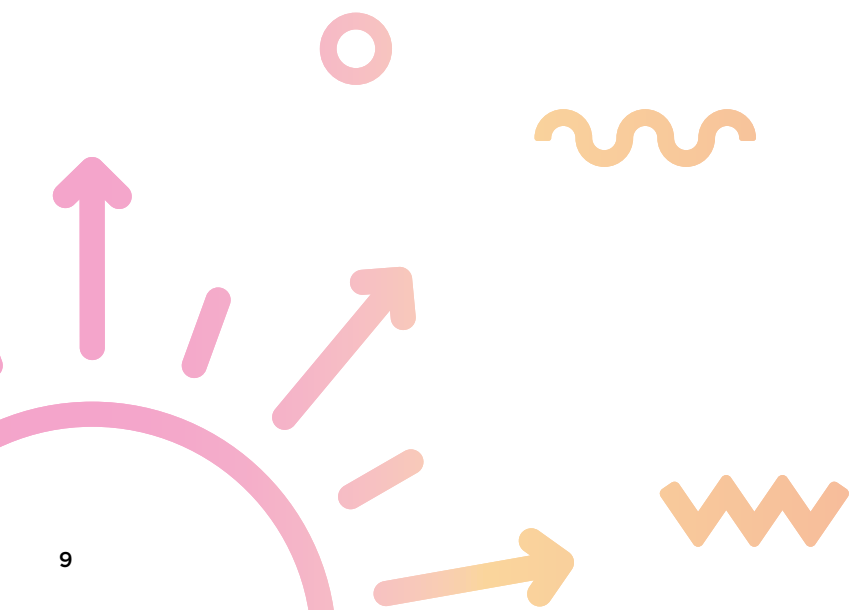
We will change how we work

We're proud that our heritage spans more than 175 years – and it's our responsibility to ensure our legacy lasts just as long.

We will evolve our organisation's capabilities to meet the needs of the chemical science community, and to stay relevant in a changing world.

- We will understand our members and customers to make our products and services as tailored and relevant as possible
- We will strengthen our existing revenue streams as well as developing new sources of income to spend on our charitable work
- We will expand our digital capacity and capability to both manage our business and deliver world-leading services for the chemical sciences community

ESTABLISHING, UPHOLDING AND ADVANCING
PROFESSIONAL STANDARDS, AND INSPIRING THE
NEXT GENERATION OF CHEMISTS



We're the largest non-governmental investor in chemical science education in the UK, and in 2019 we were proud to unveil our new education website.

With one simple and free registration, our users can now access Education in Chemistry articles, all of the teaching resources previously available from Learn Chemistry, the Chemistry Olympiad, Spectroscopy in a Suitcase, professional development and more.

Bringing all of these separate resources together will make it easy for users to find the resources they need to teach an enhanced curriculum at their school. The curriculum explorer feature lets teachers find resources linked specifically to topics on the curriculum they teach – and the ability to bookmark articles they like will help them find their favourite content again, year on year.

I think it is easy to navigate and the resources are excellent!

Emma NicMhaoláin Coláiste Cois Life

Very good for stretch and challenge.
Brings wider chemistry into the classroom.

Debra Rostern Penistone Grammar School

Your website has such a depth of good quality material that makes it far more useful and accessible than many of the alternatives for teaching resources.

Trevor Critchley Nottingham Girls' High School



Recognising the widest range of chemistry professionals

As the professional body for the chemical sciences, it's a core part of our purpose to recognise and celebrate professional chemical scientists – and we've worked hard to make sure our definition of 'professional' includes the widest possible range of people.

At our apprentice graduation ceremony, we aim to highlight and celebrate the achievements of people who have completed apprenticeships in the chemical sciences, hearing from speakers about their decision to follow a vocational training route, and the science they do in their technical roles. We welcomed 75 people to our 2019 graduation.



The RSC make it clear where different opportunities are in the chemicals sector, which is important for broadening my horizons and also increasing my skill-set, to make my career the best it can be.

Rebecca Forster Associate scientist (previously Chemical Science Apprentice), AstraZeneca

We became a supporter organisation of the Technician Commitment, an initiative promoting the visibility, recognition, career development and sustainability of the technician workforce.

We also expanded our support for professional recognition through academic routes. We accredit >95% of chemistry degree programmes in the UK, and now also accredit 18 degree programmes at overseas universities in Australia, Brazil, China (inc Hong Kong), Indonesia, Ireland, Malaysia, Mexico and Sri Lanka.



Having the recognition of a world authority in the field of chemistry, such as the Royal Society of Chemistry, is a guarantee of the quality of our educational and research processes and makes our institution attractive for students and researchers from Mexico and other countries.

Professor Perla Elizondo Chairwoman of the Industrial Chemistry program, Universidad Autónoma de Nuevo León, Mexico

We widened our company accreditation scheme to include organisations such as Agilent, Domino, EDF Energy, the Environment Agency, Evotec and Jacob Douwe-Egberts, taking the total number of companies accredited to 29.



Getting accreditation for CChem is seen by the chemists in AstraZeneca as a very positive achievement for several reasons. Firstly, it gives individual chemists the opportunity to achieve CChem directly through the company scheme; secondly it gives new and existing CChems the opportunity to mentor new CChem candidates within the company, and thirdly it reinforces the company culture that scientific standards and career development are highly valued and important for the success of our company.

AstraZeneca

Improving chemistry education in India with teacher training

2019 saw the successful completion of the Yusuf Hamied Inspirational Chemistry Programme – and a further generous commitment from Dr Hamied to continue the programme for the next four years.

We delivered more than 1,000 training workshops to over 23,000 teachers between 2014 and the end of 2018, more than three times the initial target. Also, more than 1,600 students from 500 schools attended 26 Salters' Chemistry camps across 16 states since 2015.

The training gives teachers more tools to deliver engaging and effective science lessons, encouraging students to reach the standards necessary to study science at university. So far it has benefited more than 9,000 schools across the 26 states of India.

The new four-year programme will expand provision of the Salters' Chemistry Camps to reach a further 2,400 students from under-privileged backgrounds, and expand the provision of Teacher Training workshops to reach 20,000 more teachers by recruiting and training new Teacher Developers to cover most regions of India.



The first phase of this programme was a tremendous success, reaching three times more people than we had originally targeted... the continuation of this programme will deliver even greater results.

Dr Yusuf Hamied philanthropist and chairperson of Cipla

Giving primary teachers more chemistry confidence

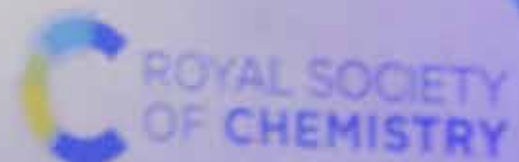
A passion for science starts young, so we're proud to support Primary Science Quality Mark (PSQM), a CPD-led quality mark for primary schools that offers training and support for science subject leaders. We gave £35,000 to fund moderation activities and hub leader enhanced CPD, which enabled 275 schools to take part in extra CPD activity.

Across the board, teachers reported increased confidence in their own knowledge, to support other staff, to use new practical activities, and to develop further ideas in a whole school context. These are essential to delivering inspirational chemistry education to the youngest learners – potential scientists of the future.

Chemistry outreach to 100,000 people in China

At our Chinese summer camp, we brought students and teachers from severely impoverished regions of China to Beijing, giving them opportunities to do hands-on chemistry experiments at a state-of-the-art teaching laboratory. More than 100,000 people watched a live session from the summer camp on a local video platform.





CHEMISTRY MEANS BUSINESS 2019



Room for improvement: chemistry-based industry

Chemistry-based industry is a hugely important part of our community – and we aim to engage through a wide range of events and initiatives, such as our SME scheme Enterprise Plus, grants to support industrial placements, our popular Emerging Technologies Competition, and our flagship industry event Chemistry Means Business.

However, we've had feedback that overall as an organisation we can come off as too academic, and that people in industry can't always see how the Royal Society of Chemistry is relevant to them.

We take this feedback very seriously, and we recognise that we can do much more to not only better communicate our existing support for industry, but also reshape it to meet the needs of modern chemistry-based industries.

Over the last 18 months, we've been conducting detailed research with hundreds of people in industry – from bench scientists to CEOs – hearing about the systemic issues that need addressing, and finding out what they need from us as their professional body. They have been incredibly valuable conversations that are steering how we update our support for industry, which we will be sharing more detail about in the coming year.

Chemistry-based industry drives tremendous advances in science and has the potential to change the world for the better. We're looking forward to lending more support than ever before to industry, and better enabling the growth and application of chemistry for a brighter future.

STATISTICS BOX

23,000



teachers trained
in India up to 2019

500



degree courses
accredited worldwide

25%



growth in our
member mentoring
scheme

10%



increase in careers
consultations

12,754



total Chartered
Chemists

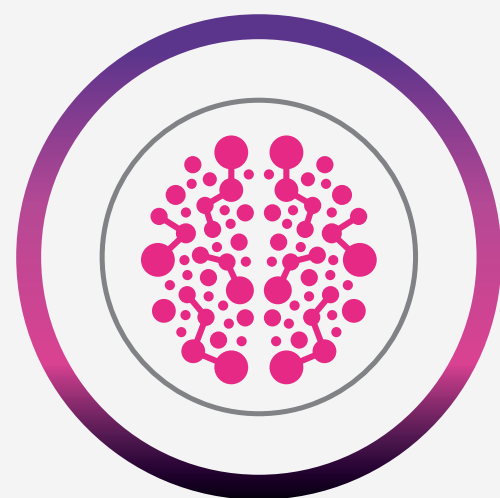
11%



increase in
applications for
Registered Scientist

PROVIDER OF HIGH QUALITY CHEMICAL SCIENCE KNOWLEDGE

ACCELERATING THE GROWTH, DISSEMINATION, APPLICATION AND IMPACT OF CHEMICAL SCIENCE KNOWLEDGE



Bringing people together to share knowledge and ideas

Each year we run hundreds of conferences and events for the chemical science community – from local networking events to international scientific symposia. They are an essential part of the scientific communication culture, enabling inspiration to cross disciplines and continents, leading to interdisciplinary and international scientific collaboration. Some have more than a century's worth of history while others depend on technology invented in the last decade. Wherever people want to share knowledge, skills and passion for chemistry, we bring them together.

Our fifth annual Twitter poster conference, known as #RSCPoster, saw more than 500 researchers upload their work as posters, and there were almost 10,000 tweets from over 3,000 contributors, reaching a potential audience of nearly 2 million. Presenters and delegates joined in from all across the world for 24 hours – without a single car journey or flight. There were posters on every chemical science topic imaginable. The one with the most social engagement – which the conference panel also judged the overall winning poster – highlighted the significant mental health concerns of PhD students.

Also in its fifth year, our flagship industry event Chemistry Means Business attracted nearly 200 representatives from companies and universities for talks on industry trends, networking and the final pitches and awarding of our Emerging Technologies Competition, which saw eight chemical science innovators take away £10,000 each to commercialise their ideas.

We held our 300th Faraday Discussion in Burlington House – a significant milestone in the history of a unique event format run at least once a year for more than 100 years. At these lively discussions, students and professors together have robust discussions about the latest science. The origins of several world-changing scientific disciplines, like polymer science and atmospheric science, are found in Faraday Discussions.

Our new Memorandum of Understanding with the National Natural Science Foundation of China cemented an already valued partnership and will enable China-UK bilateral scientific conferences in both countries for years to come. Dozens of similar exchanges and symposia result from our wide range of partnerships around the world, including with national chemical societies, international organisations like the European Molecular Society, the Federation of Asian Chemical Societies, the Federation of African Societies of Chemistry and many more.





ENABLING RESEARCH AND COLLABORATION

Financial grants

Research funding is extremely competitive, and the application processes often favour established researchers, especially for larger grants. As the average research grant value increases, it's even more essential that there's help available for students and early-career researchers. Even a relatively small grant makes a huge difference as a stepping-stone for talented researchers.

Our grants enabled researchers to gain early research data that will support a bigger application; they paid for undergraduate research projects that hugely benefit both the student and the researcher they work for; they enabled hundreds of researchers to travel to events to share knowledge and spark scientific collaborations.

In 2019 we awarded more than 1,000 financial grants, with a total value of over £2.5 million. A significant proportion of those were to enable research and collaboration, including Researcher Mobility Grants, Research Fund grants, Undergraduate Research Bursaries, Travel Grants and Scientific Meeting Grants.

“The value of this bursary is immeasurable... as a newly appointed lecturer, having a motivated and talented student has meant that I can acquire preliminary data for grants as well as publish our preliminary findings in high impact journals.

Mark McLaughlin Manchester Metropolitan University, supervisor for Undergraduate Research Bursary recipient

New cross-sector scientific collaborations

Our Synergy programme brought together companies facing similar technical challenges to work on chemistry-based solutions with experts from diverse industry sectors. In 2019 we held workshops on corrosion, which poses significant risks to health and the environment.

“Chemistry will have a role to play in the solutions, but collaboration with the supply chain, regulators, ultimate users and influencers are much more likely to succeed in an interconnected world than a single discipline approach,” said Graham Gedge, Associate Director of Materials at Arup and a delegate at one of our workshops.

Our forthcoming report will share the strategic mapping outputs of the workshops. The previous Synergy report – on liquid formulation polymers – relied on crucial contributions from the Centre for Process Innovation (CPI), with whom we announced partnership to take continued advantage of their decades of experience in helping to bridge the gap between innovation and commercialisation.

“The RSC's Synergy programme provides a fantastic opportunity to tackle some of the common chemistry problems holding back many innovative companies.

Nick Johnson Commercial Director at CPI

Leading the transition to open access

By making research available to anyone who needs it, open access (OA) publishing removes reading restrictions, allowing wider knowledge dissemination and more options for reuse, giving researchers further opportunities to improve the visibility of their work and build a strong reputation.

We are committed to increasing open access to high quality scholarly research and in recent years we have been proactive in driving the transition to open access publishing – both through our advocacy work as a voice for the chemistry research community (see p36) and through innovative publishing products and services that make high quality open access publishing easier and more affordable.

- Chemical Science, our journal for exceptional chemical science research, is fully gold open access and remains free to read and publish in. Having made the journal open access in 2015, we've now published more than 5,000 open access articles in our flagship journal
- We established many more Read & Publish agreements with research institutions, having spearheaded this agreement model in 2016 as an evolution from our “Gold for Gold” OA voucher pilot, developed in collaboration with our customers. We now have nearly 80 of these transformative agreements, across 13 countries, that support and incentivise open access publishing
- RSC Advances was the largest open access journal in the chemical sciences, publishing 4,584 articles in 2019, having switched to open access in 2017.
- We partnered with global chemical societies on ChemRxiv, the first preprint server dedicated to the chemical sciences, allowing researchers to disseminate their research quickly and establish precedence for their ideas. Having launched the partnership with the American Chemical Society and German Chemical Society, in 2019 we were pleased to welcome the Chinese Chemical Society and the Chemical Society of Japan to the partnership
- We announced a new open access journal, RSC Chemical Biology, for exceptionally significant and breakthrough findings of interest to the chemical biology community. It is free to read and free to publish, as we've waived article processing charges (APCs) until 2022. It is also the first RSC journal to adopt transparent peer review, where reviewers' comments can be read publicly
- 600 researchers attended our OA panel discussions at leading research institutions in India, exploring the opportunities and challenges for open access in that country

Through these initiatives and more we have raised awareness of open access publishing and supported our community through the transition. In 2019 we laid out plans to accelerate our transition to open access and, by launching new open access journals and new transformative agreements with institutions, we're aiming for 50% of our published output to be open access by 2025.

Saving 33,000 research hours with smarter submissions

Through months of design and user testing, we developed and launched improvements to how researchers submit their work to Chemical Science, our flagship journal for exceptional chemical science research.

They include making the submission system “smarter” by auto-detecting information within the article, for example author names, and using this to populate the submission interface, and adding a tracker to make it easier for authors to check on an article's progress.

These improvements have contributed to saving more than 6,000 research hours so far. And the Chemical Science changes alone will give 33,000 hours back to our authors by 2023.



Room for improvement: gender bias

Publishing research articles and gaining citations for those articles are established – if contentious – markers of scientific success. But when we carried out the first in-depth gender analysis of publishing in chemical sciences, based on our own publishing data and processes, we found that the combined effect of several systemic biases puts women at a significant disadvantage when disseminating their research.

We found that women are less likely to be listed as senior authors, submit to high impact journals, and be cited by men in their research. Women are more likely to have articles rejected without review. Gender also influences acceptance and peer review more widely.

We have a responsibility to promote inclusivity and accessibility in order to improve diversity – and so now that we have identified this inequality in publishing, we must act to remove it.

We published our findings along with a commitment to do better, and a call for other publishers to do the same. We said we would

- increase transparency, conducting and publishing an annual audit
- reflect our research community, training reviewers and editors to ensure the gender balance matches that of the global chemistry community (36% women)
- empower and innovate, offering training and resources, and testing new ways of addressing bias in publishing processes
- encourage intervention, partnering with others and leading the development of a “framework for action”, to be published in early 2020



We are committed to scrutinising our own processes at each stage – and we’re calling on other publishers to do the same. We want to work with them to make our industry fit for the modern age.

Dr Robert Parker – Chief Executive, Royal Society of Chemistry

STATISTICS BOX

2019

Centrally organised events

No of events

203

Delegates

11,723

Member network events

>600

>45,000

Total articles submitted:

125,645

Total articles published:

36,744

23%

articles published OA
(21% in 2018)

INFLUENTIAL VOICE FOR THE CHEMICAL SCIENCES

ENSURING THAT CHEMISTRY HAS A RECOGNISED AND INFLUENTIAL ROLE IN SCIENCE AND SOCIETY

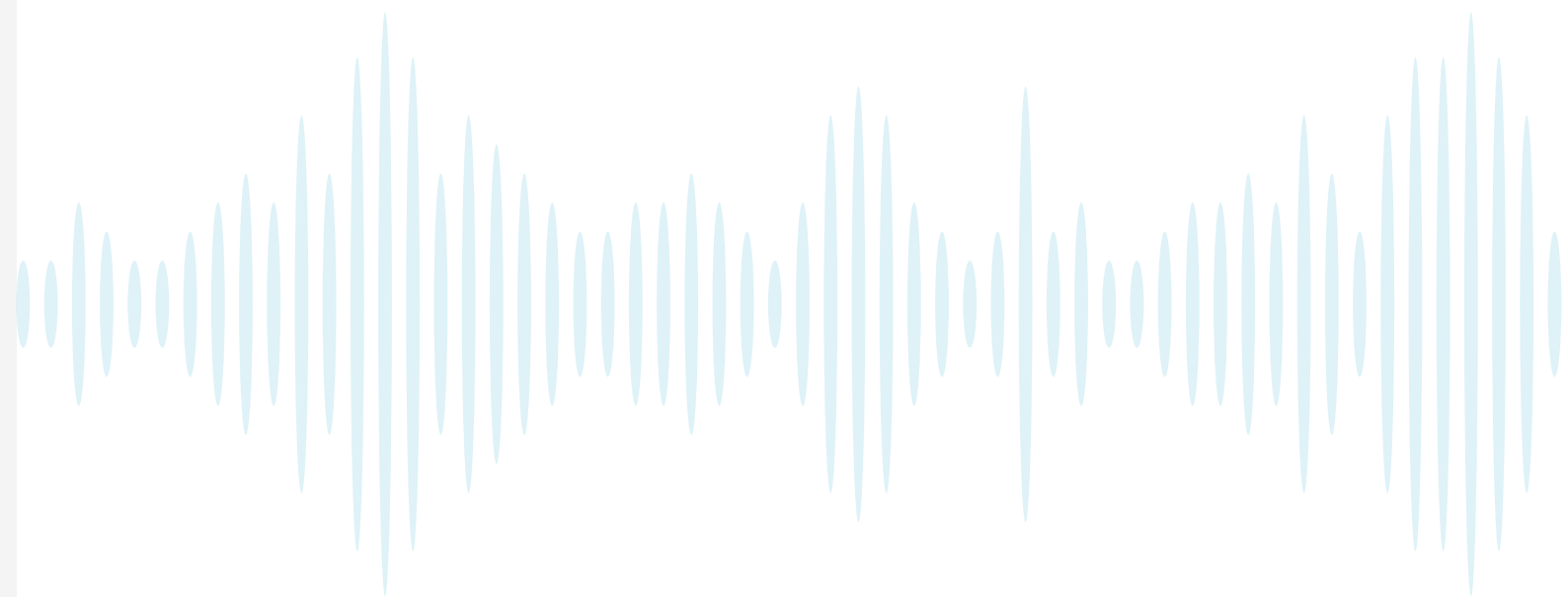


Challenging and influencing government policy

In a tumultuous year where government and politics were once again dominated by the UK's decision to leave the EU, we were more active than ever in advocating for chemistry – on issues both central to and separate from Brexit.

We responded to dozens of requests from the government for evidence, consultations, parliamentary inquiries and stakeholder engagement events, as well as proactively making our case in key areas, with tangible results.

