

Institution of Chemical Engineers

Annual Report and Consolidated
Financial Statements
for the year ended 31 December 2019

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Trustees' Report

The Board of Trustees is pleased to present its annual report together with the financial statements of the charity and its subsidiaries for the year ending 31 December 2019.

The financial statements comply with the *Charities Act 2011* and *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 2015).

Reference and Administrative Details

The Institution of Chemical Engineers (IChemE) is a registered Charity in England and Wales (charity number 214379) and a charity registered in Scotland (SC039661).

Principal Office

Davis Building, Railway Terrace, Rugby, Warwickshire, CV21 3HQ

Auditors

RSM UK Audit LLP, St Philips Point, Temple Row, Birmingham, B2 5AF

Main Bankers

NatWest Bank Plc, Silbury House, 300 Silbury Boulevard, Milton Keynes, MK9 2ZF

Solicitors

Mills & Reeve, 100 Hills Road, Cambridge, CB2 1PH

Investment Managers

Rathbone Investment Management Limited, 8 Finsbury Circus, London, EC2M 7AZ
Ruffer LLP, 80 Victoria Street, London, SW1E 5JL

Trustees

The Trustees serving through the year were as follows:

1 January 2019 – 20 May 2019

Mr KJ Rivers
Mr JM McGagh
Dr AS Thompson
Mr IJ Martin
Mr AB Just
Dr J Glassey
Mr THL White
Mrs JV Atkinson
Mrs MD Isles-Ahite
Dr C Phang
Eur Ing KC Plumb
Mr DM Sutton
Mrs WJ Wilson
Mrs AMW Woodford

From 20 May 2019

Mr KJ Rivers
Mr JM McGagh (to 12 November)
Prof SM Richardson
Mr IJ Martin
Mr AB Just
Dr J Glassey
Mr THL White
Mrs JV Atkinson
Mrs MD Isles-Ahite
Dr C Phang
Eur Ing KC Plumb
Mr DM Sutton
Mrs WJ Wilson
Mrs AMW Woodford

Chief Executive

Mr J Prichard

Senior Management Team

Ms J Downham: Director, Finance & Business
Mrs C Flavell-While: Director, Policy & Publications
Mr D Lloyd-Roach: Director, Qualifications
Mr P Slane: Director, Regions

Objectives and activities for the public benefit

The Institution of Chemical Engineers (IChemE) is a professional body committed to advancing the practice of chemical engineering worldwide for the benefit of society.

In support of this core purpose we promote a wide awareness of the role of chemical engineering. We develop, maintain and administer standards of professionalism, education, safety and engineering practice. We work to attract a broad range of talent from diverse backgrounds into the discipline, and we inspire young professionals to develop their competence to ensure that society is protected.

We assess applicants for membership through a rigorous peer review process thereby promoting professional development and competence in all those who enter the profession.

By promoting high standards, we encourage chemical engineers to deliver economic benefit and wellbeing without causing harm to society or the planet.

Through the knowledge and expertise of our members we inform policy development and advance the practice of chemical engineering. We recognise and celebrate excellence; we undertake informed advocacy on behalf of chemical engineering and chemical engineers; and share the message that chemical engineering matters.

The object of the Institution as set out in the Royal Charter is:

to promote, foster and develop the general advancement of the science of chemical engineering in all its branches as an end in itself and as a means of furthering the scientific and economic development and application of processes in which chemical and physical changes of materials are involved and to promote, assist, finance and support such research, investigation and experimental work in chemical engineering as the Institution may consider likely to conduce to those ends and to the benefit of the community at large.