- Our evidence was cited in and helped shape the conclusions of four parliamentary committee inquiries: toxic chemicals in the environment, plastics, research funding in universities and balance and effectiveness of research funding. We were invited to give oral evidence to a fifth inquiry, on the circular economy, following the successful 'elements in danger' campaign
- We generated awareness and acknowledgement in Government circles of the importance of EU funding, the problems the Immigration White Paper proposals pose for science, and the role and importance of funding 'discovery' or 'fundamental' research. Our evidence to and participation in Sir Adrian Smith's review of funding for international science collaboration helped shape its recommendations
- We have increased engagement with officials at the Department for Education, being sought out in particular for our views and input on matters relating to teacher recruitment and retention
- The Learned Societies' Group in Scotland, of whom we are a member, generated awareness of declines in uptake of STEM subjects in Scotland's senior phase, as well as increased teacher shortages and prevalence of multi-course teaching. These views were put forward in a parliamentary enquiry, resulting in a recommendation for an independent review of the senior phase that will investigate these issues, among others



Commonwealth Chemistry – a new federation for global sustainability and diversity

The Commonwealth is a diverse group of nations across the world, from small islands to larger, developed countries. It is home to 12% of the world's researchers and accounts for around 10% of global research and development expenditure. With an estimated 60% of its population under the age of 30, the Commonwealth is set to play an ever more important role in the world's future – a future that will present many challenges where science can identify solutions.

In 2019, as part of a group of scientific organisations from across the Commonwealth, we made huge progress towards the founding of a new federation of chemistry societies and organisations, which will be known as Commonwealth Chemistry.

Under its guiding principles of equality and inclusivity, Commonwealth Chemistry will have representation from all Commonwealth nations, with the recognition that those with greater resources will contribute more in order to assist those with fewer resources.

It will bring influence and change for the collective benefit of the Commonwealth through effective partnership and strong links with governments and will uphold the core values of the Commonwealth as being aspirational, inspirational and a provider of role models.

The first General Assembly of Commonwealth Chemistry was scheduled to take place in 2020 in Trinidad & Tobago, alongside the first Commonwealth Chemistry Congress, whose specific aim is to create partnerships in pursuit of the UN Sustainable Development Goals. Owing to the coronavirus pandemic, the events have been postponed until 2021.



Room for improvement— a bolder, more confident voice

We have always advocated for the chemical sciences. Whether it's a quiet, well-placed word in the corridors of power, or across the front pages of global news outlets, we strive to give chemistry an influential voice across a wide range of topics.

Conducting research into our reputation with key stakeholders in early 2019 led to some fascinating insights, including that many of them want us to be bolder and more confident in our language and tone. We recognised that our strength of our messages hasn't always matched the strength of our convictions.

We gathered other insights about how we campaign for chemistry. Stakeholders want us to make clear when we're influencing through more private routes; be more open about how we hold governments to account; and reflect the breadth of the chemical sciences – particularly chemistry-based industry. We also found that we need to demonstrate more clearly how we are ambitious for everyone, and that we are a forward-looking organisation.

From this research, and with input from our community, we have taken a more targeted approach to creating and promoting our perspectives on the issues that really matter to chemistry and to the wider world. Four themes for new perspectives – sustainability, talent, discovery and knowledge – make it clear what we care about. Strong messages and clear calls to action show that we care deeply about these issues, and that we're confident to champion our positions on behalf of the chemistry community.



DISCOVERY

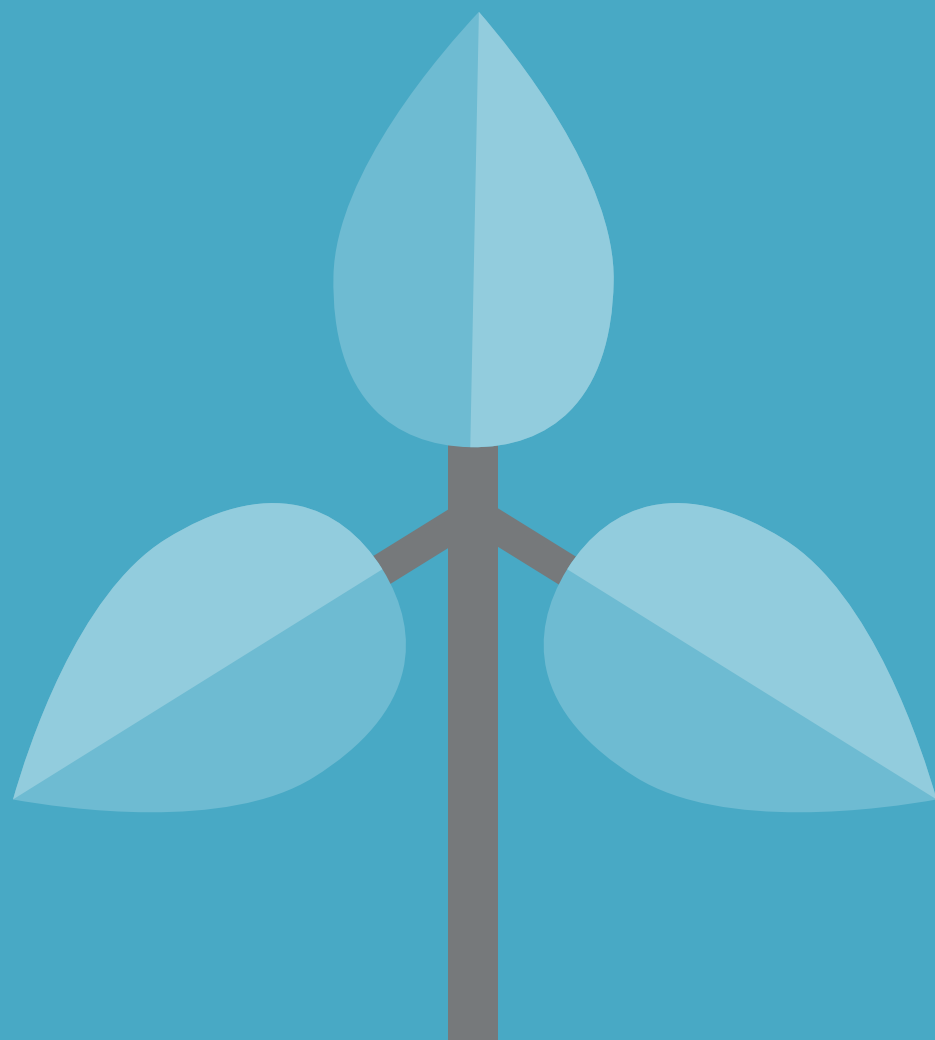
Scanning the horizons of chemical science discovery

It's an incredible time for chemical sciences research. Everyone working in chemistry can feel the amazing potential of the science and technology we have available. To capture and better define that feeling, we engaged with more than 750 leading scientists across the globe to create *Science Horizons*, a piece of research that explores the landscape and context for chemical sciences research, as well as its direction, potential and needs for the next 10-15 years.

We found that finding paths to sustainable prosperity is the priority for governments funding research and development globally. Advances in three interdependent dimensions of scientific research will be important to meeting this global R&D agenda: delivering solutions to global & industrial challenges; answering leading-edge questions; and developing frontier techniques. And that curiosity, collaboration and leadership will all be crucial to enable these advances.

We published our findings to widespread acclaim from the chemical science community, and the report is informing and influencing scientific priorities for us and our stakeholders.

- Our social media launch campaign saw excellent engagement, especially for video interviews with Nobel laureate Frances Arnold discussing themes of *Science Horizons* including frontier techniques and the essential role of collaboration in science
- The delegates of our flagship industry event, *Chemistry Means Business*, fed back that a presentation on the findings of *Science Horizons* was hugely valuable and gave them unique insights into the future potential of chemistry innovation
- UKRI, the umbrella body for research councils in the UK, cited *Science Horizons* in the strategic context section of its Infrastructure Roadmap



TALENT

Removing barriers to success

We believe that chemistry is for everyone, and that everyone should have the opportunity to reach their potential. When we uncover inequality and barriers to people succeeding, it's our responsibility to act and to lead, making our discipline more accessible and inclusive.

Re-thinking recognition

We have proudly recognised excellence in the chemical sciences for more than 150 years – but we need to make sure that the ways we reward and recognise modern scientific excellence are fit for today's needs.

Teamwork, leadership, professionalism and diversity are fundamental elements of excellence in 21st century science, yet the majority of scientific awards overlook or underplay these vital qualities.

We commissioned an independent review of our recognition portfolio to ensure that it continues to deliver the maximum impact for chemical scientists, chemistry and society.

We committed to a five point action plan to enable us to adapt so that future generations of scientists can be rewarded and recognised for a new, more inclusive definition of excellence. It includes placing more focus on teams, technicians, interdisciplinary science, teachers and leaders, as well as setting expectations of conduct and revoking prizes when those expectations are not met.

Making chemistry more inclusive

In 2019 we launched several new initiatives aiming to support people in chemistry who face barriers to participating and succeeding. We fund them through the Chemists' Community Fund (see p41).

Our *Breaking the barriers* report in 2018 identified that 78% of chemists working in UK academia felt that managing parenting and/or caring responsibilities had an impact on women's retention and progression. Following this, we introduced Grants for Carers, which offer up to £1,000 per year to help people attend a chemistry-related meeting, conference or workshop or a professional development event. The grants are open to anyone with caring responsibilities and the money is used to cover additional costs incurred, paying for care that the applicant usually provides – including medical, nursing or childcare.

We also began offering assistance grants, to help scientists with disabilities, health conditions or other impairments. Up to £1,000 is available to enable applicants to attend chemistry-related events and cover the costs of additional assistance required, including people, equipment or additional travel expenses.

At the end of 2019 we launched our bullying and harassment support line. Through *Breaking the barriers* we found almost every respondent had first-hand experience of bullying or harassment in their scientific workplace – but worried that reporting these may negatively impact their career or standing with colleagues. Our free, confidential support line is now open to anyone who sees, is a target or accused of bullying or harassment.



SUSTAINABILITY

Elements in danger

Our planet faces critical challenges – from plastics polluting the oceans, to the urgent need to find more sustainable resources. Chemistry is essential to designing and implementing the solutions to these challenges, and this year we have campaigned to drive awareness and discussion of the chemistry behind these important topics.

The average mobile phone contains at least 30 different naturally-occurring elements – and natural sources of six of these are set to run out within the next 100 years, with several more under rising threat from increased use.

These elements are also used in everything from fire-sprinkler systems and antibacterial clothing to solar panels and surgical implants. And they could be needed for other technologies in the future that we haven't discovered yet – for health, green energy, treating pollution and more.

Consumers are increasingly interested in their environmental impact, so our campaign as part of the International Year of the Periodic Table (see p37) aimed to draw attention to the lurking problem of endangered elements, as well as suggesting practical steps people can take to reduce, reuse and recycle their unused electronic devices.

- Our original research with Ipsos MORI found that more than half of UK households had at least one unused electronic device, and 82% of those had no plans to reuse or recycle them
- We worked closely with the BBC to create a story about the issue and the solutions chemical scientists are working on – the story was picked up by dozens of national and international media outlets
- Members of parliament in England, Scotland and Wales tabled motions and led debates calling on government to work towards sustainability goals for rare elements
- Many individuals and organisations got in touch to ask questions, offer support, or suggest collaborations
- We are finalising plans for a follow-up campaign in 2020, looking at the problem on a global scale



KNOWLEDGE

Amplifying researchers' voice on open access

Open access is the subject of intense international debate. There is a significant body of advocates who want the entire scientific publishing industry to go fully open access – including cOAlition S, a group of research funders and advocates who aim to accelerate the open access transition and promote a set of principles known as Plan S.

The loudest voices in the debate are often open access campaigners, librarians and information professionals, publishers, and funders who want to see the research they support made as widely available as possible.

We believe the voice of researchers is under-represented in this debate, and is also hugely diverse – different disciplines, career stages and countries all see different advantages and disadvantages in a fully open publishing system.

To make sure researchers have an influential voice in this debate, we decided to inform the community about open access and initiatives, and promote their views as part of the international debate.

- Our video animation explaining Plan S from a researcher's perspective gained many thousands of views and positive comments from the community
- An initial survey gathered hundreds of responses from the research community about the perceived opportunities and threats of full open access
- A live-streamed panel discussion with academic researchers, discussing the potential impacts of Plan S on their work and careers, again attracted thousands of viewers, dozens of questions and positive comments
- In-depth research into global attitudes to open access uncovered the extent of confusion and mixed views from our research communities, often with marked differences in opinion between regions and career stages
- All of the information, opinions and attitudes we collected have informed our own policy and advocacy work, including responding to consultations from cOAlition S and UKRI, taking speaking opportunities at international open access events, and gaining relevant media coverage to further raise awareness with researchers



INTERNATIONAL YEAR OF THE PERIODIC TABLE

2019 WAS THE UN INTERNATIONAL YEAR OF THE PERIODIC TABLE OF CHEMICAL ELEMENTS (IYPT). IT CELEBRATED THE 150TH ANNIVERSARY OF DMITRI MENDELEEV'S FIRST PERIODIC TABLE – A TURNING POINT IN SCIENCE AND ONE OF THE MOST RECOGNISABLE ICONS OF CHEMISTRY.

The global chemistry community leapt at the chance to commemorate such an important part of our science and history – and to demonstrate how even 150 years later it remains relevant – crucial – to modern science.

As one community – RSC staff and members – we proudly led the UK's contribution to this international celebration, enabling a dazzling variety of engagement projects around the world, and raising awareness of chemistry's role in sustainability through an international media campaign (see p35).

The legacy of the International Year of the Periodic Table will be significant and wide-ranging: many of the projects funded have long-term value for chemistry, including teaching aids and engagement installations that will be used for many years to come. It brought together collaborations of scientists, teachers, artists and members of the public who continue to work closely. And the platform provided by the year gave significant boosts to the visibility of other major RSC initiatives – particularly campaigning on e-waste recycling – that served to increase our influence and impact for the benefit of the chemical sciences.



IYPT highlights from the year

- We awarded £83,500 in individual and member network grants in support of 97 global projects designed to engage diverse audiences and promote IYPT to the wider public. Grants supported projects in the UK, South Africa, India, New Zealand, Finland, Belgium, Italy and Madagascar
- 20 free-to-attend IYPT public lectures held across the UK and Ireland, in association with science centres, universities and other scientific societies, which attracted over 1,200 members of the public
- The Story of the Periodic Table exhibition in Burlington House throughout August attracted 1,602 visitors
- We projected the periodic table onto 11 university buildings around the UK and Ireland, reaching thousands of members of the public
- 1,200 pupils, 7-11 years old, attended a four-day educational exhibition, Journeys from Alchemy to Chemistry at Burlington House
- Iain Gray MSP led a debate in the Scottish Parliament to mark IYPT, focusing on sustainability. During the debate, parliamentarians including the Science Minister, Richard Lochhead MSP, welcomed the RSC's work to highlight IYPT and issues around the sustainability of key elements

IYPT 2019 in numbers

1,602

attended the Story of the Periodic Table exhibition at Burlington House

97

global projects supported

£83,500

in individual and member network grants

20

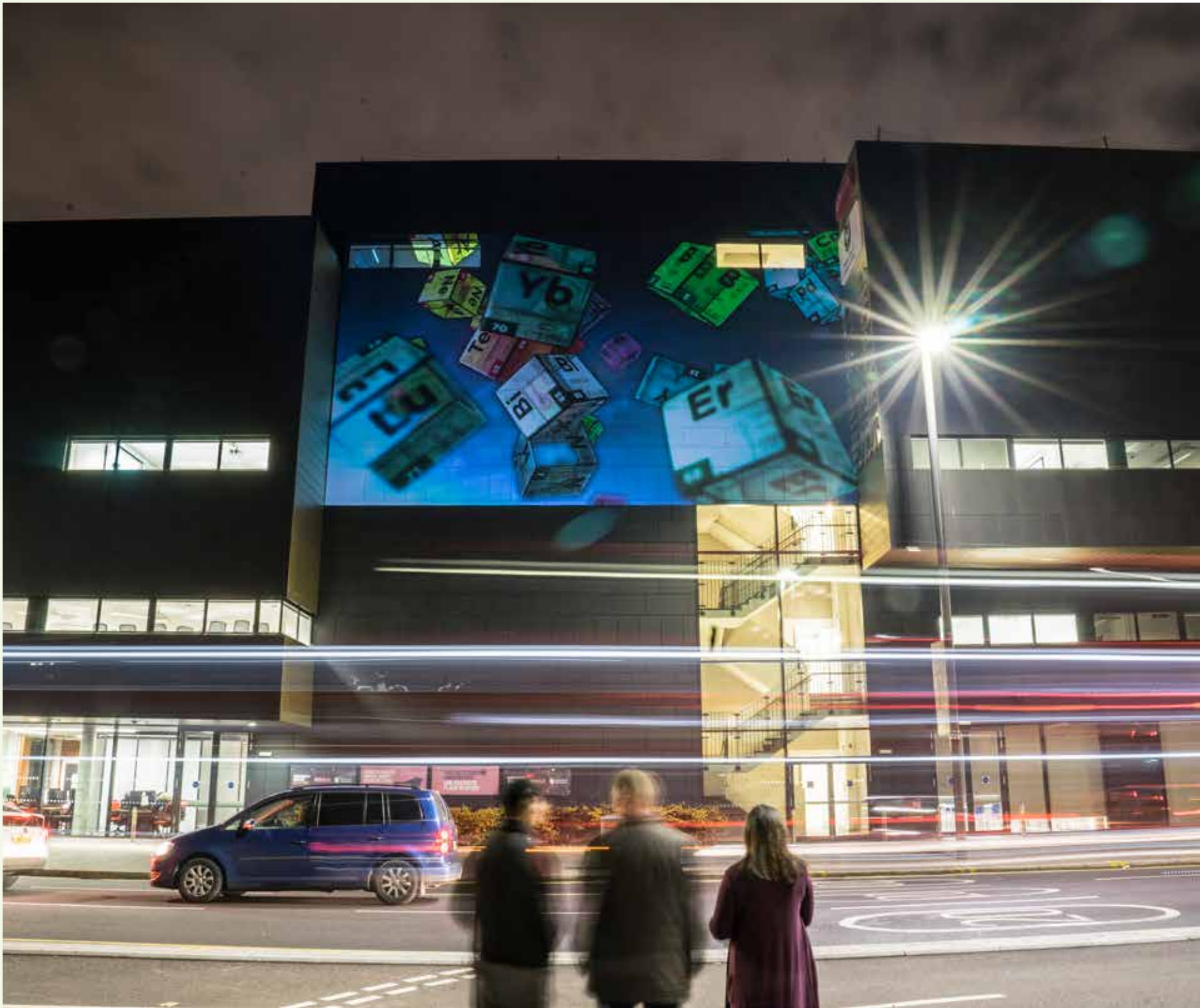
free-to-attend IYPT public lectures held

1,200

pupils, 7-11 years old, attended a four-day educational exhibition

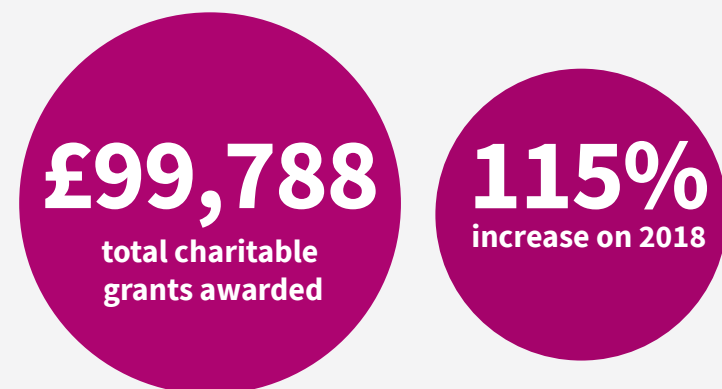
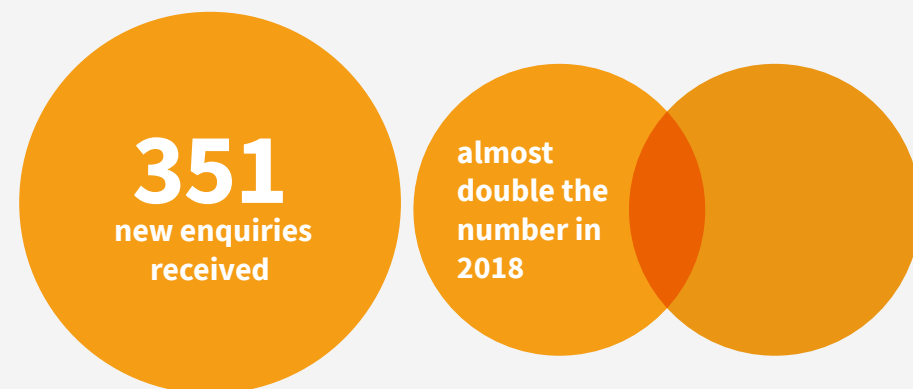
11

university buildings projected



CHEMISTS' COMMUNITY FUND

WHEN OUR MEMBERS OR THEIR DEPENDENTS ARE IN NEED, WE'RE THERE TO HELP. IN 2019 WE'VE MADE MORE CHARITABLE GRANTS, MORE PERSONAL SUPPORT, AND HELPED MORE PEOPLE IN MORE WAYS THAN EVER BEFORE.

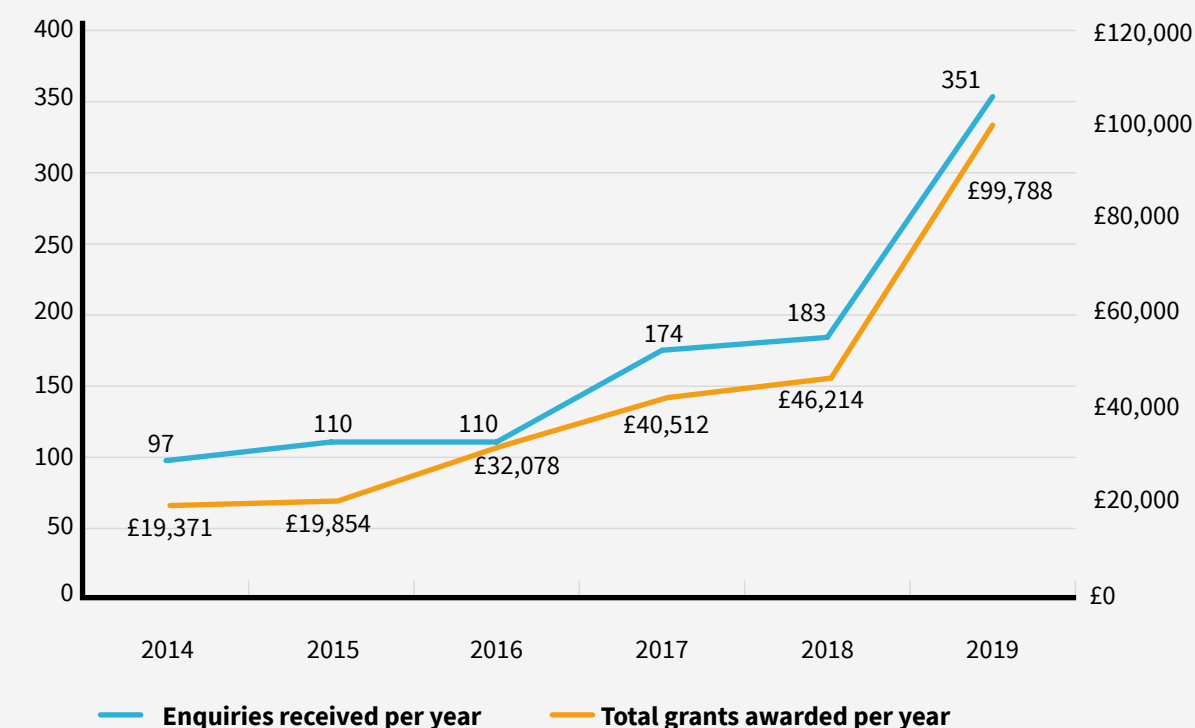


What is the Chemists' Community Fund?

The Chemists' Community Fund, the working name of the Royal Society of Chemistry's Benevolent Fund, is a linked charity to the RSC. Its primary purpose is the relief and prevention of poverty for members or past members of the RSC, as well as support for their partners, children and other dependents.

The generous contributions from our community and investment growth over 100 years means that the Fund is in a strong financial position, and the demand on the Fund's primary purpose remains low relative to our financial reserves. To increase our charitable impact we have, from 2019, based on guidance from the Charity Commission, increased the scope of our charitable activity.

See the Chemists' Community Fund full report for 2019 for more details.



Bringing stability with personal and financial support

- 7 members gained £13,102 in welfare benefits, at a cost to the fund of only £720, through our partnership with Citizens Advice Manchester
- Some members' quality of life dramatically increased when we used our housing nomination rights to help them move into sheltered housing
- Students at St Andrews University had our help to cover additional costs for travel and accommodation, following the devastating fire at their chemistry department in early 2019

 **I am starting to finally get everything stable. I can't emphasise enough how all this wouldn't be possible if wasn't for RSC's help.**

Responding to current events

When extraordinary incidents happened around the world we reached out to members who may need our assistance. This included contacting members in Sri Lanka following the terrorist attack at Easter, those in the Bahamas following the devastating hurricane, and to members in Whaley Bridge, UK, evacuated ahead of a potential dam burst.

While no financial support was requested, many members expressed their pride that the RSC had taken the time and thought to contact them at a difficult time for them locally, and that the Fund was available to them and their families.

Expanded workshop programme reached 483 members

- 238 RSC Members attended our 'Improve your Understanding of Wellbeing and Resilience' workshops. These are designed to enable attendees to identify mental health concerns for themselves and others and 99% said they would recommend this training to others.
- Our retirement planning workshops, 'Retirement in Sight', directly supported 114 members to make plans and substantial changes at a particular stage in their lives. 100% of those attending these retirement planning workshops said that they had enjoyed the course and would recommend it to a friend.

Enabling support for a wider range of people

By agreeing a broader scope of support for people in need, we have been able to fund a range of further initiatives that promote and enable wider inclusivity in the chemical sciences.

These include our assistance grants, grants for carers, and the bullying and harassment helpline (see p32 for more details).



The Fund in 2019 in numbers

£200 lowest **£7,000** highest financial support

51 volunteer visits to **24** different members

24 youngest **82** oldest beneficiary

92 Fund volunteers

FINANCIAL REVIEW



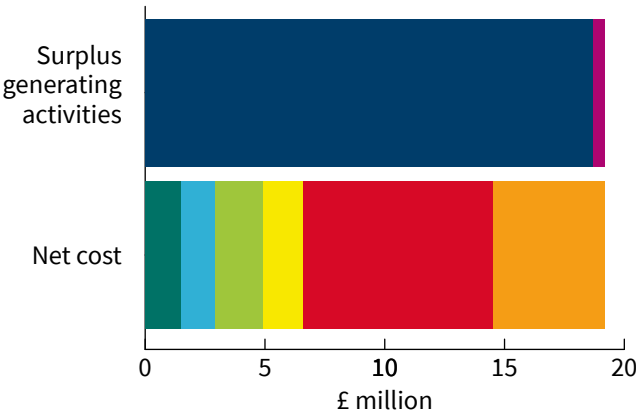
We undertake a diverse range of activities to fulfil our charitable mission to advance excellence in the chemical sciences. We aim to deliver these activities in an effective and sustainable way, supported by a long-term approach to financial planning.

Key activities in 2019

Our publishing operations are central to achieving our charitable objectives in support of the chemical science community and advancing excellence in the chemical sciences. Overall, our publishing operations generated a net surplus of £18.8m (2018: £18.4m). A portion of this surplus has been invested in the continued development of our publishing products and services, while the majority has been used to fund our other charitable activities and our running costs.

Surplus generating activities and application of surplus

Fundraising and other	£0.5m
Publishing	£18.8m



Advocacy and awareness	£4.7m
Education and professional practice	£7.9m
Scientific conferences and events	£1.7m
Chemistry World	£2m
Membership	£1.4m
Surplus	£1.5m

Definitions	
Usable funds:	These are unrestricted funds made up of our general funds, funds retained within non-charitable subsidiaries and designated funds.
Unusable funds:	These funds are made up of the pension reserve, which represents the RSC's defined benefit pension liabilities as at year end. The pensions reserve is reduced by payments made against the agreed recovery plans in the year.
General funds:	These are unrestricted funds representing monies earned primarily from publishing activities and membership subscriptions.
Designated funds:	These are unrestricted funds that have been internally 'ring fenced' for a specific purpose and consist of earmarked funds, member network funds and various trust and lecture funds.
Restricted income funds and endowment funds:	Represent grants, financial or other gifts bequeathed in a will or trust deed to the RSC with a specific direction as to use. These are not available for the general purposes of the charity and consist of the Chemists' Community Fund, various trust and lecture funds, restricted grants, Royal Chemistry India Foundation and Friends of the RSC, Inc.
Free reserves:	The amount of general funds after deducting the balances held within our fixed assets. The portion of 'available reserves' freely available to spend and use on any of our charitable activities.
Intangible and tangible fixed assets:	Assets purchased for long-term use, and not likely to be quickly converted into cash. This includes buildings, equipment, software and intellectual property.
Investments:	Funds held by investment managers on behalf of the Royal Society of Chemistry (RSC) for the purpose of generating income and capital gains over the long-term.
Debtors:	Amounts owed from third parties.
Creditors:	Amounts owed to third parties.
Deferred liabilities:	Income received / invoiced in advance for journal and membership subscriptions relating to future periods. This is held on the balance sheet and only recognised as income when the subscriptions fall due.
Cash:	Includes cash held at the bank and short-term highly liquid investments.
Working capital:	The capital, which is used in our day-to-day operations, calculated as current assets (i.e. cash, stock and debtors) less current liabilities (i.e. creditors and deferred liabilities).
Defined benefit pension liability:	The net deficit on our pension scheme, representing the difference between valuations of the pension scheme assets and liabilities.

Our publishing revenues remained stable, generating 85.4% (2018: 85.4%) of our total income.

In 2019 we continued to support the exchange of knowledge through our events programme. We spent £3.4m (2018: £3.8m) on organising and sponsoring conferences and symposia.

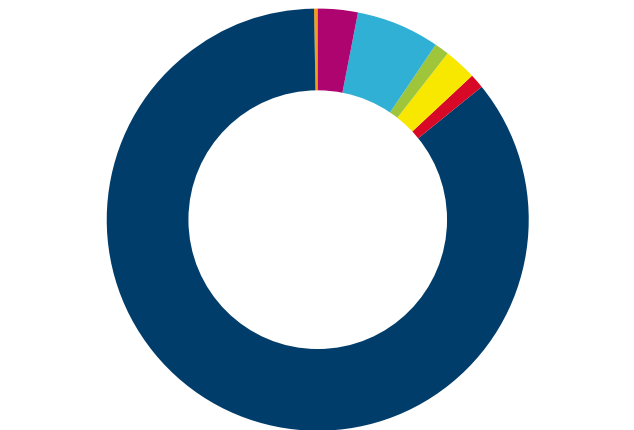
We continued to invest in education and professional practice programmes to help secure a strong, diverse and sustainable supply of chemists at all levels. In 2019, we developed and launched our new Education Platform and increased our education regions team, resulting in spend of £8.7m in 2019 (2018: £6.4m).

Financial Performance

Overview

We have continued to review and prioritise our activities according to strategic impact, and as a result we generated £67.3m of income across the group in 2019, representing an increase of £3.7m on income recognised in 2018 (2018: £63.6m). Total group expenditure in 2019 was £65.7m, representing an increase of £6.0m on 2018 expenditure (2018: £59.7m).

The breakdown of our sources of income and areas of expenditure are shown in the charts below.



Total income	
Fundraising and other income	£2.2m
Membership	£4.3m
Chemistry World	£0.7m
Scientific conferences and events	£1.7m
Education and professional practice	£0.8m
Publishing	£57.4m
Advocacy and awareness	£0.1m

We continued to support chemical science professionals through our member services. In 2019, there has been additional focus on advice and guidance, and continued development of our support of accreditation and registrations. Spend on membership in 2019 was £5.7m (2018: £4.9m).

The policy and evidence teams expanded their work programmes in 2019, with increased focus on partnership working, collaboration and commissioning research. Overall, we spent £4.8m (2018: £4.0m) on advocacy and awareness programmes in 2019.

The activities undertaken in the year were carried out within the budget approved by our Trustees, and all the income of the charity has been spent on our charitable and fundraising activities or retained in our charitable reserves (see notes 25 and 26).

Overall we achieved a net operating surplus of £1.6m (2018: net operating surplus of £3.9m) and a net surplus of £9.2m after investment movements (2018: net deficit of £0.7m). The table opposite reconciles this to the operating surplus of £2.8m reported in our internal management accounts.



Total expenditure	
Fundraising and other expenditure	£1.7m
Membership	£5.7m
Chemistry World	£2.7m
Scientific conferences and events	£3.4m
Education and professional practice	£8.7m
Publishing	£38.7m
Advocacy and awareness	£4.8m

'Real' operating surplus	
As reported in internal management accounts	
Less: Designated Fund costs	(£1.8m)
Costs associated with Strategic Initiative Funds and Earmarked Funds as these are one-off items that sit outside of the operating budget.	
Add: Investment Income	£1.1m
Not included in the management accounts as the income was reinvested in the portfolio rather than used to fund operating expenditure. The income is shown in the Consolidated Statement of Financial Activities (SOFA) as required by accounting rules.	
Less: Defined benefit pension fund interest	(£0.8m)
Not included in the management accounts because this is a notional cost that accounting rules require to be shown in the SOFA.	
Add: Foreign Exchange	£1.1m
Not included in the Management accounts as revaluations do not form part of operational budgeting.	
Less: Investment Management Costs	(£0.8m)
Not included in the management accounts because investment portfolio costs do not form part of the operational budgeting.	
Net operating surplus (net income before investment gains)	£1.6m
Per the SoFA	
Add: Investment movements	£7.6m
Not included in the management accounts because investment portfolio movements do not form part of the operational budgeting.	
Net income	£9.2m
Per the statement of financial activities	

Our usable reserves, consisting of general funds, funds retained in non-charitable subsidiaries and designated funds, remain healthy with a balance of £98.3m (2018: £91.5m).

Our working capital position remains strong, with a net current asset position of £7.8m (2018: £8.4m) owing to the large cash and debtors balances offsetting the creditor balances and advance payments received for journal subscriptions.

Overall, our financial position remains healthy, with substantial usable reserves readily available to fund future activities. We will continue to focus on allocating our resources to deliver our strategy in a sustainable and effective way.

Investments

We hold financial investments to maximise the security of our reserves and generate returns. Our investment portfolio is designed to ensure long-term growth and to provide additional funding to support our charitable objectives.

Following review and amendment in 2018, the long-term investment objectives for general funds and restricted funds are to achieve an annual rate of return of 2.0% (2018: 2.0%) in excess of the rate of UK inflation, as measured by the Retail Price Index (RPI), after fees and costs at an acceptable level of risk for the investment portfolio.

Trustees adopt an investment time horizon of at least 10 years, over which they aim to achieve their objectives and expect the portfolio to remain substantially invested. The Trustees accept that investment performance objectives may not be achievable every year and that there will be occasional temporary adverse movements. As a result, we will review investment performance over relevant time frames.

Responsibility for investment strategy resides with the Board of Trustees, acting under advice from the Finance and Resources Board. Investment parameters are agreed with our investment managers, whilst monitoring performance in the context of long-term objectives and external benchmarks.

JP Morgan primarily manages our investments, with a small residual private equity investment maintained by Schroders Investment Management (UK) Limited. Our investment portfolio is split between general funds and restricted funds to maintain appropriate governance and stewardship of funds, while minimising management fees. Risk is managed through diversification of the portfolio between different asset classes and geographic markets, and the wider social and environmental impact of the portfolio is monitored through independently provided Environmental, Social and Governance (ESG) Quality scores where appropriate.

We transferred £1.6m (2018: £6m) of surplus cash into our investment portfolio in 2019 and achieved total investment income of £1.0m in 2019 (2018: £1.0m) which was reinvested. Together with investment gains of £7.6m (2018: loss of £4.7m), £1.6m purchase of investment (2018: £6m), cash distributions of £Nil (2018: £0.4m) and investment management costs of £0.8m (2018: £0.8m) the value of our investments increased overall to £108.2m, (2018: £98.9m), an increase of £9.3m during the year. Overall this represented a 3.1% over achievement of the RPI+2% objective as outlined above (2018: underachieved by 10.3%).

Reserves policy

We review our reserves policy regularly. Our aim is to maintain our reserves at a sufficient level to ensure our financial resilience and sustainability, including protecting us against risks identified in the Risk Register.

Our reserves policy sets out the target reserves level and the key principles by which we will manage any excesses or deficits compared to the target. Our aim is to strike the appropriate balance between ensuring a sustainable financial position and using our funds to fulfil our charitable mission.

Free reserves element	Purpose for reserve	Target amount £m
Contingency reserve	- Ensure short term solvency and stability in case of an extreme event - Buy some time in the event of a serious income shock - Enable the organisation to function while action is taken - Ensure charitable commitments can be met	18.3
Financial management reserve	- Smooth out volatility - Provide coverage for permanent changes in circumstances - Enable adjustments to be phased in over a longer time period - Insulate usable reserves from adverse fluctuation in the investment portfolio	11.7
Pension fund reserve	- Ensure affordability of the deficit recovery plan - Provide surety to the Pension Fund, underpinning the employer covenant (Partially repositioned as a designated fund as noted below)	10.7
Total		40.7

The Board of Trustees approved the transfer of £8.7m to the Strategic Initiatives Fund in July 2019 and a further £3.3m to the Technology Roadmap Fund in November 2019, details of which are noted as follows:

Designated Fund	Purpose for designated fund	Target amount £m
Strategic Initiatives Fund	The Strategic Initiatives Fund will be used to deliver impactful charitable activities over the next five years and to enable the delivery of the RSC’s Strategy by funding the non-recurring costs of major projects without having to afford this from day-to-day operating budgets.	8.7
Technology Roadmap Fund	The Technology Roadmap Fund comprises of four strategic programmes which have been developed to support the RSC strategic objectives over the next 5 years, with a total expenditure of £12.7m.	3.3
Total		12.0

The level of accumulated usable funds held at 31 December 2019 was £98.3m (2018: £91.5m). Of this, £46.6m (2018: £51.9m) relates to the Charity’s unrestricted general funds and £49.4m (2018: £37.8m) relates to designated funds,

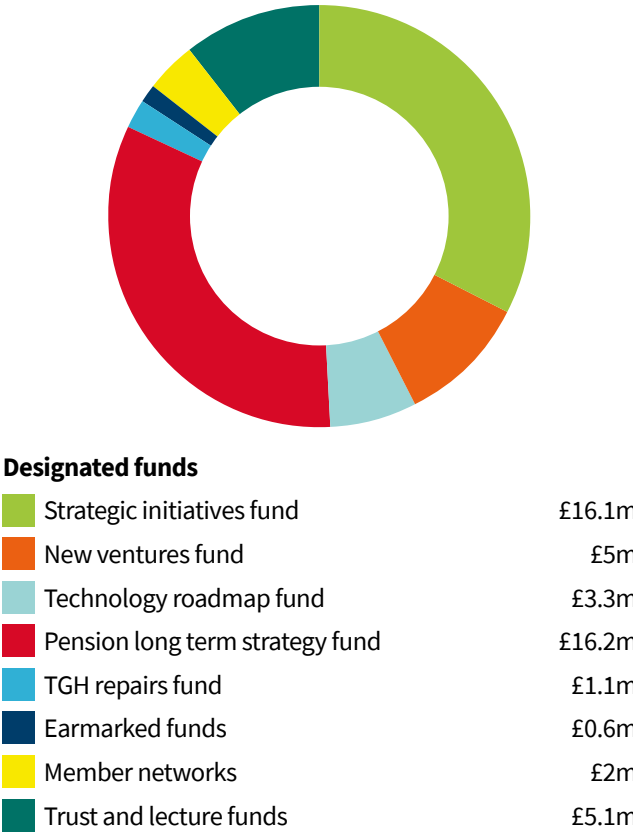
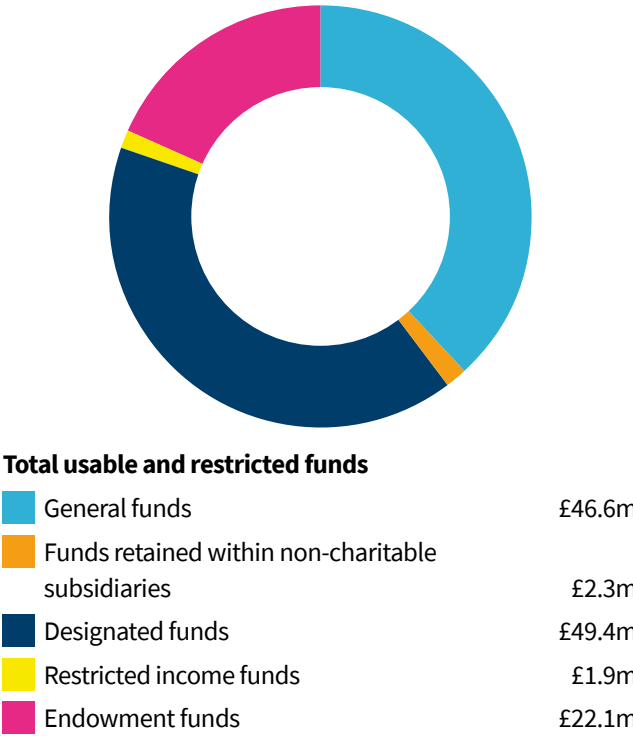
Free reserves represent unrestricted general funds of the RSC and exclude both the restricted funds held and funds that have been designated by our Trustees. The free reserves also exclude any funds that could only be realised by disposing of fixed assets held for charitable use.

In 2019, our policy was to maintain free reserves of at least £40.7m consisting of:

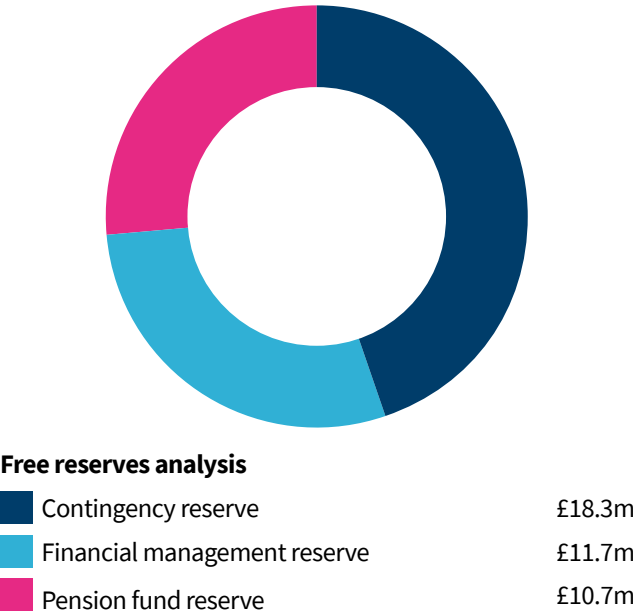
Prior to the Board of Trustees resolution to transfer £3.3m to designated funds, the RSC maintained free reserves in excess of the £40.7m target. Although the transfer to designated funds brought the free reserves below the 2019 target, they still exceed the 2020 target range of £34.9m to £38.5m.

which have been earmarked for specific purposes. The balance of £2.3m (2018: £1.9m) relates to funds retained within the group’s non-charitable subsidiaries.