The powers vested in the Institution to achieve these objects are:

- To hold meetings of the Institution for reading and discussing papers and communications bearing upon the science of chemical engineering or the application thereof or upon subjects relating thereto and generally to advance knowledge of chemical engineering.
- To print, publish, sell, lend or distribute the proceedings or the reports of the Institution or any papers, communications, works or treatises on chemical engineering or its application or subjects connected therewith in the English or any foreign tongue or any abstracts thereof or extracts therefrom.
- To co-operate with Government Departments, Universities, other Educational Institutions and public educational authorities for the furtherance of knowledge of and education in chemical engineering, science or practice.
- To publish statements in the public interest for the education or information of the general public on matters involving the science or application of chemical engineering.
- To hold or prescribe examinations or other assessments for candidates for election to Voting and Non-Voting membership and by requiring standards of knowledge and experience approved by the Institution.
- To maintain, under licence from the Engineering Council (UK) or the Science Council, or any other successor organisations, or any other appropriate organisations, such Register, or parts thereof, as refer to relevant Chartered Practitioner status or to relevant Technician or other status.
- To co-operate with any other organisations to advance the cause of chemical engineering or for economic purposes related thereto.
- To do all other things incidental or conducive to the attainment of the above objects or any of them.

Our strategy

The IChemE Board of Trustees, Congress and Senior Management Team launched a five-year strategic plan for the organisation in July 2019.

The plan sets out IChemE's enduring purpose to advance the contribution of chemical engineering worldwide for the benefit of society; and its vision as being led by members, supporting members, and serving society. We will have realised this vision and fulfilled our purpose if we achieve four key aims by 2024. They are:

- ***Respected for professionalism and technical competence***

IChemE will continue to set and uphold professional standards, offering routes to recognized qualifications for all chemical engineers who should be qualified. The Institution will encourage and champion professional development and apprenticeship opportunities to meet existing and future demand. This will be supported by an increase in, and enhancement of, external organisational partnerships.

- ***Recognised as a vibrant learned society that addresses the Global Grand Challenges***

This will be achieved by developing insight and opinion and by working alongside other professions to provide a collective voice on joint issues. Showing technical leadership by engaging with governments and other global bodies to inform policy/decision-making is vital. By using new technology and platforms, the Institution can engage and empower members to spread technical expertise across geographies, special interests and with peers and partners – helping them to adapt to (and influence) current and future challenges.

- ***Acknowledged as an Institution of choice in which an engaged membership receives and adds value***

Improving societal understanding of the history of chemical engineering, as well as its contribution to tackling the *Grand Challenges for Engineering* and the *United Nations Sustainable Development Goals*, is important in inspiring the next generation of engineers. Just as important is properly communicating the value proposition of IChemE to existing members, tailoring engagement carefully, depending on their level and ambitions. A more engaged membership adds value back into the Institution, creating greater value for all prospective and current members.

- ***Known as a high-performing organisation delivering significant value***

Embracing digitalization will be key, creating a platform which is befitting of a modern global professional body and allows instantaneous transfer of knowledge and skills, regardless of geography. To support this, a streamlined business architecture and measures to ensure financial sustainability will also be introduced.

Public Benefit

The Institution works to fulfil these goals on a broad international scale, reflecting the global nature of its membership and of the chemical engineering profession, and bringing benefits to the public and society by promoting high standards of engineering competence, professional ethics, safety and sustainability, thus enabling industry and society to receive the benefit from a competent profession and its practitioners.

The Trustees confirm that they have referred to the Charity Commission's guidance on public benefit when reviewing the Institution's aims and objectives and in planning future activities.

Achievements and performance

Significant progress has already been made across the four aims of Strategy 2024 with several projects launched to deliver against its objectives. The Institution's achievements will continue to be measured against the strategic plan. To support this, annual business plans will be developed to allow the Institution to focus its efforts on delivering specific goals.

Aim 1: Respected for professionalism and technical competence

IChemE's 2019 year-end membership figure was 35,345, which represents a fall of 4.7% from the previous year (2018: 37,075). The decrease is attributed to the ongoing work in developing a sustainable membership model, of which a large part was strengthening the subscription arrears and lapsing processes. This helped to provide a position where the data reflects the Institution's active, paying membership and ensured that we could concentrate on delivering services for truly engaged members and meet their needs. This in turn allowed us to make sure that all members are supported in the development of their professional and technical competence appropriately. In 2019, 106 Fellows, 419 Chartered Members and 1,761 Associate Members were elected. Overall, 35% of members were professionally qualified – up from 34% in 2018.