A portion of the unrestricted general fund balance is locked up within fixed assets. After deducting intangible and tangible assets of £0.2m and £6.2m respectively from the unrestricted general fund balance of £46.6m, £40.2m remains as the ‘free reserves’ available to the group.



For 2019, the target level of available reserves was set at £40.7m. After deducting the target of £40.7m from our ‘free reserves’ of £40.2m, the Charity had no remaining free reserves. This was due to the designated funds transfer in November 2019, although the free reserves are ahead of the 2020 target of £34.9m to £38.5m.



The designated funds consist of earmarked funds totalling £42.3m (2018: £31.0m), designated trust and lecture funds totalling £5.1m (2018: £4.8m) as well as reserves totalling £2.0m (2018: £2.0m) held by branches of the Royal Society of Chemistry including our Local Sections, Regions and Interest Groups. Each of these branches is managed by a committee, which organises activities to advance the chemical sciences in local and specialist areas. Earmarked funds are specific amounts set aside for future contingency or policy purposes. Earmarked funds are established by appropriating amounts out of the general funds and are subject to Council approval.

Restricted funds

The total restricted funds, including restricted income and endowment funds, held at 31 December 2019 were £24.1m (2018: £22.8m) and represents income for restricted purposes specified by the donor that are not available for the general purposes of the charity.

Of this, £16.7m (2018: £15.7m) relates to the Chemists’ Community Fund, which provides a flexible range of financial and non-financial help to members and their dependents. The remainder comprises other restricted income and endowment trust funds totalling £1.6m (2018: £1.7m) and £5.8m (2018: £5.4m) respectively.

Our strategy for all of our restricted funds is to maintain capital over the long-term while generating income to meet current and expected expenditure levels.

Pensions

Employees who joined from January 2003 are entitled to join a defined contribution pension scheme. For employees who joined prior to that date, we operate a defined benefit scheme, which commits to pay a pension based on the number of years worked and the final salary of the members. This was closed to new members in 2002 and the scheme was closed to future accrual for existing members in 2011.

The Defined Benefit Pension Scheme therefore represents a commitment by the Royal Society of Chemistry to pay members a pension (scheme liability), which is paid from a fund managed by the Pension Fund Trustees (the scheme asset).

We agreed a recovery plan with the Pension Fund Trustees to address the deficit, following the triennial valuation of the pension scheme as at 31 December 2016. The funding valuation method is used to determine the recovery plan and the annual deficit payments made by the RSC, and therefore this method has a direct impact on the actual costs falling upon the RSC. This has resulted in annual payments of £1.9m from 1 January 2018 each year to 2025 inclusive, when the shortfall is expected to be eliminated.

Accounting rules require the use of an accounting valuation method, which measures the pension fund’s assets and liabilities on a different basis to the funding valuation method, and results in a larger deficit. FRS 102 is the accounting standard that dictates how the scheme is presented in the financial statements and the valuation is determined by an actuary. The FRS 102 valuation (accounting valuation) of the deficit on the Defined Benefit Pension Scheme was £29.8m at the end of 2019 (2018: £29.9m). This followed an increase in the liabilities of the scheme of £9.1m, attributable to changes in the actuarial assumptions, most notably the decrease in the discount rate from 2.8% to 2.1%, as well as a corresponding increase in the assets of the scheme of £9.2m.

The accounting valuation results in a notional deficit that does not directly impact on the actual costs falling upon the RSC. The funding valuation is considered the real figure and this, along with the agreed recovery plan, will remain until the next triennial valuation process in 2020.

The differences between the 2019 accounting valuation and 2016 funding valuation measures of the pensions fund deficit are summarised in the table below:

Details	Accounting valuation 31 Dec 2019 <i>For use in the 2019 financial statements</i> £m	Funding valuation 31 Dec 2016 <i>For use in the recovery plan agreed in October 2017</i> £m	Difference
Scheme assets	101.9	97.7	4.2
Scheme liabilities	(131.7)	(115.6)	(16.1)
Net deficit	(29.8)	(17.9)	(11.9)

Over time, the deficit will vary in line with market interest rates and equity returns and may ultimately become a surplus. Given the length of time over which the scheme

will exist, the FRS 102 figures represent only a best estimate of the final position if existing market factors remain unchanged.

Risks

Our leadership team regularly review risks to our ability to deliver our strategy and to the organisation, and oversee plans for mitigating these risks. These risks are detailed in the Strategic Risk Register, which is a standing item on the Audit and Risk Committee agenda, to ensure thorough oversight on behalf of our Trustees. The most recent

update to the register was received by the Audit and Risk Committee in March 2020.

The key risks faced by the RSC along with their associated mitigations, are detailed in the table below:

Strategic risk	Mitigation
General compliance failure	Maintain appropriate knowledge and skills to ensure compliance with our domestic and international regulatory and statutory obligations, including the Bribery Act, Charity Commission requirements, Data Protection, EU GDPR, employee rights, health and safety regulations, international trade sanctions, Modern Slavery Act, Safeguarding Children & Vulnerable Adults, statutory financial reporting, and tax legislation.
Pension fund deficit increase	A triennial valuation process was completed in 2017 with an agreed deficit recovery plan that is affordable to the RSC. This risk is mitigated until 2020 when the valuation process will be repeated. Sufficient funds are being held in compliance with the Reserves Policy to ensure that any future disruption to the operating budget is avoided
Publishing surplus decrease	The RSC publishes significant volumes of journal content, providing flexibility and economies of scale. The RSC’s developing Commercial Strategy seeks to identify additional revenue streams. Increasing proportions of Open Access (OA) content/revenues within our publishing portfolio reduces the exposure to content piracy or illegitimate sharing, since we do not own the intellectual property for OA content. Regular scenario planning and financial planning exercises provide assurance over the organisation’s capacity to respond to market adjustments.
Business continuity and disaster recovery	The RSC maintains a comprehensive Business Continuity Plan (BCP), which was last tested in March 2019, highlighting several areas for improvement. Related mitigations include setting up a staff helpline and a collection of ‘emergency kits’ for use by the Crisis Management Team in the event of a major incident. From March 2020 the BCP was activated in response to the COVID-19 crisis and as at the date of this report the Crisis Management Team are closely monitoring and managing a full work force working remotely whilst offices remain closed.
Cyber security	Externally validated back-up procedures, anti-virus software, firewall penetration testing, security penetration-testing of services and redundancy built-in to application services. Access to best-practice cyber security provisions through the use of specialist outsourced IT services.
Organisational focus	Clear cascade of RSC strategy through management meetings and staff briefings. The Portfolio Management Office was established in 2019 to prioritise activities and assess new initiatives in line with organisational strategy. Adoption of strategy-focused management reporting, including the adoption of a balanced scorecard to monitor overall organisational health.
Workforce management	Investment in Change Management capabilities. On-going monitoring of staff turnover. Measurement of morale through employee engagement surveys, including participation in the Best Companies survey published by the Sunday Times. Provide effective performance management through annual objective setting. Targeted succession planning for key roles.
Banking and investments failure	The organisation’s use of bank accounts continues to operate in accordance with the banking policy, setting out how cash funds will be distributed between banks to ensure security and liquidity. RSC Council approved revised Investment Strategy targets in July 2018, which intend to strike an appropriate balance between risk and return. The position is kept under close review, including a formal fortnightly review by the Director of Finance and reports to each meeting of the Finance & Resources Board.
Brexit Impact on RSC	Campaign work on UK science and Brexit policy, voicing our concerns and recommendations on key issues. Director of HR and Organisation Development is liaising with senior HR contacts on access to skilled workers. Medium-term financial planning to reflect expected movements in foreign exchange rates.

Structure, governance and management

The Royal Society of Chemistry is a registered charity governed by a Royal Charter that was granted on 15 May 1980, following the amalgamation of the Chemical Society, the Royal Institute of Chemistry, the Faraday Society, and the Society for Analytical Chemistry.

We are governed by our Board of Trustees, members of which are elected or appointed in accordance with our charter and by-laws.

Our Board of Trustees comprises:

- President
- President Elect or Immediate Past President
- Honorary Treasurer
- Seven Elected Trustees
- Up to eight Appointed Trustees who may be Chairs of our Board or other persons appointed by the Board of Trustees.

In accordance with the By-laws of the Society, the trustees are elected to position at the Annual General Meeting. Any member of the RSC may stand for election as an Ordinary Member and any Fellow may stand for election as President or Honorary Treasurer. All members are eligible to nominate candidates and vote in elections. The Board of Trustees

itself may also make nominations. Voting takes place by post or electronically and is managed by an external provider approved by the Board of Trustees. Election of Ordinary Members for the Board of Trustees normally takes place every two years. The next election will be for Ordinary Members to take office after the 2021 Annual General Meeting (AGM).

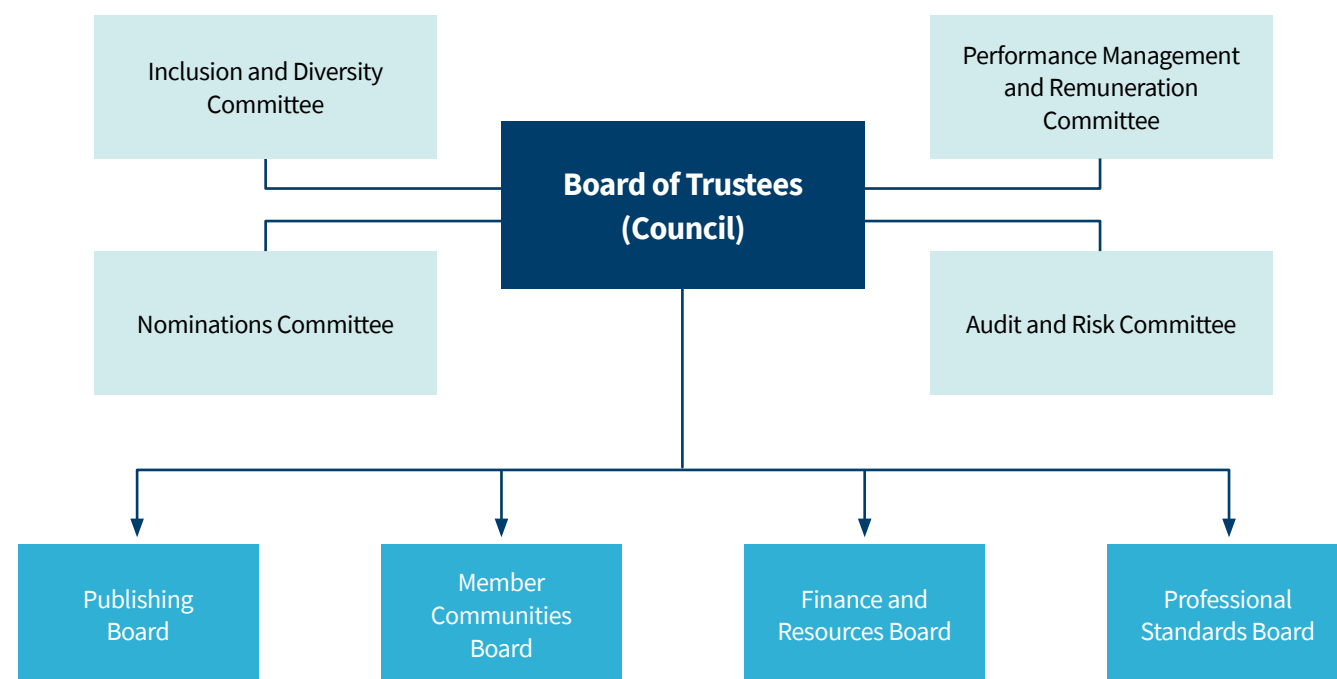
Our governance structure

Our governance boards and committees develop strategic planning and policies with the support of staff and subject to approval by the Board of Trustees, which delegates the day-to-day management of the organisation and strategy implementation to the Chief Executive Officer (CEO) and staff. Members of staff provide updates on progress to the governance bodies, which, in turn, report to the Board of Trustees on performance against our strategy.

Each board and committee has a chair appointed by the Board of Trustees. More details on the current structure and membership of each board can be found on our website:

<http://www.rsc.org/about-us/our-structure/-boards-committees>

The Board of Trustees has oversight of the RSC's involvement in the Science Council, the European Association for Chemical and Molecular Sciences (EuChemS) and the European Technology Platform for Sustainable Chemistry (SusChem).



Remuneration of key management personnel

Our Leadership Team, led by the Chief Executive Officer (CEO), manages the implementation and operational delivery of the RSC's agreed strategy, programmes of activity by promoting leadership and direction, and works closely with the Board of Trustees to ensure we are governed effectively. The Performance Management and Remuneration Committee is responsible for:

- Setting objectives for and reviewing the performance of the CEO, and determining his or her salary in accordance with the organisation's performance management procedures
- On the basis of recommendations from the CEO, discussing and agreeing any major changes to the duties of senior staff i.e. the Deputy Chief Executive Officers (DCEOs) and the leadership team (LT), their annual remuneration and any change in the number of such posts
- Ensuring that appropriate benchmarking is in place to understand how the salary and remuneration packages of the CEO, DCEOs and LT members compare to those in similar organisations
- Providing general advice to the CEO on people management issues, in accordance with by-law 74

Remuneration for the CEO, DCEOs and the LT is reviewed on an annual basis at the same time as the annual pay review for all staff. Please refer to disclosure note 7 for more information on LT remuneration.

Trustees

At the date of signing the Trustees' Report, the Board of Trustees are the Trustees of the Royal Society of Chemistry. A list of the Trustees for the period from January 2019 to the date of this report is shown on page 57.

All Board of Trustees members are required to attend trustee training sessions covering the responsibilities of trustees, including financial and business planning and strategy development. Trustees are also offered external training and are provided with a Governance Handbook and trustee induction pack that they are asked to familiarise themselves with.

We also conduct an annual skills audit to ensure that the Board of Trustees includes the right skills to provide effective strategic direction and oversight for the organisation.

In shaping our objectives for the year and planning our activities, the Trustees have considered the Charity Commission's guidance on public benefit, including the guidance 'public benefit: running a charity (PB2)'. The Trustees are satisfied that the RSC's activities provide public benefit by advancing chemical sciences through publishing chemistry books, journals and magazines; informing and influencing policy makers; supporting and advancing chemical science education; recognising and regulating professional standards in the chemical sciences; organising meetings, conferences and networking events and informing and engaging the public.

All members of the Board of Trustees and its Boards and committees give their time voluntarily to the RSC.

Subsidiary Companies

Overview

The RSC has two wholly owned UK registered subsidiaries, Chemistry Limited and RSC Worldwide Limited. The profit before taxation for Chemistry Limited was £267k (2018: £199k). The profit before taxation for RSC Worldwide Limited was £656k (2018: £595k).

The principal activity of RSC Worldwide Limited is to facilitate the RSC's activities overseas. It also holds the ChemSpider asset, a database providing fast text and structure search access to over 71 million chemical structures from hundreds of data sources.

In 2019, RSC Worldwide Limited continued to facilitate operations in the US, China, India, Japan, Brazil and Germany, representing activities to advance the chemical sciences internationally.

The principal activity of Chemistry Limited is to promote Burlington House as a unique venue for both chemistry and non-chemistry related events and to carry out any non-primary purpose trading on behalf of the RSC.

Consolidation shown on page 61

We have reflected in the Consolidated Statement of Financial Activities and Balance Sheet the following entities covered by the Royal Society of Chemistry charity registration:

- Chemistry Limited
- RSC Worldwide Limited
- RSC Worldwide (US) Inc
- RSC (Beijing) Chemical and Science Technology Company Limited

- Royal Chemistry India Private Limited
- Royal Chemistry India Foundation
- Royal Society of Chemistry Japan KK
- Friends of RSC Inc.
- RSC Worldwide (Germany) GmbH
- Commonwealth Chemistry Limited

Connected charities

The RSC jointly administers the Sir George Beilby Memorial Fund. An annual prize of £1,000 is awarded and sustained by a trust fund commemorating Sir George Beilby FRS, President of the Society for Chemical Industry (SCI) (1898-99), the Institute of Chemistry (1909-12) and The Institute of Metals (1916-1918) and founding Chairman of the Fuel Research Board.

The award is administered in rotation by the RSC, the Institute of Materials, Minerals and Mining and the SCI. It recognises substantial work of exceptional practical significance in chemical engineering, applied materials science, energy efficiency or related field, and is made to scientists or engineers. The assets of the fund are held in a named portfolio with Schroders Investment Management Limited. The RSC's share of the fund has not been consolidated within the Consolidated Balance Sheet and Statement of Financial Activities on the basis of materiality.

The RSC works with a broad range of UK and international charities. Details are available on request.

Reference and Administrative Details

Charity Registration Number

The Royal Society of Chemistry's charity registration number is 207890 and this registration encompasses the RSC Chemists' Community Fund, the Royal Society of Chemistry and its trust and lecture funds and member networks.

Leadership team for the year 1 January 2019 to 31 December 2019

Chief Executive Officer

Dr Robert Parker CSci CChem FRSC

Deputy Chief Executive

Dr Helen Pain CSci CChem FRSC

Deputy Chief Executive

Paul Lewis FRSA FInstLM

Finance Director

Stephen Joyce FCPFA

Director of Science and Communities

Dr Jo Reynolds FRSC

Director of Human Resources and Organisation Development

Karen Roberts MCIPD

Interim Director of Education and Professional Practice

Nicole Morgan CChem FRSC

Director of Publishing, Journals and Databases

Dr Emma Wilson MRSC

Director of Technology

Dr Frank Gibson
(to February 2019)

Interim Director of Technology

Chris Cook
(from February 2019)

Director of Sales and Marketing

Stephen Rumbelow FCIM
(from February 2019)

Auditors, Bankers and other Professional Advisors

Auditors

RSM UK Audit LLP

2nd Floor
North Wing East
City House
Hills Road
Cambridge
CB2 1RE

Bankers

National Westminster Bank plc

Market Street Branch
23 Market Street
Cambridge
CB2 3PU

Nationwide Building Society

Nationwide House
Pipers Way,
Swindon
SN38 1NW

Goldman Sachs Asset Management International

Plumbtree Court
25 Shoe Lane
EC2A 4AU

Citizens

One Citizens Plaza,
Providence, RI 02903
USA

Barclays Bank plc

1 Churchill Place
London
E14 5HP

Lloyds Bank plc

25 Gresham Street
London
Ec2V 7HN

Investment managers

J P Morgan

25 Bank Street
Canary Wharf
London
E14 5JP

Schroder Investment Management (UK) Limited

1 London Wall Place
London
EC2Y 5AU

Actuary

JLT Employee Benefits

The St Botolph Building
138 Houndsditch
London
EC3A 7AW

Pension Advisors

Broadstone Consultants & Actuaries Limited

CBBS House
23-25 St George's Road
Bristol
BS1 5UU

Legal Advisors

Charity, technology, intellectual property and employment matters:

Taylor Vinters

Merlin Place
Milton Road
Cambridge
CB4 0DP

Commercial, compliance and employment matters:

Mills & Reeve LLP

Botanic House
100 Hills Road
Cambridge
CB2 1PH

Commercial property matters:

Bristows LLP

100 Victoria Embankment
London
EC4Y 0DH

Publishing matters:

Farrer & Co.

66 Lincoln's Inn Fields
London
WC2A 3LH

Chemists' Community Fund and Data Protection matters:

Eversheds

Kett House
Station Road
Cambridge
CB1 2JY

Trust Law

Smee & Ford

5th Floor, 10 Whitechapel High Street
London
E1 8QS

Translation and Document Review

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HKRI Taikoo Hui, 288 Shimen Road
(No.1)
Shanghai 200041, P.R. China

Compliance and company law:

ARC – Arfiff Rozhan & Co

Solaris Mont Kiara
50480 Kuala Lumpur
Malaysia

Property law:

Peixoto & Cury

Rua Teixeira da Silva
560
Sao Paulo

Safeguarding:

Mason Haynes and Curran

South Bank House
Barrow St
Dublin 4

Principal Office

Royal Society of Chemistry

Burlington House
Piccadilly
London
W1J 0BA

Royal Society of Chemistry Council

Patron

Her Majesty The Queen

Council Members for the year 1 January 2019 to 31 December 2019

Honorary Officers

President

Professor Dame Carol Robinson DBE HonFRSC FRS

President Elect (from July 2019)

Chair, Professional Standards Board (up to July 2019)

Professor Tom Welton OBE CChem FRSC

Immediate Past President and Chair, Member Communities Board

Professor Sir John Holman CChem FRSC
(retired July 2019)

Honorary Treasurer and Chair, Finance & Resources Board

Dr Paul Satchell CChem FRSC

Appointed Trustees

Chair, Publishing Board

Professor Geoffrey Maitland CBE CChem CEng FRSC
FICHEM FREng

Chair, Professional Standards Board

Dr Andy Rudge CSci CChem FRSC
(from July 2019)

Chair, Member Communities Board

Professor Tom Brown CChem FRSC FRSE
(from July 2019 to January 2020)

Elected Trustees

Professor Andrew Bell CChem FRSC

Ms Julia Hatto BEM CSci CChem FRSC

Dr Elizabeth Rowsell FRSC

Professor Tom Simpson CChem FRSC FRS FRSE

Dr Louise Armstrong-Denby CChem FRSC
(from July 2019)

Claire Gallery-Strong CSci CChem FRSC
(from July 2019)

Professor Annie Powell CChem FRSC
(from July 2019)

Professor Marina Resmini FRSC
(from July 2019)

Professor Polly Arnold OBE CChem FRSC FRSE FRS
(retired July 2019)

Professor Sabine Flitsch CChem FRSC
(retired July 2019)

Professor Melissa Hanna-Brown CChem FRSC
(retired July 2019)

Dr David Rees CChem FRSC
(retired July 2019)

Dr Janette Waterhouse EurChem CChem FRSC
(retired July 2019)

All the members named above, with the exception of those who have retired or stood down, form the Board of Trustees as at the date of signing the Trustees' report.

Responsibilities of the Trustees

Statement of Trustees' responsibilities in respect of the Trustees' report and the accounts

The Trustees are responsible for preparing the Trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England and Wales requires the Trustees 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 charity and of the incoming resources and application of resources of the group for that period. In preparing those financial statements, the Trustees are required to

- Select suitable accounting policies and apply them consistently;
- Observe the methods and principles in the Charities Statement of Recommended Practice (SORP);
- Make judgements and estimates that are reasonable and prudent;
- State whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Royal Society of Chemistry will continue in business.

The Trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the group and the charity and to enable them to ensure that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008 and the provisions of the Royal Charter. They are also responsible for safeguarding the assets of the group and the charity, and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

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

On behalf of the Trustees



Professor Dame Carol Robinson DBE HonFRSC FRS

Independent Auditors' Report to the Trustees of the Royal Society of Chemistry

Opinion on the financial statements

We have audited the financial statements of the Royal Society of Chemistry (the 'charity') and its subsidiaries (the 'group' for the year ended 31 December 2019 which comprise the Consolidated Statement of Financial Activities, the Consolidated and charity Balance Sheets, the Consolidated and charity Statements of Cash Flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland" (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:

- give a true and fair view of the state of the group's and charity's affairs as at 31 December 2019 and of their 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.

Basis for opinion

We have been appointed as auditors under section 151 of the Charities Act 2011 and report in accordance with regulations made under section 154 of that Act.

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the group and charity in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the trustees' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the trustees have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the group's or charity's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the Financial Statements and Trustees' Report other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

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 financial statements is inconsistent in any material respect with the Trustees' Report; or
- sufficient accounting records have not been kept by the charity; or
- the 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.

Responsibilities of trustees

As explained more fully in the Statement of Trustees' responsibilities set out on page 58 the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the group's and charity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the group or charity or to cease operations, or have no realistic alternative but to do so.

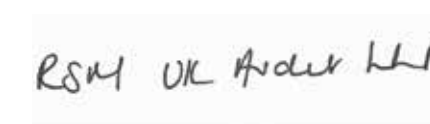
Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is provided on the Financial Reporting Council's website at <http://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

Use of Our Report

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.



RSM UK Audit LLP
Statutory Auditor
Chartered Accountants
2nd Floor, North Wing East
City House, Hills Road
Cambridge CB2 1RE

Date 14 May 2020

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

FINANCIAL STATEMENTS

Consolidated statement of financial activities for the year ended 31 December 2019

		Unrestricted funds					Restricted funds					
		General funds 2019 £000	Designated funds 2019 £000	Total general and designated funds 2019 £000	Pension reserve 2019 £000	Total unrestricted funds 2019 £000	Restricted income funds 2019 £000	Endowment funds 2019 £000	Total restricted funds 2019 £000	Total 2019 £000	Total 2018 £000	
	Note	£000	£000	£000	£000	£000	£000	£000	£000	£000	£000	
Income and endowments from:												
Donations and legacies	1	177	35	212	-	212	-	367	367	579	126	
Other trading activities	2	593	-	593	-	593	-	-	-	593	661	
Investment income	3	662	199	861	-	861	214	-	214	1,075	1,004	
Charitable activities												
Membership		4,246	9	4,255	-	4,255	-	-	-	4,255	3,992	
Chemistry World		701	-	701	-	701	-	-	-	701	737	
Scientific conferences and events		733	854	1,587	-	1,587	130	-	130	1,717	2,117	
Education and professional practice		139	-	139	-	139	681	-	681	820	607	
Publishing		57,407	-	57,407	-	57,407	-	-	-	57,407	54,275	
Advocacy and awareness		100	-	100	-	100	-	-	-	100	45	
Other income		4	-	4	-	4	-	-	-	4	27	
Total income and endowments		64,762	1,097	65,859	-	65,859	1,025	367	1,392	67,251	63,591	
Expenditure on:												
Raising funds												
Donations and legacies		419	137	556	4	560	-	-	-	560	801	
Other trading activities		326	-	326	-	326	-	-	-	326	462	
Investment management costs		443	161	604	-	604	9	159	168	772	753	
Charitable activities												
Membership		4,601	532	5,133	83	5,216	522	-	522	5,738	4,898	
Chemistry World		2,629	40	2,669	38	2,707	-	-	-	2,707	2,601	
Scientific conferences and events		2,264	1,002	3,266	25	3,291	116	-	116	3,407	3,814	
Education and professional practice		7,263	752	8,015	96	8,111	558	-	558	8,669	6,354	
Publishing		37,334	776	38,110	496	38,606	47	-	47	38,653	35,921	
Advocacy and awareness		4,680	97	4,777	69	4,846	3	-	3	4,849	4,049	
Total expenditure		59,959	3,497	63,456	811	64,267	1,255	159	1,414	65,681	59,653	
Net income/(expenditure) before investment gains/(losses)		4,803	(2,400)	2,403	(811)	1,592	(230)	208	(22)	1,570	3,938	
Gains/(losses) on investment assets	16	4,328	1,631	5,959	-	5,959	94	1,542	1,636	7,595	(4,675)	
Net income/(expenditure)		9,131	(769)	8,362	(811)	7,551	(136)	1,750	1,614	9,165	(737)	
Transfer between funds	25, 26	(13,891)	12,348	(1,543)	1,924	381	(160)	(221)	(381)	-	-	
Net group (expenditure)/income before other recognised gains		(4,760)	11,579	6,819	1,113	7,932	(296)	1,529	1,233	9,165	(737)	
Remeasurement on defined benefit pension scheme	12	-	-	-	(1,031)	(1,031)	-	-	-	(1,031)	128	
Net movement in funds (decrease) /increase		(4,760)	11,579	6,819	82	6,901	(296)	1,529	1,233	8,134	(609)	
Reconciliation of funds												
Fund balances brought forward		53,721	37,801	91,522	(29,909)	61,613	2,241	20,595	22,836	84,449	85,058	
Fund balances carried forward		48,961	49,380	98,341	(29,827)	68,514	1,945	22,124	24,069	92,583	84,449	

Notes 1–33 form an integral part of these Financial Statements.

Refer to note 33 for the accounting policies that have been used in preparing these financial statements.

A separate statement of financial activities has not been presented for the Charity alone.

Refer to note 24 for further disclosure on the Charity's financial outturn for 2019.

Consolidated and Charity balance sheets as at 31 December 2019

	Note	Group 2019 £000	Group 2018 £000	Charity 2019 £000	Charity 2018 £000
Fixed assets					
Intangible assets	14	233	446	233	446
Tangible assets	15	6,197	6,603	6,110	6,596
Investments	16	108,226	98,871	108,226	98,871
Total fixed assets		114,656	105,920	114,569	105,913
Current assets					
Stock – books and paper		-	445	-	445
Debtors	18	11,449	13,653	11,584	13,829
Cash at bank and in hand		23,501	22,151	21,270	19,947
Total current assets		34,950	36,249	32,854	34,221
Current liabilities					
Creditors	19	(5,815)	(7,000)	(6,162)	(6,901)
Deferred income					
Journal subscriptions	20	(20,048)	(19,419)	(20,023)	(19,384)
Membership subscriptions	20	(1,333)	(1,392)	(1,333)	(1,391)
Total current liabilities		(27,196)	(27,811)	(27,518)	(27,676)
Net current assets		7,754	8,438	5,336	6,545
Long-term liabilities					
Defined benefit pension liability	12	(29,827)	(29,909)	(29,827)	(29,909)
Total long-term liabilities		(29,827)	(29,909)	(29,827)	(29,909)
Net assets	21	92,583	84,449	90,078	82,549
Accumulated funds					
Unrestricted funds:					
Usable funds					
General funds	26	46,618	51,861	46,618	51,861
Funds retained within non-charitable subsidiaries	26	2,343	1,860	-	-
Designated funds	26	49,380	37,801	49,380	37,801
Total usable funds		98,341	91,522	95,998	89,662
Unusable funds					
Pension reserve	12, 26	(29,827)	(29,909)	(29,827)	(29,909)
Total unusable funds		(29,827)	(29,909)	(29,827)	(29,909)
Total unrestricted funds		68,514	61,613	66,171	59,753
Restricted funds:					
Restricted income funds	25	1,945	2,241	1,783	2,201
Endowment funds	25	22,124	20,595	22,124	20,595
Total restricted funds		24,069	22,836	23,907	22,796
Total charity funds		92,583	84,449	90,078	82,549

Approved by Board of Trustees and authorised for issue on 30 April 2020

Professor Dame Carol Robinson President

Stephen Joyce Finance Director

Notes 1–33 form an integral part of these Financial Statements.

Refer to note 33 for the accounting policies that have been used in preparing these financial statements.

Consolidated and Charity statements of cash flows for the year ended 31 December 2019

	Note	Group 2019 £000	Group 2018 £000	Charity 2019 £000	Charity 2018 £000
Reconciliation of net income to net cash outflow from operating activities					
Net income for the reporting period		9,165	(737)	8,560	(1,037)
Adjustments for:					
Depreciation and amortisation		1,317	1,536	1,311	1,532
Loss on disposal of fixed assets		-	-	1	-
Proceeds from the sale of fixed assets		-	(2)	-	(2)
Gains/losses on investments		(7,595)	4,675	(7,595)	4,675
Investment income	3	(1,075)	(1,004)	(1,075)	(1,004)
Investment management fees deducted from investments		746	750	746	750
Decrease in stock		445	51	445	51
Decrease/(Increase) in debtors		2,204	(1,799)	2,245	(1,099)
(Decrease)/Increase in creditors and accruals		(1,199)	1,690	(753)	1,195
Increase in deferred income		570	317	581	302
Receipt of endowment		(367)	(44)	(367)	(44)
Exchange rate movements on cash and cash equivalents		256	(245)	199	(202)
Employer's contributions payable to the defined benefit pension scheme	12	(1,924)	(1,924)	(1,924)	(1,924)
Net pension interest expense	12	811	756	811	756
Net cash inflow from operating activities		3,354	4,020	3,185	3,949
Cash flows from investing activities					
Investment income	3	1,075	1,004	1,075	1,004
Investment income reinvested	16	(941)	(885)	(941)	(885)
Purchase of investments	16	(1,565)	(6,065)	(1,565)	(6,065)
Proceeds from sale of investments	16	-	358	-	358
Proceeds from the sale of fixed assets		-	2	-	2
Purchase of intangible fixed assets	14	(32)	(85)	(32)	(85)
Purchase of tangible fixed assets	15	(652)	(521)	(567)	(520)
Net cash (outflow)/inflow from investing activities		(2,115)	(6,192)	(2,030)	(6,191)
Cash flows from financing activities					
Receipt of endowment		367	44	367	44
Net cash inflow from financing activities		367	44	367	44
(Decrease)/increase in cash and cash equivalents		1,606	(2,128)	1,522	(2,198)
Cash and cash equivalents at the beginning of the reporting period		22,151	24,034	19,947	21,943
Change in cash and cash equivalents due to exchange rate movements		(256)	245	(199)	202
Cash and cash equivalents at the end of the reporting period		23,501	22,151	21,270	19,947
Analysis of changes in net debt					
		Group 2019 £000	Group 2018 £000	Charity 2019 £000	Charity 2018 £000
Cash and Cash Equivalents					
Cash and cash equivalents at the start of the reporting period		22,151	24,034	19,947	21,943
Cash flows		1,350	(1,883)	1,323	(1,996)
Cash and cash equivalents at the end of the reporting period		23,501	22,151	21,270	19,947

A reconciliation of net debt is required per the Charities SORP (FRS 102).

There was no debt within the group during 2019 and 2018, and there were no non-cash flows to reflect.

Notes 1–33 form an integral part of these Financial Statements.

Refer to note 33 for the accounting policies that have been used in preparing these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

1. Donations and legacies

	General funds £000	Designated funds £000	Restricted income funds £000	Endowment funds £000	Total 2019 £000	Total 2018 £000
Donations	177	35	-	22	234	102
Bequests and legacies	-	-	-	345	345	24
Total	177	35	-	367	579	126

Note 6 to these financial statements provides additional analysis on funding activity and the costs on raising funds.

2. Income from other trading activities

Income from other trading activities consists entirely of turnover from Chemistry Limited, a wholly owned trading subsidiary of the RSC. Its principal activity is to promote Burlington House as a unique venue for both chemistry and non-chemistry related events and to carry out any non-primary purpose trading on behalf of the RSC. All the profit from the trading subsidiary is passed to the charity under the gift aid scheme.

3. Investment income

	General funds £000	Designated funds £000	Restricted income funds £000	Total 2019 £000	Total 2018 £000
Assets in the UK					
Fixed interest	115	21	6	142	46
Assets outside the UK					
Fixed interest	80	26	27	133	42
Unit trusts	331	108	113	552	412
Equities	73	24	32	129	159
Interest	63	20	36	119	345
Total	662	199	214	1,075	1,004

4. Government grants

The RSC receives grant funding from national and international governmental bodies. In 2019 £411k of government funding was recognised in the statement of financial activities (2018: £647k) for education related and teaching training programmes and for chemical database services.

Funds have been used for the RSC’s Initial Teacher Training Scholarship scheme which offers packages of support to eligible trainee chemistry teachers.

We have received funds to support a pilot mentoring programme in England and a separate programme in Scotland. Funds have been used to support the RSC’s Pan Africa Chemistry Network Congress held in Ethiopia. Finally we have received funds to support additional delivery of the Spectroscopy in a Suitcase programme in Ireland, which gives school students the chance to learn about spectroscopy through hands-on experience.

5. Analysis of grant expenditure (Group and Charity)

	Grants to institutions 2019 £000	Grants to individuals 2019 £000	Total 2019 £000	Grants to institutions 2018 £000	Grants to individuals 2018 £000	Total 2018 £000
Hardship	-	99	99	-	46	46
Prizes & Awards	-	304	304	-	308	308
Travel & Divisons	-	434	434	6	266	272
Research	360	181	541	178	302	480
Diversity	-	115	115	15	132	147
Education & Outreach	264	176	440	142	238	380
Industry	-	210	210	-	190	190
Intl Engagement	62	-	62	131	4	135
Member Network Grants	326	3	329	347	3	350
Total	1,012	1,522	2,534	819	1,489	2,308

The RSC provides grants through the Chemists’ Community Fund , with its primary purpose being the prevention and relief of poverty of its members. As a secondary purpose, the Chemists’ Community Fund is used for the benefit of other legally charitable purposes insofar as funds not being required for the primary purpose.

To help promote excellence in chemistry, the RSC also funds a number of prizes and awards as well as providing grants to fund travel to events and conferences.

The RSC operates a research fund which provides grants to promote original research in the science of chemistry, as explained in note 28. No individual institution was awarded more than £5k for research, with the £360k (2018: £178k) of total research grants to institutions split between multiple beneficiaries.

6. Funding activities outturn analysis

		General funds £000	Designated funds £000	Restricted income funds £000	Endowment funds £000	Total 2019 £000	Total 2018 £000
	Note						
Funding activity income							
Donations and legacies	1	177	35	-	367	579	126
Restricted grant income	25	-	-	811	-	811	950
Total		177	35	811	367	1,390	1,076
Funding activity costs							
Direct staff costs	8	(297)	-	-	-	(297)	(323)
Direct and support costs	8	(126)	(137)	-	-	(263)	(478)
Total		(423)	(137)	0	0	(560)	(801)
Net income/(expenditure) from funding activities		(246)	(102)	811	367	830	275

The RSC receives donations and legacies as well as restricted income including grants as part of its funding activities. This table provides an outturn analysis of the income generated through our funding activities and the associated costs incurred on raising funds.

7. Total staff costs

	2019	2018
	£000	£000
Gross wages and salaries	23,292	21,635
National insurance	2,376	2,205
Pension and related cost	2,194	1,883
Redundancy payments	12	60
Other payments	718	601
Temporary staff and contractors	431	72
Total	29,023	26,456

As required by FRS 102, an amount of £243k (2018: £253k) relating to holiday pay owed to staff at 31 December 2019 has been accrued for. A total of £104k (2018: £41k) was paid in relation to compensation for loss of earnings under agreed settlement agreements. There were no outstanding obligations at year end.

In 2019 the RSC paid a total of £12k (2018: £60k) in respect of statutory and other employment severance-related payments. The number of employees across the Group who earned more than £60k during the year (including taxable benefits in kind, but excluding employer pension costs) is shown below:

Employee earnings	Number of employees 2019	Number of employees 2018
£60,000 - £69,999	25	23
£70,000 - £79,999	11	6
£80,000 - £89,999	3	1
£90,000 - £99,999	2	3
£100,000 - £109,999	2	3
£110,000 - £119,999	8	7
£120,000 - £129,999	2	1
£130,000 - £139,999	-	1
£150,000 - £159,999	-	1
£170,000 - £179,999	1	-
£200,000 - £209,999	-	1
£210,000 - £219,999	1	-
£250,000 - £259,999	1	1
Total	56	48

The number of employees who earned more than £60k, for whom pension benefits are accruing under the RSC defined contribution scheme is 48 (2018: 43). 8 employees (2018: 5 employees) did not accrue pension benefits under the RSC defined benefit contribution scheme. The key management personnel of the RSC comprises the trustees and the leadership team. Key management personnel are in charge of directing and controlling the charity and running and operating the charity on a day to day basis. All trustees give their time freely and no trustee remuneration was paid

in the year. Details of trustee expenses and related party transactions are disclosed in note 30 to the accounts. Total employee benefits of £1,363k (2018: £1,570k) were paid to the RSC's leadership team personnel in 2019. Employer national insurance contributions of £153k (2018: £170k) were paid over to HMRC in respect of RSC leadership team personnel. During 2019, an interim Director of Technology was in post and was paid outside of payroll to the value of £303k. The leadership team consisted of 10 personnel in 2019 (2018: 11 personnel).

Average monthly headcount (number of staff employed)	2019	2018
Membership	39	37
Chemistry World	17	17
Scientific conferences and events	14	13
Education and professional practice	56	49
Publishing	264	258
Advocacy and awareness	33	25
Support	167	159
Fundraising	3	6
Total	593	564

Average monthly FTE	2019	2018
Total average FTE	569	544

8. Total expenditure

Unrestricted funds	General funds				Designated funds			Total	Total
	Direct Staff Costs	Direct Costs	Support Costs	Total general fund costs	Direct Costs	Support Costs	Total designated fund costs	Total 2019	2018
	£000	£000	£000	£000	£000	£000	£000	£000	£000
Expenditure on raising funds									
Donations and legacies	297	19	107	423	132	5	137	560	801
Other trading activities	69	250	7	326	-	-	-	326	462
Investment management costs	-	443	-	443	161	-	161	604	568
Total	366	712	114	1,192	293	5	298	1,490	1,831
Charitable activities									
Membership	1,547	1,149	1,988	4,684	446	86	532	5,216	4,420
Chemistry World	801	953	913	2,667	-	40	40	2,707	2,601
Scientific conferences and events	366	1,322	601	2,289	976	26	1,002	3,291	3,661
Education and professional practice	2,112	2,933	2,314	7,359	652	100	752	8,111	5,963
Publishing	11,778	14,098	11,954	37,830	259	517	776	38,606	35,544
Advocacy and awareness	1,611	1,473	1,665	4,749	25	72	97	4,846	4,049
Total	18,215	21,928	19,435	59,578	2,358	841	3,199	62,777	56,238
Total expenditure	18,581	22,640	19,549	60,770	2,651	846	3,497	64,267	58,069

Direct costs include the write off of book stock during 2019, at a net value of £390k. Stock related costs are charged against publishing. See Note 32 on Accounting Policies for further information. Direct costs also include foreign

exchange gains of £442k (2018: Charge of £509k) and doubtful debt expenditure of £96k (2018: £587k), which is the net of debt write offs and doubtful debt provision movements during the year.

Unrestricted funds	Restricted income funds			Endowment funds		Total	Total
	Direct Staff Costs	Direct Costs	Total restricted income fund costs	Direct Costs	Total endowment fund costs	Total 2019	2018
	£000	£000	£000	£000	£000	£000	£000
Expenditure on raising funds							
Investment management costs	-	9	9	159	159	168	185
Total	-	9	9	159	159	168	185
Charitable activities							
Membership	185	337	522	-	-	522	478
Scientific conferences and events	11	105	116	-	-	116	153
Education and professional practice	160	398	558	-	-	558	391
Publishing	28	19	47	-	-	47	377
Advocacy and awareness	-	3	3	-	-	3	-
Total	384	862	1,246	-	-	1,246	1,399
Total resources expended	384	871	1,255	159	159	1,414	1,584

Defined contributions and other pension related costs totalling £2,194k (2018: £1,883k) are included within direct staff costs charged to general funds and restricted income funds.