Further progress in improving flexible routes to professional qualification was made in Programme SMART (Sustainable Membership Achieved via Robust Transactions). Fifty-three candidates successfully passed through a piloted process to enable candidates to become Chartered within three months. A second successful pilot took place for the Individual Case Procedure (ICP), a new process that was developed and first piloted in 2018 to give recognition to non-accredited programmes of study. Assessment of ICP applications is carried out by the newly established ICP Panel made up of volunteers, with Fenella Nordquist being appointed as the panel's first Chair.

2019 saw the first IChemE accredited chemical engineering degree apprenticeship programme launched with the University of Chester and Unilever.

The Institution worked with legislators in Victoria, Australia on drafting a bill for a new registration scheme that is mandatory for engineers providing professional services in the region and the legislation was passed. Although it does not currently include a chemical engineering category, IChemE's active involvement with legislators ensures the Institution will be in a position to respond quickly and support its members as and when this is introduced in the future. IChemE also became an assessing authority for the new scheme, similar to its status as an assessing authority for the Registered Professional Engineer Queensland scheme.

Throughout the year, IChemE employees and member volunteers have supported the continuing professional development of members through training courses, physical events and webinars on membership-related topics, such as how to become Chartered. Fifty-five industrial visits, 37 academic visits, and 50 Get Chartered and professional registration presentations were also delivered in the UK and Ireland to support employers.

For championing professional development and chartered status, GSK was awarded IChemE Gold Corporate Partner status. Nine Accredited Company Training Schemes were reaccredited by IChemE's Qualifications function, and Ecolab, Mace and Energus were newly accredited.

2019 was IChemE's best year for the take up of online training since its new suite of training was introduced in 2017, with chemical engineers around the world accessing over 30 courses from the Institution's on-demand library. New 'live' courses introduced included *Runaway Reactions* and *Safe Start Ups and Shutdown of Process Units*. 2019 also marked 10 years of the *Fundamentals of Process Safety* training course.

IChemE updated its mentoring guidelines and developed a framework for effective mentoring to guide its volunteer mentors on how to best support individuals applying to become a Chartered Chemical Engineer and understand the high standards required. New mentoring training events were also developed and run in London and Chester, UK, with in-company mentoring workshops held at AstraZeneca and Xodus, UK.

New arbitration practices and standards were published in *The Pink Book*, to support those around the world managing an engineering project contract, or for arbitrators engaged in resolving disputes.

Aim 2: Recognised as a vibrant learned society that materially impacts on the Global Grand Challenges

IChemE strives to be the foremost learned society in chemical engineering. A key focus for 2019 was joining up its learned society activities to better support members addressing major societal challenges. This led to the creation of the Learned Society Committee which sets the strategic direction of IChemE's learned society activities. The committee is made up of technical experts across a broad range of sectors in industry and academia.

To further encourage knowledge transfer, IChemE provided members with unlimited free access to special interest groups, and provided students with free access to *The Loss Prevention Bulletin*.

Collaborative work to provide technical leadership and professional opinion to influence policy grew further in 2019. IChemE joined with 39 professional engineering institutions to establish the National Engineering Policy Centre (NEPC) to give policy-makers access to the best expertise across the profession. The NEPC published a manifesto calling on the government to work with the centre and invest in skills, innovation and clean energy technologies for UK prosperity.

IChemE contributed to a report assessing the use of hydrogen in the UK gas grid to cut carbon emissions, as well as to *Engineering Skills for the Future - the 2013 Perkins review revisited*, marking five years on from IChemE Fellow John Perkins' initial review into education and skills.

Members contributed to several government consultations, including one for a UK national food strategy, and also giving expert advice on standards for bio-based plastics. Following feedback that members wanted even more visibility on how chemical engineers are contributing to policy, a dedicated section was created on IChemE's website and regular articles were published in *The Chemical Engineer* and on IChemE's blog.

Young chemical engineers had the opportunity to quiz MPs on science funding and single-use plastic at *Voice of the Future*, in UK Parliament. At *Parliamentary Links Day*, members discussed with UK politicians how boosting international collaboration, skills and funding are key to future research and development.