9. Support costs

	Management £000	Finance £000	Information technology £000	Comms £000	Human resources £000	Accomm. £000	Governance £000	Total 2019 £000	Total 2018 £000
Basis of allocation	Head count	Head count	Head count	Head count	Head count	Head count	Head count		
Donations and legacies	6	20	42	10	15	17	2	112	301
Other trading activities	-	-	-	-	-	-	7	7	5
Membership	115	368	788	191	274	309	29	2,074	1,710
Chemistry World	53	169	362	88	126	142	13	953	855
Scientific conferences and events	34	109	234	57	82	92	19	627	557
Education and professional practice	134	427	915	222	319	360	37	2,414	1,864
Publishing	692	2,206	4,723	1,144	1,647	1,857	202	12,471	10,976
Advocacy and awareness	97	308	659	160	230	259	24	1,737	1,207
Total	1,131	3,607	7,723	1,872	2,693	3,036	333	20,395	17,475

10. Governance costs

	Note	2019 £000	2018 £000
Trustee expenses	30	10	16
Legal fees		4	3
Audit and accounting fees	See below	94	80
Governance support costs		225	187
Total		333	286

The increase in governance support costs from the previous year is due mainly to the 2019 Governance Review, as

well as costs relating to the set up of both RSC Worldwide (Germany) Gmbh and Commonwealth Chemistry Limited.

Analysis of auditor's remuneration	2019 £000	2018 £000
Fees payable to:		
RSM UK Audit LLP for the audit of the current year RSC and consolidated accounts	56	55
RSM UK Audit LLP for other audit work, including grant audits	9	10
RSM UK Tax and Accounting Limited for tax advisory services	12	7
Auditors other than RSM UK Audit LLP	17	8
Total	94	80

The RSC’s internal policy on the ‘use of external auditors to provide non-audit services’, limits the amount of non-audit services that can be commissioned without Audit Committee pre-approval to 50% of the average of the

previous three years’ audit fee. A total of £12k (2018: £7k) of non-audit services have been billed in 2019, which is below the policy threshold for 2019 of £30k.

11. Outturn per charitable activity

	2019			2018		
	Income £000	Expenditure £000	Net income/ (expenditure) £000	Income £000	Expenditure £000	Net income/ (expenditure) £000
Donations and legacies	579	(560)	19	126	(801)	(675)
Other trading activities	593	(326)	267	661	(462)	199
Investments	1,075	(772)	303	1,004	(753)	251
Membership	4,255	(5,738)	(1,483)	3,992	(4,898)	(906)
Chemistry World	701	(2,707)	(2,006)	737	(2,601)	(1,864)
Scientific conferences and events	1,717	(3,407)	(1,690)	2,117	(3,814)	(1,697)
Education and professional practice	820	(8,669)	(7,849)	607	(6,354)	(5,747)
Publishing	57,407	(38,653)	18,754	54,275	(35,921)	18,354
Advocacy and awareness	100	(4,849)	(4,749)	45	(4,049)	(4,004)
Other	4	-	4	27	-	27
Total	67,251	(65,681)	1,570	63,591	(59,653)	3,938

12. Pension fund

Group and Charity

The RSC operates a defined benefit scheme in the UK. This is a fund, administered by independent and separate trustees, holding the pension scheme assets to meet long term pension liabilities. A full actuarial valuation was carried out at 31 December 2016 and updated to 31 December 2019 by a qualified actuary, independent of the scheme’s sponsoring employer. The major assumptions used by the actuary are shown in this note. The most recent actuarial valuation showed a deficit of £17,900k. The RSC has agreed with the trustees that it will aim to eliminate the deficit by annual payments of £1,924k for a period of 8 years from 1 January 2018 to 31 December 2025. In addition, the RSC earmarked £15m in 2018 to facilitate a buyout transaction in 2033, which will provide a permanent resolution to the deficit and fully discharge the RSC’s obligations to the defined pension fund. Refer to note 26 for more detail. The 2019 actuarial valuation is currently underway, the results of which will be finalised in 2020 and reported in the 2020 financial statements.

The difference of £11,927k between the triennial actuarial valuation net liability of £17,900k and the FRS 102 net liability of £29,827k shown in these financial statements arises due to differences in the dates at which the respective valuations took place and the differences in the valuation basis applied. The triennial actuarial valuation (carried out at 31 December 2016) allows for the actual investments in which the Scheme is invested, and these expected returns are used to discount the liabilities. In contrast the FRS 102 valuation (carried out as at 31 December 2019) discounts the liabilities using the yield on high quality corporate bonds as required by accounting standards. The Scheme’s investments would be expected to return more than corporate bonds, allowing a higher discount rate to be used, resulting in lower obligation liabilities compared to the FRS 102 accounting basis of valuation.

The RSC also operates a defined contribution scheme. The contributions are administered by investment managers on behalf of the employees. The cost for the year to the employer was £2,130k (2018: £1,835k).

Defined benefit scheme: employee benefit obligations	2019 £000	2018 £000
Present value of funded obligations	(131,764)	(122,602)
Fair value of scheme assets	101,937	92,693
Net liability	(29,827)	(29,909)

Defined benefit scheme: Statement of Financial Activities impact	2019 £000	2018 £000
Net interest cost	(811)	(756)
Total expense	(811)	(756)

Defined benefit scheme: Amount recognised in the Statement of financial activities after net income/(expenditure)	2019 £000	2018 £000
Remeasurement on defined benefit scheme liability	(1,031)	128
Net cumulative actuarial losses	(26,128)	(25,097)

Defined benefit scheme: Reconciliation of fair value of the defined benefit obligation and fair value of plan assets	2019 £000	2018 £000
Change in the present value of the defined benefit obligation:		
Opening defined benefit obligation	(122,602)	(134,310)
Interest expense	(3,377)	(3,277)
Actuarial losses	(9,826)	8,533
Benefits paid	4,041	6,452
Closing defined benefit obligation	(131,764)	(122,602)

Change in the fair value of plan assets:		
Opening fair value of plan assets	92,693	103,105
Interest Income	2,566	2,521
Return on plan assets less interest income	8,795	(8,405)
Contributions by employer	1,924	1,924
Benefits paid	(4,041)	(6,452)
Closing fair value of plan assets	101,937	92,693

The actual return on the plan assets over the period ended 31 December 2019 was £11,361k (31 December 2018: (£5,884k)).

12. Pension fund (continued)

Defined benefit scheme: principal actuarial assumptions at the balance sheet date		
	At 31/12/2019	At 31/12/2018
	%	%
Rate of discount	2.10	2.80
Inflation (RPI)	2.85	3.25
Inflation (CPI)	2.05	2.25
Salary increases	3.05	3.25
Allowance for revaluation of deferred pensions of CPI or 5% p.a. if less	2.05	2.25
Allowance for revaluation of deferred pensions of CPI or 2.5% p.a. if less	2.05	2.25
Allowance for pension in payment increases of RPI or 5% p.a. if less	2.75	3.15
Allowance for pension in payment increases of RPI or 3.5% p.a. if less	2.45	2.85
Allowance for commutation of pension for cash at retirement	90% take-up	90% take-up
Defined benefit scheme: the mortality assumptions adopted at 31 December imply the following life expectancies:		
	At 31/12/2019	At 31/12/2018
	Life expectancy at age 60 (years)	Life expectancy at age 60 (years)
Male retiring in 2019 (2018)	27.0	27.2
Female retiring in 2019 (2018)	29.0	29.2
Male retiring in 2039 (2038)	28.2	28.4
Female retiring in 2039 (2038)	30.3	30.5
Defined benefit scheme: assets in the plan as a percentage of total plan assets		
	At 31/12/2019	At 31/12/2018
Equities and Diversified Growth Funds	64%	61%
Bonds	36%	38%
Cash	0%	1%
Defined benefit scheme: Movement in net liability during the year		
	2019	2018
	£000	£000
Net liability at beginning of the year	(29,909)	(31,205)
Movement in year		
Employer's contributions	1,924	1,924
Interest Income	2,566	2,521
Actuarial (losses)/gains	8,795	(8,405)
Interest on pension liabilities	(3,377)	(3,277)
Experience gains arising on the plan liabilities	517	223
Changes in assumptions underlying the plan liabilities	(10,343)	8,310
Total movement	82	1,296
Deficit in plan at end of the year	(29,827)	(29,909)
Defined contribution scheme		
	2019	2018
	£000	£000
Employer contributions	2,130	1,835

13. Operating leases

Charges under operating leases to the Statement of Financial Activities during the year was £73k (2018: £83k).

At 31 December the RSC was committed to making the following payments for each of the following periods:

Group and charity		
	2019	2018
	£000	£000
Leases payments:		
Within a year	69	66
Within two to five years	15	16
Later than five years	1,085	1,091
Total	1,169	1,173

The RSC, along with the four other courtyard societies, continues to be in negotiation with the landlord on the renewal of the lease of Burlington House. The accounts have been prepared on the assumption that the RSC

will retain use of the property for the foreseeable future. Current and back rent payments are up to date, however future financial commitments have not been finalised and therefore are not included above.

14. Intangible fixed assets

Group			
	Index and databases	Web platform	Total
	£000	£000	£000
Cost			
Balance at 1 January 2019	1,737	3,625	5,362
Additions	-	32	32
Balance at 31 December 2019	1,737	3,657	5,394
Accumulated amortisation			
Balance at 1 January 2019	1,737	3,179	4,916
Charge for year	-	245	245
Balance at 31 December 2019	1,737	3,424	5,161
Net book value at 31 December 2019	-	233	233
Net book value at 31 December 2018	-	446	446
Charity			
	Index and databases	Web platform	Total
	£000	£000	£000
Cost			
Balance at 1 January 2019	695	3,625	4,320
Additions	-	32	32
Balance at 31 December 2019	695	3,657	4,352
Accumulated amortisation			
Balance at 1 January 2019	695	3,179	3,874
Charge for year	-	245	245
Balance at 31 December 2019	695	3,424	4,119
Net book value at 31 December 2019	-	233	233
Net book value at 31 December 2018	-	446	446

The intangible asset index relates to the intellectual property rights of the Merck Index acquired for \$750k by the RSC during 2012.

The intangible asset database relates to ChemSpider owned by RSC Worldwide Limited and Marin Lit owned by the RSC. RSC Worldwide Limited is a wholly owned subsidiary of the RSC.

The web platform provides access to RSC online purchases of journal articles, books, CPD courses and other ecommerce purchases and is owned by the RSC.

The amortisation charge for the year is included as part of support costs which in turn are allocated across expenditure headings in the consolidated statement of financial activities, as detailed in notes 8 and 9.

15. Tangible fixed assets

Group			
	Leasehold land and buildings	Fixtures, fittings and equipment	Total
	£000	£000	£000
Cost			
Balance at 1 January 2019	8,435	13,643	22,078
Additions	-	666	666
Disposals	-	(25)	(25)
Balance at 31 December 2019	8,435	14,284	22,719
Accumulated depreciation			
Balance at 1 January 2019	5,322	10,153	15,475
Disposals	-	(25)	(25)
Charge for year	257	815	1,072
Balance at 31 December 2019	5,579	10,943	16,522
Net book value at 31 December 2019	2,856	3,341	6,197
Net book value at 31 December 2018	3,113	3,490	6,603

Charity			
	Leasehold land and buildings	Fixtures, fittings and equipment	Total
	£000	£000	£000
Cost			
Balance at 1 January 2019	8,433	13,363	21,796
Additions	-	581	581
Disposals	-	(25)	(25)
Balance at 31 December 2019	8,433	13,919	22,352
Accumulated depreciation			
Balance at 1 January 2019	5,322	9,878	15,200
Disposals	-	(24)	(24)
Charge for Year	257	809	1,066
Balance at 31 December 2019	5,579	10,663	16,242
Net book value at 31 December 2019	2,854	3,256	6,110
Net book value at 31 December 2018	3,111	3,485	6,596

Heritage Assets

As one of the foremost chemical societies in the world, the RSC is the guardian of an extensive historical collection of over 3,500 books, the oldest of which dates back to 1505, and over 2,000 journals. The collection is primarily composed of materials from the Chemical Society, further augmented by the collections of other societies and further added to by donations, bequests and loans.

The library provides access to items of interest to walk-in visitors, whilst other, older and more valuable items are kept securely elsewhere throughout Burlington House. Many of the items within the collection are irreplaceable originals to which no reliable value can be attributed.

Reliable cost information or comprehensive valuations are not readily available for these assets and such information cannot be obtained at a cost commensurate with the benefit to the users of the accounts and to the RSC. Accordingly, these assets are not capitalised in the financial statements. The Trustees take the view that any further and detailed particulars of the numerous items making up this collection would unduly clutter the accounts and thus detract from their primary purpose.

Due to the importance of the collection the RSC has a policy to not dispose of any items held within it.

There were no additions or disposals in the year (2018: 341 additions).

16. Fixed asset investments

Group and charity	Unrestricted funds		Restricted funds		Total	Total
	General funds	Designated funds	Restricted income funds	Endowment funds	2019	2018
	£000	£000	£000	£000	£000	£000
Investments listed on recognised stock exchange in the UK						
Mixed funds	15,144	4,925	532	6,180	26,781	21,310
Investments listed on recognised stock exchange outside the UK						
Fixed income	21,903	7,136	1,031	6,742	36,812	28,978
Equities	10,319	3,350	312	3,590	17,571	21,582
Mixed funds	15,267	4,965	358	4,160	24,750	25,156
Total investments listed on recognised stock exchange	62,633	20,376	2,233	20,672	105,914	97,026
Cash held for investment	362	113	29	288	792	2,515
FX hedging	900	292	27	301	1,520	(670)
Total liquid investments	1,262	405	56	589	2,312	1,845
Total investments	63,895	20,781	2,289	21,261	108,226	98,871

Movement in market value	Unrestricted funds		Restricted funds		Total	Total
	General funds	Designated funds	Restricted income funds	Endowment funds	2019	2018
	£000	£000	£000	£000	£000	£000
Investments listed on recognised stock exchange						
Market value at 1 January	57,086	18,842	1,934	19,164	97,026	94,234
Realised and unrealised gains/(losses)	3,027	1,210	60	1,105	5,402	(3,236)
Add: Purchases at cost including share exchanges	1,565	-	-	-	1,565	6,065
Net transfers to/(from) cash held for investment	955	324	239	403	1,921	(37)
Market value at 31 December	62,633	20,376	2,233	20,672	105,914	97,026
Cash and liquid assets held for investment						
Market value at 1 January	819	265	56	705	1,845	3,470
Transfers (from)/to investments listed on recognised stock exchange	(955)	(324)	(239)	(403)	(1,921)	37
Investment management costs	(443)	(161)	(9)	(159)	(772)	(753)
Add back: Investment management costs paid externally	16	1	-	9	26	3
Investment income	662	199	214	-	1,075	1,004
Less: Investment income distributions	(138)	4	-	-	(134)	(119)
Less: Capital distributions	-	-	-	-	-	(358)
Movements on FX Hedging	1,301	421	34	437	2,193	(1,439)
Market value at 31 December	1,262	405	56	589	2,312	1,845
Total investments at 31 December	63,895	20,781	2,289	21,261	108,226	98,871

During the year the Society transferred an additional £1.6m of surplus cash balances into the investment portfolio (2018: £6.1m). During the year, £Nil was withdrawn from investment portfolios (2018: £358k).

The sum of ‘realised and unrealised gains/(losses)’ of £5,402k and ‘movements on FX hedging’ of £2,193k equates to a total investment gain of £7,595k for 2019 (2018: loss of £4,675k).

The historical cost of investments held at fair value as at 31 December 2019 is £94,685 (2018: £93,117k).

17. Investment in subsidiaries

Charity	Investment	Capital and reserves
	£	£000
RSC Worldwide Limited*	100	654
RSC Worldwide (US) Inc**	6,431	438
RSC Worldwide (Germany) GmbH**	24,931	30
Chemistry Limited*	2	388
RSC (Beijing) Chemical and Science Technology Consulting Co., Ltd.**	120,000	616
Royal Chemistry India Private Limited***	157,272	426
Royal Society of Chemistry Japan K.K.**	69,729	169
Royal Chemistry India Foundation****	151	132
Friends of the RSC, Inc.	-	31
Commonwealth Chemistry Limited	1	-

- * RSC owns 100% of the Issued Share Capital.
- ** RSC Worldwide Limited owns 100% of the Issued Share Capital.
- *** RSC Worldwide Limited owns 99.99% of the Issued Share Capital.
- **** Royal Chemistry India Private Limited owns 100% of the Issued Share Capital.

The Consolidated Balance Sheet incorporates the above balance sheets of these subsidiary companies after elimination of the intercompany debtor and creditor balances due to and from the RSC.

The primary purpose of all subsidiaries with the exception of Chemistry Limited is to promote the RSC and its charitable objectives in different territories of the world.

The activities of RSC Worldwide Limited span across publishing, scientific conferences and events.

The principal activity of Chemistry Limited is to promote Burlington House as a unique venue for both chemistry and non-chemistry related events and to facilitate the non-primary purpose trading of the RSC.

Commonwealth Chemistry Limited was incorporated, as a company limited by guarantee, on 6 December 2019 to provide a future platform for International Societies within the Commonwealth to come together. As at 31 December 2019, the RSC was the only guarantor (a limit of £1), and the RSC CEO Robert Parker was the sole director. As a result, Commonwealth Chemistry Limited temporarily forms part of the RSC Group and is disclosed as such for the 2019 financial year. From 2020 onwards other member societies of the Commonwealth are to join as guarantors alongside the RSC and this company will cease to be a subsidiary of the RSC.

2019 profit and loss and balance sheet for the charity’s controlled subsidiaries

	RSC Worldwide Limited Registered no. 6702733		Chemistry Limited Registered no. 3801760	
	2019 £000	2018 £000	2019 £000	2018 £000
Profit and loss account				
Gross income	5,561	5,274	593	661
Total expenditure	(4,905)	(4,679)	(326)	(462)
Profit for the financial year	656	595	267	199
Gift aid distributed	(533)	(513)	(199)	(307)
Balance sheet				
Aggregate assets	1,752	1,252	626	609
Aggregate liabilities	(1,098)	(722)	(238)	(289)
Total funds	654	530	388	320

The directors of RSC Worldwide Limited and Chemistry Limited have passed a resolution to pay any taxable profits made to the RSC under Gift Aid within 9 months of the year end. In 2019 a total of £732k (2018: £820k) was paid over to the RSC under Gift Aid.

18. Debtors

	Group 2019 £000	Group 2018 £000	Charity 2019 £000	Charity 2018 £000
Trade debtors				
Journal subscriptions	6,632	9,349	6,632	9,349
Journal covers	303	340	303	340
Open access	201	318	201	318
Advertising	182	274	136	243
Book distribution	314	395	314	395
Venue hire	56	141	-	-
Other trade debtors	212	192	203	161
Total trade debtors	7,900	11,009	7,789	10,806
Other debtors	1,577	887	1,286	699
Amounts due from group undertakings	-	-	707	678
Prepayments and accrued income	1,972	1,757	1,802	1,646
Total	11,449	13,653	11,584	13,829

Trade debtors are shown net of doubtful debt provision which totals £669k (2018: £890k) for the Group and £572k (2018: £634k) for the Charity.

Total bad debt write-offs of £313k (2018: £1,025k) were charged to expenditure during 2019.

19. Creditors

Amounts falling due within one year				
	Group 2019 £000	Group 2018 £000	Charity 2019 £000	Charity 2018 £000
Trade creditors	(718)	(1,272)	(703)	(1,219)
Other creditors	(799)	(832)	(721)	(685)
Taxation and social security	(562)	(568)	(533)	(516)
Amounts due to group undertakings	-	-	(789)	(476)
Accruals	(3,736)	(4,328)	(3,416)	(4,005)
Total	(5,815)	(7,000)	(6,162)	(6,901)

20. Deferred income

Amounts falling due within one year				
	Group 2019 £000	Group 2018 £000	Charity 2019 £000	Charity 2018 £000
Journal subscriptions				
Balance at 1 January	(19,419)	(19,025)	(19,384)	(19,004)
Amounts released in year	19,369	18,919	19,333	18,897
Amounts deferred in year	(19,998)	(19,313)	(19,972)	(19,277)
Balance at 31 December	(20,048)	(19,419)	(20,023)	(19,384)
Membership subscriptions				
Balance at 1 January	(1,392)	(1,469)	(1,391)	(1,469)
Amounts released in year	1,392	1,469	1,391	1,469
Amounts deferred in year	(1,333)	(1,392)	(1,333)	(1,391)
Balance at 31 December	(1,333)	(1,392)	(1,333)	(1,391)
Total	(21,381)	(20,811)	(21,356)	(20,775)

21. Analysis of net assets between funds

Group	Unrestricted funds			Restricted funds		Total
	General funds	Designated funds	Pension reserve	Restricted income funds	Endowment funds	
	£000	£000	£000	£000	£000	£000
Fund balances at 31 December 2018 are represented by:						
Tangible fixed assets	6,603	-	-	-	-	6,603
Intangible fixed assets	446	-	-	-	-	446
Investments	57,905	19,107	-	1,990	19,869	98,871
Net current (liabilities)/assets	(11,233)	18,694	-	251	726	8,438
Pension liability	-	-	(29,909)	-	-	(29,909)
Total net assets	53,721	37,801	(29,909)	2,241	20,595	84,449
Fund balances at 31 December 2018 are represented by:						
Tangible fixed assets	6,197	-	-	-	-	6,197
Intangible fixed assets	233	-	-	-	-	233
Investments	63,895	20,781	-	2,289	21,261	108,226
Net current (liabilities)/assets	(21,364)	28,599	-	(344)	863	7,754
Pension liability	-	-	(29,827)	-	-	(29,827)
Total net assets	48,961	49,380	(29,827)	1,945	22,124	92,583
Charity						
	Unrestricted funds			Restricted funds		Total
	General funds	Designated funds	Pension reserve	Restricted income funds	Endowment funds	
	£000	£000	£000	£000	£000	£000
Fund balances at 31 December 2018 are represented by:						
Tangible fixed assets	6,596	-	-	-	-	6,596
Intangible fixed assets	446	-	-	-	-	446
Investments	57,905	19,107	-	1,990	19,869	98,871
Net current (liabilities)/assets	(13,086)	18,694	-	211	726	6,545
Pension liability	-	-	(29,909)	-	-	(29,909)
Total net assets	51,861	37,801	(29,909)	2,201	20,595	82,549
Fund balances at 31 December 2019 are represented by:						
Tangible fixed assets	6,110	-	-	-	-	6,110
Intangible fixed assets	233	-	-	-	-	233
Investments	63,895	20,781	-	2,289	21,261	108,226
Net current (liabilities)/assets	(23,620)	28,599	-	(506)	863	5,336
Pension liability	-	-	(29,827)	-	-	(29,827)
Total net assets	46,618	49,380	(29,827)	1,783	22,124	90,078

22. Financial derivatives

Forward exchange contracts and forward exchange options are used to manage exposure to currency exchange risk.

Forward contracts to the value of US\$10,095k were entered into during the year ended 31 December 2019 (2018: US \$8,250k). Forward contracts totalling US\$10,345k (2018: US\$16,900k) matured during 2019. As at 31 December 2019 there were forward contracts totalling US\$5,500k which will mature in 2020 (2018: US\$5,750k). The year end valuation on the open contracts resulted in a fair value gain of £356k (2018: loss of £74k).

Forward options were purchased during the year for a combined premium of £121k (2018: £77k) to provide protection for the sale of US\$8,000k (2018: US\$8,250k). During the year, options to sell US\$2,500k were exercised whilst options to sell US\$5,750k lapsed (2018: US\$2,500k) without being exercised due to better spot rates being available at the time of maturity. As at 31 December 2019, the Society held options to sell US\$5,500k in 2020 at protected rates. The year end valuation of the held options resulted in a fair value gain of £225k (2018: £Nil)

23. Financial Assets and Liabilities

	Group 2019 £000	Group 2018 £000	Charity 2019 £000	Charity 2018 £000
Financial assets measured at fair value through income and expenditure	108,807	98,871	108,807	98,871
Financial liabilities measured at fair value through income and expenditure	-	(74)	-	(74)

Fixed Asset Investments are valued at quoted prices through the recognised stock exchange in the UK and outside the UK.

The RSC uses forward foreign currency contracts to reduce exposure to foreign exchange rates.

The fair value of the forward currency contracts is calculated by reference to current forward exchange contracts with similar maturity profiles.

24. Royal Society Of Chemistry

Included in the accounts is income of £66,101k (2018: £62,499k) from the RSC as a single entity and a surplus of £8,560k (2018: £1,037k deficit).

25. Restricted funds

Group – movement in funds										
	Restricted income funds					Total restricted income funds	Endowment funds		Total endowment funds	Total restricted funds
	Chemists' Community Fund	Trust and lecture funds	Grant income	Friends of the RSC, Inc.	Royal Chemistry India Foundation		Chemists' Community Fund	Trust and lecture funds		
	£000	£000	£000	£000	£000		£000	£000		
Balance at 1 January 2018	621	1,407	298	33	35	2,394	15,867	5,845	21,712	24,106
Income	141	68	801	-	149	1,159	44	-	44	1,203
Expenditure	(229)	(260)	(744)	-	(177)	(1,410)	(129)	(45)	(174)	(1,584)
Losses on investment assets	-	(54)	-	-	-	(54)	(664)	(232)	(896)	(950)
Transfers	-	202	(50)	-	-	152	-	(91)	(91)	61
Balance at 31 December 2018	533	1,363	305	33	7	2,241	15,118	5,477	20,595	22,836
Income	149	65	556	-	255	1,025	367	-	367	1,392
Expenditure	(340)	(191)	(591)	(3)	(130)	(1,255)	(116)	(43)	(159)	(1,414)
Gains on investment assets	-	94	-	-	-	94	1,134	408	1,542	1,636
Transfers	-	82	(242)	-	-	(160)	(190)	(31)	(221)	(381)
Balance at 31 December 2019	342	1,413	28	30	132	1,945	16,313	5,811	22,124	24,069

Charity – movement in funds									
	Restricted income funds				Endowment funds				
	Chemists' Community Fund	Trust and lecture funds	Grant income	Total restricted income funds	Chemists' Community Fund	Trust and lecture funds	Total endowment funds	Total restricted funds	
	£000	£000	£000	£000	£000	£000	£000	£000	£000
Balance at 1 January 2018	621	1,407	298	2,326	15,867	5,845	21,712	24,038	
Income	141	68	801	1,010	44	-	44	1,054	
Expenditure	(229)	(260)	(744)	(1,233)	(129)	(45)	(174)	(1,407)	
Losses on investment assets	-	(54)	-	(54)	(664)	(232)	(896)	(950)	
Transfers	-	202	(50)	152	-	(91)	(91)	61	
Balance at 31 December 2018	533	1,363	305	2,201	15,118	5,477	20,595	22,796	
Income	149	65	556	770	367	-	367	1,137	
Expenditure	(340)	(191)	(591)	(1,122)	(116)	(43)	(159)	(1,281)	
Gains on investment assets	-	94	-	94	1,134	408	1,542	1,636	
Transfers	-	82	(242)	(160)	(190)	(31)	(221)	(381)	
Balance at 31 December 2019	342	1,413	28	1,783	16,313	5,811	22,124	23,907	

As required by the Statement of Recommended Practice, investment income attributable to endowments cannot be added to endowment capital and instead the income is allocated to restricted income funds. Endowment related expenses, with the exception of investment management fees, are charged to restricted income funds.

Chemists’ Community Fund

Note 27 to these financial statements provides a memorandum account disclosing the Chemists’ Community Fund income and expenditure for the year ended 31 December 2019.

The Trust Deed allows Trustees to deploy funds under its secondary purpose to any other legally charitable purpose, insofar as funds are not needed for the primary purpose. This follows the guiding principles and charitable distinction of the CCF defined by Trustees – to provide charitable support to individuals within the chemistry community, either directly or indirectly through funding programmes where the objective is to support individuals.

Trust and lecture funds

Note 28 to these financial statements provides a breakdown of Trust and lecture funds.

Transfers

A transfer from expendable endowment funds to restricted income funds takes place to match the expenditure funded from expendable endowments. The £31k (2018: £91k) transfer from endowment trust funds to restricted income trust funds was required to meet the expenditure incurred within restricted income. The transfer from restricted grant income of £242k (2018: £50k) to general funds was required to meet the grant expenditure incurred within the general fund. The transfer of £190k out of the CCF endowment funds to the RSC General Fund has been approved by Trustees under the CCF Secondary Purpose. The balance of £82k (2018: £152k) was transferred from general funds into restricted income to meet expenditure incurred in excess of the income generated on the RSC’s permanent endowments. Refer to note 26 and note 28 for more detail.

26. Unrestricted funds

Group and charity					
Movement in unrestricted funds					
	General funds	Funds held within non-charitable activities	Designated funds	Pension reserve	Total
	£000	£000	£000	£000	£000
Balance at 1 January 2018	82,182	1,532	8,443	(31,205)	60,952
Income	51,501	9,826	1,061	-	62,388
Expenditure	(46,013)	(9,498)	(1,802)	(756)	(58,069)
Losses on investment assets	(3,465)	-	(260)	-	(3,725)
Transfers	(32,344)	-	30,359	1,924	(61)
Actuarial gain	-	-	-	128	128
Balance at 31 December 2018	51,861	1,860	37,801	(29,909)	61,613
Income	54,353	10,409	1,097	-	65,859
Expenditure	(50,033)	(9,926)	(3,497)	(811)	(64,267)
Gains on investment assets	4,328	-	1,631	-	5,959
Transfers	(13,891)	-	12,348	1,924	381
Actuarial gain	-	-	-	(1,031)	(1,031)
Balance at 31 December 2019	46,618	2,343	49,380	(29,827)	68,514

Pension reserve

The RSC operates a defined benefit scheme in the UK. Refer to note 12 of these financial statements for more detail.

Group and Charity									
Designated funds – movement in funds									
	Strategic initiatives fund	New Ventures Fund	Technology Roadmap fund	Pension long term strategy fund	TGH repairs fund	Earmarked funds	Member networks	Trust and lecture funds	Total
	£000	£000	£000	£000	£000	£000	£000	£000	£000
Balance at 1 January 2018	-	-	-	-	-	1,158	1,969	5,316	8,443
Income	-	-	-	-	-	-	1,022	39	1,061
Expenditure	-	-	-	-	-	(236)	(1,290)	(276)	(1,802)
Losses on investment assets	-	-	-	-	-	-	-	(260)	(260)
Transfers from general funds	8,900	5,000	-	15,000	1,100	-	349	10	30,359
Balance at 31 December 2018	8,900	5,000	-	15,000	1,100	922	2,050	4,829	37,801
Income	-	-	-	138	-	-	888	71	1,097
Expenditure	(1,543)	-	-	(113)	-	(293)	(1,247)	(301)	(3,497)
Gains on investment assets	-	-	-	1,155	-	-	-	476	1,631
Transfers from general funds	8,700	-	3,286	-	-	-	330	32	12,348
Balance at 31 December 2019	16,057	5,000	3,286	16,180	1,100	629	2,021	5,107	49,380

Strategic initiatives fund

The fund will be used to deliver impactful charitable activities over the next four years (up to 2023) and to enable the delivery of the RSC’s Strategy by funding the non-recurring costs of major projects without having to afford this from day-to-day operating budgets.

New ventures fund

Previously referred to as the commercial strategy fund, this fund will enable investment into new revenue generating activities, including commercial acquisitions, over the duration of the Commercial Strategy (until 2025).

Technology Roadmap Fund

The fund comprises four strategic programmes which have been developed to support the RSC strategic objectives over the next 5 years (up to 2025), with a total expenditure of £12.7m

Pension long term strategy fund

A capital sum of £15m was earmarked in 2018 to facilitate a buyout transaction of £30m in 2033, which will provide a permanent resolution to the deficit and fully discharge the RSC’s employer obligations to the defined benefit pension fund.

TGH repairs fund

Future capital repairs planned on the Thomas Graham House (TGH) building over the next 5 years (up to 2023) will be funded from this designated fund.

Earmarked funds

Earmarked funds are unrestricted funds that have been internally ‘ring fenced’ to primarily meet demand for the RSC’s grant programmes ending in 2020 and to fund customer insights research. Earmarked funds are established by appropriating amounts out of the general funds and are subject to Board of Trustees approval.

Member networks

Each Member Network has, as its objectives, those that are embodied in the RSC’s Charter. There is no time frame for usage of the funds. The groups can use the funds as needed for their ongoing activities.

Trust and lecture funds

Note 28 to these financial statements provides a breakdown of Trust and lecture funds. There is no time frame for usage of the funds.

Transfers

Transfers between funds arise when there is a charge from unrestricted general funds to other funds.

The £1,924k transfer from general funds to the pensions reserve (2018: £1,924k) reflects the employer defined benefit recovery plan contributions paid in the year. The £330k transfer from general funds to designated funds (2018: £349k) reflects the grants made by the RSC to Member networks to support activities at that level of £330k. The £32k (2018: £10k) transfer from general funds to designated trust funds was required to meet expenditure incurred in excess of the income generated on the RSC’s designated trust funds. The £11,986k (2018: £30,000k) transfer from general funds to designated funds with respect to the strategic initiatives fund and the technology roadmap fund, was agreed by the Board of Trustees in 2019. These funds are committed and will remain designated and available for the intended purposes when the expenditure is incurred. The remaining £381k (2018: £61k transfer from General Funds) net transfer to General Funds relates to transfers from restricted grants and the Chemists’ Community Fund as well as transfers to Trust and Lecture Funds. Refer to note 25 for more detail.

27. Chemists’ Community Fund Memorandum Account

The RSC Chemists’ Community Fund was established to provide financial relief of its Beneficiaries, and insofar as the income is not required for such relief, to carry out such other legally charitable purpose as the RSC shall in its absolute discretion think fit. The Chemists’ Community Fund operates within a well defined strategy to provide a flexible range of financial and non-financial help to members and their dependants to relieve poverty. We have a network of volunteers, predominantly in the UK. Some are actively

involved in visiting existing or potential beneficiaries to help them with the application process. Others provide peer support, and are a local point of contact for isolated members of our community.

This memorandum account discloses the Chemists’ Community Fund income and expenditure for the year ended 31 December 2019.

	2019			2018		
	Restricted income funds	Expendable endowment funds	Total	Restricted income funds	Expendable endowment funds	Total
	£000	£000	£000	£000	£000	£000
Income						
Casual Donations	-	22	22	-	20	20
Legacies and Bequests Revenue	-	345	345	-	24	24
Investment Income	149	-	149	141	-	141
Total income	149	367	516	141	44	185
Expenditure						
Grants Awarded	(100)	-	(100)	(46)	-	(46)
Investment & Banking Fees	-	(116)	(116)	-	(129)	(129)
Staff Costs	(185)	-	(185)	(155)	-	(155)
Volunteer Expenses	(5)	-	(5)	(4)	-	(4)
Member Expenses	(4)	-	(4)	(3)	-	(3)
Other	(46)	-	(46)	(21)	-	(21)
Total expenditure	(340)	(116)	(456)	(229)	(129)	(358)
Net (expenditure)/income before investment gains	(191)	251	60	(88)	(85)	(173)
Gains/(losses) on investment assets	-	1,134	1,134	-	(664)	(664)
Net (expenditure)/income	(191)	1,385	1,194	(88)	(749)	(837)
Transfer between funds	-	(190)	(190)	-	-	-
Net movement in funds (decrease)/increase	(191)	1,195	1,004	(88)	(749)	(837)
Reconciliation of funds						
Fund balances brought forward	533	15,118	15,651	621	15,867	16,488
Fund balances carried forward	342	16,313	16,655	533	15,118	15,651

28. Trust and lecture funds

Trust and lecture funds with either an opening or closing cumulative balance over £100k are disclosed in the table below together with the movements that have taken place

during 2019. All other trust and lecture funds that fall below the £100k threshold have been grouped together for each fund type.

Fund Balances as at 31 December 2019							
	Opening balance	Income	Expenditure	Accumulated investment movement	Transfers	Closing balance	Closing balance
	2019	2019	2019	2019	2019	2019	2018
	£000	£000	£000	£000	£000	£000	£000
Designated funds							
Research Fund	1,389	17	(180)	137	-	1,363	1,389
Saville Fund	130	1	(1)	12	-	142	130
Ludwig Mond Trust	99	1	(7)	9	-	102	99
Industrial Division Endowment Lecture Fund	136	1	(1)	12	-	148	136
A Spinks Symposia Fund	127	1	(1)	11	-	138	127
Marriot Legacy	218	2	(12)	20	-	228	218
W A Waters	230	3	(7)	21	-	247	230
Colman-Porter Fund	350	4	(3)	32	-	383	350
Memorial Fund	117	1	(3)	11	-	126	117
Sir Derek Barton Fund	1,549	25	(17)	163	-	1,720	1,549
Other designated trust funds	484	15	(69)	48	32	510	484
Total	4,829	71	(301)	476	32	5,107	4,829
Restricted income							
Tilden Lecture Fund	136	1	(19)	11	-	129	136
A Robertson Bequest	220	2	(2)	16	-	236	220
A Albert	653	6	(18)	46	-	687	653
Other restricted income trust funds	354	56	(152)	21	82	361	354
Total	1,363	65	(191)	94	82	1,413	1,363
Expendable endowment							
William Briggs Fund	209	-	(2)	15	(2)	220	209
R A Robinson Memorial Fund	195	-	(1)	14	(1)	207	195
J O Cutter	756	-	(6)	56	(25)	781	756
Charles Rees Award	113	-	(1)	8	-	120	113
Other expendable endowment trust funds	385	-	(3)	32	(3)	411	385
Total	1,658	-	(13)	125	(31)	1,739	1,658
Permanent endowment							
Centenary Fund	527	-	(4)	38	-	561	527
Corday Morgan Medal and Prize Fund	211	-	(2)	15	-	224	211
Corday Morgan Memorial Fund	827	-	(6)	59	-	880	827
Robert Robinson Lecture Fund	129	-	(1)	9	-	137	129
W J Hickinbottom Bequest	1,739	-	(13)	126	-	1,852	1,739
Sir Derek Barton Award Fund	238	-	(3)	25	-	260	238
Other permanent endowment trust funds	148	-	(1)	11	-	158	148
Total	3,819	-	(30)	283	-	4,072	3,819
Total trust funds	11,669	136	(535)	978	83	12,331	11,669

Further details regarding trust funds with an accumulated balance in excess of £250k are disclosed below.

A Albert

The fund was founded in 1962 by a bequest from Adrien Albert. The fund gives financial support to lecturers and prizes likely to promote interest in the study of the laws connecting chemical structure with biological activity.

Sir Derek Barton Fund and Award Fund

The fund was founded in 2000 following a bequest by Sir Derek Barton and is held for the advancement of public education in the field of chemistry and to award a prize for organic chemistry together with an annual dinner.

Centenary Fund

In July 1947 the Chemical Society and subsequently the RSC celebrated the centenary of its foundation, which was commemorated by the creation of a capital fund. The fund is administered by the Council of the Society and the interest earned on the capital investment is employed to further the objectives of the RSC, such as the promotion of international interchange of new chemical knowledge.

Colman–Porter Fund

The fund was founded in 1999 following a bequest from Mrs I V Colman–Porter for the purpose of helping needy but able post-graduate chemistry students. The capital is invested and the interest used to provide bursaries to students to allow their attendance at courses peripheral to their research but essential to their understanding of the world of business and current practices in industry.

Research Fund

The fund has been established to promote original research in the science of chemistry. The fund is administered by the RSC and is awarded by the Research Fund Committee, which is authorised to make a limited number of awards in any one year.

29. Post balance sheet events

The financial statements were authorised for issue on 30 April 2020. Events taking place after this date are not reflected in the financial statements or notes. Where events taking place before this date provided information about conditions existing at 31 December 2019, the figures in the financial statements and notes have been adjusted in all material respects to reflect the impact of this information.

There were no adjusted post balance sheet events for the 2019 financial statements.

Where events taking place before this date did not relate to conditions at the balance sheet date but provided information that is relevant to an understanding of the Group’s financial position, these events are disclosed as part of this note.

At 31 December 2019, whilst Coronavirus (COVID-19) existed, the severity of the virus and the responses to the outbreak including the impact on businesses and operations globally, occurred after this date. The disruption in the global economy precipitated by, amongst other things, the outbreak of the COVID-19 virus have led to a major reduction in the projections for revenues and profits for most major publicly traded companies. This in turn has therefore led to a significant reduction in the value of equities worldwide, with major indices falling by up to 40% as at the financial statement authorisation date.

Corday Morgan Memorial Fund

The fund was founded in 1940 following a bequest by Sir Gilbert Morgan. The funds are to be applied for the unification of the chemical professions formerly within the British Empire by grants or other awards to the Chemical Council or to any other representative body of British chemists in such a manner as the Chemical Society, subsequently the RSC, may in their absolute and uncontrolled discretion determine.

J O Cutter

The fund was founded in 1987 following a bequest by John Cutter. The income from the bequest is to establish and maintain a scholarship at a university approved by the RSC.

Hickinbottom Fund

The fund was founded in 1979 and incorporates the William Briggs Scholarship. The income from the funds are used to endow a prize for notable contributions to the practices of organic chemistry.

Consequently, the market valuation of the RSC’s investment portfolio has fallen, but has been sheltered from the recent downturns to some extent due to diversification and utilisation of hedge funds. Investment managers expect that significant disruption to the markets will continue for at least the rest of 2020. Whilst the RSC have not previously depended solely on our investments to fund operations, the current situation with COVID-19 could have potential impacts on the RSC’s revenues. However, our investments can be easily liquidated to meet cash demands.

Regarding the RSC Defined Benefit Pension fund, due to the volatility of the market following the COVID-19 outbreak there have been considerable movements in both the assets and liabilities of the scheme. While there remains considerable uncertainty this has been fully considered within our detailed financial forecasts, and the expected outcome is that contributions may increase.

Financial modeling and reforecasting has taken place to calculate the potential impact of the COVID-19 outbreak on the RSC’s financial resilience over the next 12 months, and no issues were identified that would give rise to a going concern risk. Despite the challenges COVID-19 presents, and the effects it has made on our investments and defined benefit pension fund to date, the RSC still considers themselves to be a going concern given the reserve levels we currently have available to us.