Work on producing technical standards and guidance to support the chemical engineering community continued. The IChemE Energy Centre launched the *Energy and resource efficiency good practice guide* and case studies to help chemical engineers and organisations implement good practice in the workplace. Meanwhile, the IChemE Safety Centre (ISC) released guidance on how to build competency in process safety.

The ISC also launched three new interactive case studies: *Chemical Plant*, *Underground Pipeline*, and *Laboratory Experiments* – the latter of which was launched with free access for students to encourage process engineering thinking during undergraduate studies. Chemical and process engineers use these training resources to see how their decisions can impact an incident in real time.

Impact Factors increased for all IChemE journals in 2019; including a first for *Molecular Systems Design and Engineering*, which is jointly owned with the Royal Society of Chemistry. Impact Factors provide a quantitative measurement of a journal in relation to its competitors. *Process Safety and Environmental Protection (PSEP)*'s Impact Factor saw the highest increase (27%).

Three successful process safety conferences were held in 2019 aimed to enable chemical engineers to share knowledge and learnings from process safety incidents. Walt Disney worldwide safety manager, Mike Bell, delivered the Trevor Kletz lecture at *Hazards 29* in Birmingham, UK, explaining why their 'safety begins with me' culture across their theme parks is essential.

'Competence and capability' was the key theme at *Hazards Australasia 2019*. An expert panel from the Australian and New Zealand regulatory bodies discussed the importance of sharing lessons learned and how the recent Work, Health and Safety review could affect process engineers. *Hazards Asia Pacific 2019* held in Kuala Lumpur, Malaysia, marked five years of the conference. Under the theme 'culture, technology and responsibility', ideas were shared on how to manage hazards and address the impact of technological and cultural changes – such as digitalisation and climate change - on the process industries in a holistic way.

Australia's Chief Scientist Dr Alan Finkel, and Orica's European business manager Belinda Grealy delivered popular keynote speeches at *Chemeca 2019* about how chemical engineers and leaders in the profession are key to addressing current and future challenges.

Aim 3: Acknowledged as a peer-group leader in which an engaged membership receives and adds value

In 2019, IChemE placed significant emphasis on continuing to improve engagement across all levels of the membership, supporting members and recognising their expertise and achievement in addressing global challenges.

Engagement on strategic matters strengthened between the Board of Trustees and Congress in 2019. Congress had its first full year of operation and represented the voice of the membership through their constituencies to provide valuable input into many Trustee-led work programmes. This included on Strategy 2024, governance structures and member engagement.

Over 1,900 members participated in a member engagement survey. It was widely agreed that what matters most is for IChemE to fulfil its role as a qualifying body and serve as an ambassador for chemical engineering and chemical engineers. IChemE has identified 10 improvement areas, and made good progress on a number of these, including doing more to influence policy-makers and looking at ways to improve the volunteer experience.

Professor Stephen Richardson was elected as Deputy President in May, following Andrew Thompson's decision to step down. To provide continuity and serve a full three-year term as an IChemE Trustee (Deputy President, President and Past President) Professor Richardson will serve an 18-month term as President. During his Presidential Address in November, he initiated a new two-year programme to further improve support for, and better recognise, volunteers. Progress on this programme will continue throughout Professor Richardson's presidency.

Significant collaboration took place between IChemE's members groups and special interest groups worldwide, organising physical and online events to support professional and specialist knowledge development. Over 5,000 people attended 100 webinars throughout the year. Also, a new IChemE employee was recruited and based in Glasgow to give further support to member-led activities in Scotland and Ireland.

Chemical engineers across the world were recognised by their peers for excellence in the profession with more than 130 entries making it to the finals of the IChemE Global Awards and IChemE Malaysia Awards. The University of Birmingham, UK and Jinhe Energy, China were the overall winners at the Global Awards for their novel environmentally-friendly technology that allows surplus energy to be converted to heat and safely stored.

Chemical engineers in Australia and New Zealand were recognised with Awards of Excellence at *Chemeca 2019*. Honorary Fellow Marlene Kanga was awarded the *Chemeca Medal* for significant contributions to process safety and for campaigning for 4 March to be declared World Engineering Day for Sustainable Development.