30. Connected charities

Sir George Beilby memorial fund		
	2019	2018
	£000	£000
Accumulated fund	58	58
Represented by:		
Investments	73	73
RSC creditor	(15)	(15)
Total	58	58

This fund is jointly administered by the RSC, the Society of Chemical Industry, and the Institute of Materials, Minerals and Mining. The RSC’s share of the above figures are not

included in the Statement of Financial Activities, Charity’s Balance Sheet or Consolidated Balance Sheet on the basis of materiality.

31. Transactions with Trustees and related parties

Trustees’ remuneration

No Trustees received or waived remuneration for their role as a trustee during the 2019 year (2018: £nil).

Trustees’ Expenses

The total amount of expenses reimbursed to 11 (2018: 12) Trustees or paid directly to third parties in respect of travel to meetings and related expenses in 2019 was £9,517 (2018: £15,905).

Donations from Trustees

Total donations received without conditions from trustees was £76 in 2019 (2018: £72).

Trustees’ Indemnity Insurance

The amount paid in 2019 for Trustees’ Indemnity Insurance was £12,320 (2018: £12,320).

Related Parties

The following transactions took place between the Charity and its subsidiaries:

	2019	2018
	£000	£000
Service payments to RSC Worldwide Limited	(5,294)	(5,037)
Gift aid received from RSC Worldwide Limited	533	513
Gift aid received from Chemistry Limited	199	307
Debtor amounts due from subsidiaries		
Chemistry Limited	193	155
RSC Worldwide (US) Inc	501	511
Friends of the RSC, Inc.	13	11
Creditor amounts due to subsidiaries		
RSC Worldwide Limited	(783)	(471)
Royal Society of Chemistry Japan K.K.	(5)	(5)

There have been no other related party transactions in 2019.

Guarantees

The RSC operates a group registration for Value Added Tax (VAT) purposes, including the Charity, Chemistry Limited and RSC Worldwide Limited. Each entity within the VAT group is jointly and severally liable for any UK VAT liabilities present within the Group. The VAT liabilities as at 31 December 2019 in respect of RSC Worldwide Limited and Chemistry Limited were £3k (2018: £1k) and £52.7k (2018: £50k) respectively.

32. Consolidated statement of financial activities for the year ended 31 December 2018

The prior year consolidated statement of financial activities is shown below:

	Unrestricted funds					Restricted funds			
	General funds	Designated funds	Total general and designated funds	Pension reserve	Total unrestricted funds	Restricted income funds	Endowment funds	Total unrestricted funds	Total
	2018	2018	2018	2018	2018	2018	2018	2018	2018
	£000	£000	£000	£000	£000	£000	£000	£000	£000
Income and endowments from:									
Donations and legacies	25	57	82	-	82	-	44	44	126
Other trading activities	661	-	661	-	661	-	-	-	661
Investment income	763	39	802	-	802	202	-	202	1,004
Charitable activities									
Membership	3,985	-	3,985	-	3,985	7	-	7	3,992
Chemistry World	737	-	737	-	737	-	-	-	737
Scientific conferences and events	999	965	1,964	-	1,964	153	-	153	2,117
Education and professional practice	216	-	216	-	216	391	-	391	607
Publishing	53,869	-	53,869	-	53,869	406	-	406	54,275
Advocacy and awareness	45	-	45	-	45	-	-	-	45
Other income	27	-	27	-	27	-	-	-	27
Total income and endowments	61,327	1,061	62,388	-	62,388	1,159	44	1,203	63,591
Expenditure on:									
Raising funds									
Donations and legacies	644	144	788	13	801	-	-	-	801
Other trading activities	462	-	462	-	462	-	-	-	462
Investment management costs	541	27	568	-	568	11	174	185	753
Charitable activities									
Membership	3,936	410	4,346	74	4,420	478	-	478	4,898
Chemistry World	2,564	-	2,564	37	2,601	-	-	-	2,601
Scientific conferences and events	2,537	1,100	3,637	24	3,661	153	-	153	3,814
Education and professional practice	5,826	56	5,882	81	5,963	391	-	391	6,354
Publishing	35,068	1	35,069	475	35,544	377	-	377	35,921
Advocacy and awareness	3,933	64	3,997	52	4,049	-	-	-	4,049
Total expenditure	55,511	1,802	57,313	756	58,069	1,410	174	1,584	59,653
Net income/(expenditure) before investment gains/(losses)	5,816	(741)	5,075	(756)	4,319	(251)	(130)	(381)	3,938
(Losses)/gains on investment assets	(3,465)	(260)	(3,725)	-	(3,725)	(54)	(896)	(950)	(4,675)
Net income/(expenditure)	2,351	(1,001)	1,350	(756)	594	(305)	(1,026)	(1,331)	(737)
Transfer between funds	(32,344)	30,359	(1,985)	1,924	(61)	152	(91)	61	-
Net group (expenditure)/income before other recognised gains and losses	(29,993)	29,358	(635)	1,168	533	(153)	(1,117)	(1,270)	(737)
Remeasurement on defined benefit pension scheme	-	-	-	128	128	-	-	-	128
Movement on forward contracts	-	-	-	-	-	-	-	-	-
Net movement in funds (decrease)/increase	(29,993)	29,358	(635)	1,296	661	(153)	(1,117)	(1,270)	(609)
Reconciliation of funds									
Fund balances brought forward	83,714	8,443	92,157	(31,205)	60,952	2,394	21,712	24,106	85,058
Fund balances carried forward	53,721	37,801	91,522	(29,909)	61,613	2,241	20,595	22,836	84,449

33. Accounting policies

Accounting convention

The Royal Society of Chemistry (RSC) is a company established by Royal Charter and limited by guarantee, and domiciled in England and Wales, registration number RC000524 . The principal office is Burlington House, Piccadilly, London, W1J 0BA.

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2019), Charities: Statement of Recommended Practice (FRS 102), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102), and the Charities Act 2011.

The financial statements have been prepared to give a ‘true and fair’ view and have departed from the Charities (Accounts and Reports) Regulations 2008 only to the extent required to provide a ‘true and fair view’. This departure has involved following Accounting and Reporting by Charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) issued on 16 July 2014 rather than the Accounting and Reporting by Charities: Statement of Recommended Practice effective from 1 April 2005 which has since been withdrawn.

The Royal Society of Chemistry meets the definition of a public benefit entity under FRS 102.

Going concern

As at 31 December 2019 the going concern basis of accounting was considered to be appropriate for the RSC as no material uncertainties existed. The outbreak of COVID-19 in the early part of 2020 has caused severe disruption to the global economy, and will continue to do so. The RSC has performed financial modeling to consider the impact of the COVID-19 outbreak on the reported results and forecast position, and no issues were identified that would give rise to a going concern risk. Given the substantial reserves the RSC has in place, COVID-19 should not cast any doubt on the ability of the RSC to continue as a going concern.

Basis of consolidation

The consolidated statement of financial activities (SoFA) and the consolidated balance sheet include the financial statements of the charity and its subsidiaries consolidated on a line by line basis. Intra-group transactions and profits are eliminated fully on consolidation.

Accounting policies are consistent across the group.

Chemistry Limited and RSC Worldwide Limited are wholly owned subsidiaries of the RSC.

RSC Worldwide (US), RSC (Beijing) Chemical and Science Technology Consulting Co. Ltd., Royal Chemistry India Private Limited, Royal Society of Chemistry Japan K.K. and RSC Worldwide (Germany) GmbH are wholly owned subsidiaries of RSC Worldwide Limited.

Royal Chemistry India Foundation is a wholly owned subsidiary of Royal Chemistry India Private Limited. Both companies have a reporting date of 31 March.

Friends of the RSC, Inc. is registered in the US and receives donations to support the RSC’s wider charitable objectives. As a Section 501(c)(3) corporation, it is not a wholly owned subsidiary but all of the members and controlling officers are employees of the RSC group operating under the direction of the RSC and therefore the company has been included in the consolidated financial statements. The company has a reporting date of 30 November.

Commonwealth Chemistry Limited was incorporated, as a company limited by guarantee, on the 6 December 2019 to provide a future platform for International Societies within the Commonwealth to come together. As at the 31 December, the RSC was the only guarantor (a limit of £1). Commonwealth Chemistry Limited temporarily forms part of the RSC Group and is disclosed as such for the 2019 financial year. From 2020 onwards other member societies of the Commonwealth are to join as guarantors alongside the RSC and this company will cease to be a subsidiary of the RSC

The local sections, regions and interest groups and Chemists’ Community Fund are separately constituted by Trust Deeds. Their results and net assets are accounted as branches in these Financial Statements.

General funds

The General funds mainly represent undesignated monies earned from publishing activities. They also comprise financial or other gifts bequeathed in a Will without any restriction upon their use, or stated as being for ‘general use’. The funds are managed in accordance with the RSC’s reserves policy.

Designated funds

Designated funds are unrestricted funds which have been internally ‘ring fenced’ for a specific use/purpose. The purpose of these funds can be varied by internal resolution.

The member network designated funds relate to the large number of member led groups which allow the wider community to connect with fellow chemists based on either geographical location or subject interest. The geographical network consists of 35 local sections in the UK and Ireland and 23 sections based outside the UK. Regions and interest groups are subject specific covering the breadth of the chemical sciences research, education, innovation and policy. The groups are run by members and organise annual programmes of events, award portfolios and bursaries. The income within the designated funds is taken and held directly by the Interest Groups and used solely for the purposes of that group. As such it is classified as designated fund income and not recognised as general fund income.

Restricted funds

Restricted income funds can comprise grants restricted to specific projects, or a financial or other gift bequeathed in a Will or Trust Deed with a specific direction as to use.

An expendable endowment fund allows both the capital and income of the fund to be applied in accordance with specific conditions. Income generated from expendable endowment is spent in accordance with any restriction within a reasonable time of receipt. Capital is held in perpetuity unless expended at the discretion of Trustees.

A permanent endowment fund requires the permanent investment of the capital of the fund, with only the income being applied in accordance with any conditions.”

The RSC’s restricted funds are the Chemists’ Community Fund, various trust funds, restricted grants, Royal Chemistry India Foundation and Friends of the RSC, Inc.

The Chemists’ Community Fund provides financial and non-financial assistance to the RSC’s members, past members and their dependents. The Chemists’ Community Fund holds contracts that allow it to nominate occupation of 22 units of sheltered housing. In accordance with FRS 102, the value is held as zero as these rights have no realisable value.

Various trust funds are restricted to specific aspects of the RSC’s activities. The income of the various trust funds finances lectureships, awards, prizes, and research grants.

The restricted grants are restricted to specific projects by the donors that further the RSC’s charitable activities. Income is recognised when the RSC is entitled to the grant, which is usually when the grant is received, except for performance related grants: income for these is recognised when a specified output is achieved.

Royal Chemistry India Foundation is a charitable foundation, registered in Delhi, India. Its primary purpose is to deliver educational programmes in chemistry within India, including teacher training and student outreach camps.

Friends of the RSC, Inc. is a US private foundation which was incorporated to offer a tax efficient way for US citizens to make donations to support scientific research and projects at educational institutions in the United Kingdom.

Income recognition

Income is measured at the fair value of the consideration received or receivable. The fair value of the consideration received or receivable takes into account the amount of any trade discounts, prompt settlement discounts and volume rebates. Income is shown net of Value Added Tax.

Voluntary income, including donations and legacies

Voluntary income, including donations and legacies, is recognised in the SoFA when any conditions for receipt have been met and when the entitlement is probable and measurable.

Trading income

Trading income relates to income generated by non-charitable subsidiaries. Profit from trading subsidiary undertakings is transferred to the Charity under the gift aid scheme and included as investment income in the RSC’s own accounts.

Investment income

Investment income is recognised on an accruals basis and apportioned between funds on the basis of the level of funds invested. Investment income is reinvested into the investment portfolio and not withdrawn to defray operating expenditure.

Deferred Income

Income received in the year or invoiced in advance for journal and membership subscriptions relating to the following year is shown as deferred income in the balance sheet. The income is treated as income in the year the subscription covers.

Conference income received in advance is deferred and treated as income in the year the respective conference is held.

Membership

Membership subscription income is treated as income in the year the subscription covers. Any receipts in respect of future years are shown as deferred income on the balance sheet. Life membership subscriptions are accounted for on a received basis. In 2019 these subscriptions amounted to £9k relating to 13 members (2018: £11k, 18 members).

Conference income

Income for conferences is recognised in the year of the event.

Publishing income

Income from publishing activities, including Chemistry World, is recognised in two separate ways, dependent on the specific product:

- Income for the sales of institutional subscriptions, package subscriptions and consortium deals, is recognised in equal monthly proportions during the subscription year.
- Income for the sales of journal archive and eBooks is recognised when access to the product is passed to the customer.

Government grants

Income from government and other grants, whether ‘capital’ grants or ‘revenue’ grants, is recognised when the charity has entitlement to the funds, any performance conditions attached to the grants have been met, it is probable that the income will be received and the amount can be measured reliably and is not deferred.

Intangible income

No value has been placed on the support given to the RSC by way of volunteer assistance. The RSC has not received any other intangible income or gifts in kind.

Expenditure

All expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all costs related to the category. Where costs cannot be directly attributed to a particular heading they have been allocated to activities on a basis consistent with the use of resource. Governance costs include expenditure on compliance with constitutional and statutory requirements.

Costs of raising funds include investment management fees and corporate fundraising costs. Fundraising costs include the salaries and overheads of the staff who directly undertake fundraising activities plus allocated support costs.

Staff Costs

The costs of short-term employee benefits are recognised as a liability and an expense.

Employees are entitled to carry forward up to 5 days of any unused holiday entitlement at the reporting date. The cost of any unused entitlement is recognised in the period in which the employee’s services are received.

The best estimate of the expenditure required to settle an obligation for termination benefits is recognised immediately as an expense when the RSC is demonstrably committed to terminate the employment of an employee or to provide termination benefits.

Apportionment of support costs

Support costs are those which provide indirect support to front-line activites. Support costs not attributable to a single activity have been apportioned on the basis of head count for each of the respective departments. Refer to note 9 for details.

Grants

Grants made by RSC in relation to the Chemists’ Community Fund are treated as expenditure as soon as they are approved by the Benevolent Fund Grants Committee as there is an expectation of receipt by the Beneficiary. Other grants made from Designated Funds represent grants made to local sections, divisions and interest groups, which are treated on a cash payment basis.

Leases

Rentals under operating leases are charged to the SoFA on a straight-line basis over the lease term allocated to the charitable activities to which they relate.

Taxation

The RSC is registered as a charity (Charity Commission reference 207890) and as such the income arising from and expended on its charitable activities is exempt from corporation tax. It is also registered for Value Added Tax with HM Revenue and Customs and is subject to partial exemption rules. Any irrecoverable VAT is either included in fixed asset costs or in support costs that are then allocated to the charitable activities as applicable.

Foreign currency

Monetary assets and liabilities in foreign currencies are translated into sterling at the rate of exchange ruling at the balance sheet date. Transactions in foreign currencies are translated into sterling at the rate of exchange ruling at the date of transaction or at an exchange rate that approximates the actual rate. Exchange differences are taken into account in arriving at the operating result.

Forward exchange contracts are used to manage the exposure to foreign exchange rate risks related to US dollar income and cash balances.

The balance sheet values of subsidiaries have been translated at the closing rate on 31 December 2019. The profit and loss transactions have been translated at the rate of exchange ruling at the date of transaction or at an exchange rate that approximates the actual rate.

Intangible fixed assets

Intangible assets are capitalised at cost, including any directly attributable costs. These are currently amortised on a straight-line basis over a five year period, which is the useful economic life of the asset. A full impairment review is carried out in the year of acquisition with consideration given in subsequent years to whether any indicator of impairment exists.

Amortisation of the index and databases are charged to publishing activities. The web platform is used for activities across the whole organisation and therefore amortisation is apportioned across all charitable activities.

Tangible fixed assets and depreciation

Items of a capital nature are capitalised at cost if their individual purchase price is valued at £10k or above. For groups of items that cumulatively exceed £10k the previous point still applies, as the categorisation will be based on the unit price. The only exception to this is where individual components are integral to a main asset coming into use. Purchased software is capitalised at cost. Depreciation is provided on all tangible fixed assets, at rates calculated to write off the cost or valuation of each asset to its estimated residual value on a straight line basis over its expected useful life, as follows:

Leasehold land and buildings:

Thomas Graham House	2%
Burlington House	5%

Fixtures, fittings and equipment:

Computer software	20%–33%
Personal computers	25%
Other computer hardware	20%
Other fixtures and fittings	2%-25%

Fixed Assets are written down to their realisable value if it is considered that there has been a permanent diminution in their value. Assets are reviewed annually for impairment.

Investments

Quoted investments are stated at market value, using quoted bid price, at the balance sheet date. Account is therefore taken of both realised and unrealised gains in the SoFA. Investment income is stated on an accruals basis.

Investment in subsidiary undertakings

Investments in subsidiary undertakings are stated at cost, but are written down to their realisable value if it is considered that there has been a permanent diminution in their value.

Stocks

The recognition of stock is required under section 13 of FRS102, unless it is considered immaterial. Stocks held by the RSC include publications and paper stocks. These are considered immaterial and in 2019, the RSC stopped recognising stock on the balance sheet, and has instead taken the charge directly to the SoFA.

Heritage assets

The RSC does not capitalise its heritage assets as neither reliable cost information nor comprehensive valuations are readily available and such information cannot be obtained at a cost commensurate with the benefit to the users of the accounts and to the Charity. The RSC was founded in 1841 and the library collection has been built over time to contain a large number of unique and irreplaceable historical items. Therefore due to the number of books held and the lack of comparable market values these assets have not been recognised on the balance sheet as any value attributed to these assets would be purely subjective and of limited practical use.

Recognition of liabilities

Liabilities are recognised when an obligation arises to transfer economic benefit as a result of past transactions or events.

Derivative instruments

The RSC uses forward foreign currency contracts and forward options to reduce exposure to foreign exchange rates. Forward options involve buying a contract which would give the RSC the right but, unlike forward foreign currency contracts, not the obligation to exchange foreign currency for GBP at a pre-agreed rate on a specified date. Forward option premiums are expensed to the SoFA. Derivative financial instruments are initially measured at fair value on the date the derivative contract is entered into and are subsequently re-measured to fair value, at each reporting date. Fair value gains and losses are recognised in the SoFA.

Pensions

The RSC has two types of pension scheme:

Defined contribution plan

The RSC operates a defined contribution scheme. The RSC's contributions are charged to the SoFA's general funds and restricted income funds during the period in which the employee is an active member of the scheme. The cost of administering the scheme and providing for death in service are met by the RSC.

Defined benefit plan

The RSC operates a defined benefit pension scheme.

The defined benefit plan closed to new entrants on 31 December 2002 and was closed to future accrual on 30 November 2011.

The pension liability recognised in the balance sheet is the obligation of the RSC, being the present value of its defined benefit obligation at the reporting date minus the fair value at the reporting date of plan assets out of which the obligations are to be settled.

The pension costs for the scheme are recognised as follows:

(i) the change in the net defined benefit liability arising from employee service rendered during the reporting period in the SoFA; (ii) net interest on the net defined benefit liability during the reporting period in the SoFA; (iii) the cost of plan introductions benefit changes, curtailments and settlements in the SoFA; (iv) remeasurement of the net defined benefit liability in other recognised gains or losses on the SoFA. The net interest element is determined by multiplying the net defined benefit liability by the discount rate, at the start of the period taking into account any changes in the net defined benefit liability during the period as a result of contribution and benefit payments. The net interest is recognised in the SoFA as other revenue or apportioned in expenditure.

Remeasurement of the net defined benefit liability comprises: (i) actuarial gains and losses; and (ii) the return on plan assets, excluding amounts included in net interest on the net defined benefit liability. Remeasurement of the net defined benefit liability recognised in other gains or losses on the SoFA shall not be reclassified to profit or loss in a subsequent period.

Financial assets and liabilities

The RSC has elected to apply the provisions of Section 11 'Basic Financial Instruments' and Section 12 'Other Financial Instruments Issues' of FRS 102, in full, to all of its financial instruments.

Financial assets and financial liabilities are recognised when the RSC becomes a party to the contractual provisions of the instrument, and are offset only when the RSC currently has a legally enforceable right to set off the recognised amounts and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Fixed asset investments and forward exchange contracts are measured at fair value through the SoFA. All other financial instruments are measured at amortised cost.

Cash and cash equivalents

Cash at bank and cash in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or similar account.

Key judgements and assumptions

The cost of the defined benefit pension plan has been determined by updating the results of the 31 December 2016 full actuarial valuation to 31 December 2019. This was carried out by a qualified actuary independent of the RSC. The actuarial valuation involves making assumptions about discount rates, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and the long term nature of the scheme, such estimates are subject to significant uncertainty. In determining the appropriate discount rate, the management considers the market yields of AA corporate bonds consistent with the currency and term of the defined benefit obligation. The mortality rate is based on publicly available mortality tables, which uses data for UK self-administered pension schemes and allowing for expected future improvements in longevity. Future salary increases and pension increases are based on expected future inflation rates as determined by the Bank of England spot rate with a consistent term of the defined benefit obligation at the valuation date.

Further details are given in Note 12.

Notes

Notes

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