For her commitment to engineering and addressing sustainability in the water industry, Chartered Chemical Engineer Mandy Lester from Atkins received the *Karen Burt Award*.

The SIESO Medal was launched in 2019 to recognise science and engineering undergraduate students demonstrating process engineering skills and thinking. The medal was won by a team at Universiti Teknologi Petronas, Malaysia for their joint paper and poster demonstrating issues that led to the gas leak disaster in Bhopal, India.

Aim 4: Known as a high-performing organisation delivering significant value

To enable sustainable growth within IChemE and to be a high-performing organisation delivering value to members and society, a strong governance and operational model is required, underpinned by an enhanced digital offering.

Following a £1m investment agreed by the Board of Trustees in 2018, substantial work was undertaken by IChemE employees in 2019 to lay the foundations for improvements to the Institution's IT, business systems and procedures that will enable the implementation of the five-year strategy. The development of a new Customer Relationship Management (CRM) system began, with preliminary discovery and testing work conducted by employees. The new CRM will be a modern and dynamic system that will ultimately help improve member and non-member engagement levels.

During the course of 2019, IChemE has been working to implement a quality management system compliant with the internationally recognised standard ISO9001. A staged approach is being adopted, with the scope of certification initially limited to the provision of published materials. Following an audit by Lloyd's Register Quality Assurance, certification was confirmed in February 2020. Over the next two years the scope of the quality management system will be widened to incorporate other areas of the Institution.

Digitalisation has been a key focus for 2019 to allow members to better connect with IChemE's services and resources. It was the first full year of IChemE's new mobile and tablet-friendly website, which saw a significant increase in engagement. Page views were up 52% and there was a 44% increase in access via mobile devices. *The Chemical Engineer* also saw a significant growth in online engagement, with the number of users visiting the website up 83% to 278,000 and page views up 42%.

Work also began in developing the Knowledge Hub – a central digital archive of technical material published by IChemE. A focus group of members and staff tested an early version in Q4.

SharePoint, an online storage and sharing system, was rolled out to staff to replace hard-drive storage in order to improve back-office functions and provide more resilient business operations.

In 2019, efforts continued in streamlining IChemE's governance while ensuring communities across the world collectively feel supported, with the decision in November to establish a Regions Working Group and a Finance Working Group. Once these groups have been fully established, they will assist in the development of coherent governance structures across all national boards and members groups.

IChemE reshaped its collaboration agreement with its partner organisation, the South African Institution of Chemical Engineers (SAIChE), to operate under a wholly aligned membership and payment process. Also, work began to create an IChemE national board in South Africa to better connect the members with IChemE's broader programme of activity through a standardised structure.

Plans for the future

The key activities to deliver against each of the strategic objectives are set out as follows:

Aim 1: Respected for professionalism and technical competence

- Setting and upholding professional standards – offering internationally-recognised accreditation, maintaining pathways to professional registration, regulating professional conduct.
- Developing chemical and process industry skills – championing continuing professional development (CPD), celebrating success and achievement, supporting apprenticeship frameworks.
- Supporting industry and employers – developing and enhancing the Corporate Partner scheme, facilitating the skills pipeline, contributing to up-skilling and re-skilling initiatives for engineers.

Aim 2: Recognised as a vibrant learned society that materially impacts on the Global Grand Challenges

- Developing insight and opinion – providing a collective voice with other professions on joint issues, developing and communicating policy position statements (informed by our member experts), demonstrating that chemical engineering matters.
- Providing professional and technical leadership – supporting research and innovation, developing our Special Interest Groups (SIGs) to engage and collaborate more effectively, enabling digital literacy for our members, promoting a diverse profession.

Aim 3: Acknowledged as an Institution of choice in which an engaged membership receives and adds value

- Improving societal understanding of chemical engineering – providing tools for careers outreach, promoting the contribution our members make in society, building partnerships with like-minded bodies, celebrating chemical engineering heritage and success.
- Ensuring support across the member lifecycle – promoting STEM career paths, developing student understanding and commitment, promoting early-career support, encouraging mid-career engagement, promoting senior member leadership.

Aim 4: Known as a high-performing organisation delivering significant value

- Embracing digitalisation – creating and updating our digital products and services so that we can service our membership 365 days a year and 24/7.
- Delivering a coherent business architecture – confirming and validating local governance structures, optimising regional support, developing and supporting local Member Groups (MGs).
- Securing and sustaining a financially sustainable organisation – delivering financial targets, identifying KPIs, continuous process improvement and risk management.
- Developing organisational capability – aspiring to operational excellence, promoting member engagement, promoting business-like management, being an employer of choice.

Financial Review

The financial statements for the year ended 31 December 2019 are set out on pages 19 to 39.

The charity only financial statements incorporate the results of the UK and Australian charitable operations.

The consolidated financial statements include the results of the Institution's UK trading subsidiary, IChemE Ltd, and the charitable activities of the Institution's subsidiaries in Malaysia, New Zealand and Singapore.

Unrestricted funds

Total group income for the year was £7,984,000 (2018: £8,542,000). The principal sources of income were:

- Membership subscription and accreditation fees totalling £3,907,000 (2018: £3,873,000).
- Within the Learned Society activity, training courses generated income of £1,730,000 (2018: £1,891,000). Income from journals and publications was £989,000 (2018: £1,009,000), and a further £723,000 (2018: £812,000) was received from conferences, seminars and events. Income from the Institution's knowledge communities, which includes company subscriptions to the IChemE Safety Centre and Special Interest Group activity remained steady at £394,000 (2018: £395,000). Other income, generated from collaboration with other entities, was £16,000 (2018: £31,000).
- The income of the Institution's trading subsidiary IChemE Ltd, which is generated mainly through the sale of advertising space in the Institution's magazine, was £148,000 (2018: £223,000).
- Donations for the year were £29,000 (2018: £60,000). No further legacy payments were received in the year (2018: £150,000). However, a final sum of money is still due to be paid from a former member's estate, which at the point of signing the accounts is unknown in terms of value and payment date. The legacy was originally notified to the Institution in December 2017.
- Dividends and interest on the investment portfolio was £77,000 (2018: £98,000).

Total group expenditure for the year was £8,142,000 (2018: £8,316,000). This includes expenditure of £344,000 (2018: £nil) on the IT Transformation Programme to be funded from the designated fund. Details of the designated fund are set out in note 19 to the financial statements. Excluding the IT Transformation Programme costs, expenditure decreased in line with the small decline in income.

Excluding the expenditure from designated funds, the net income before investment gains or losses was £186,000 (2018: £226,000).

Gains on investments for the year were £491,000 (2018: losses of £397,000) which resulted in an overall net income of £333,000 (2018: net expenditure £171,000). The actuarial loss on the defined benefit pension scheme of £1,256,000 (2018: gain £389,000) resulted in a decrease of £923,000 (2018: increase of £218,000) in the unrestricted fund balance to £1,679,000 (2018: £2,602,000).

The Institution's wholly owned trading subsidiary, IChemE Ltd, achieved an operating profit of £59,000 (2018: £95,000), which has been gift aided to the Institution.

The results of the UK trading subsidiary and of the subsidiary undertakings in Malaysia, New Zealand and Singapore are set out in note 3 to the financial statements.

Restricted funds

Restricted funds are income funds that can only be used for specific purposes which have been specified by the donor, or by the terms applied to an appeal for funds.

The net expenditure in restricted funds was £13,000 (2018: £30,000). The total restricted fund balance at year end was £1,305,000 (2018: £1,318,000). The movement in restricted income funds is set out in note 18 to the financial statements.

Investment policy and powers

The investment policy adopted by the Trustees is to achieve a target return of CPI + 3% over a 5-year rolling basis and over a rolling 3 year period to achieve a minimum return of CPI. The Institution's investment objective remains to achieve long term capital growth with income.

The investment portfolio is split between Rathbones Investment Management Limited and Ruffer LLP. Both organisations are working to this investment policy and apply their individual judgement for asset allocation and investment selection to achieve the investment objective.

During the year the investment funds received £77,000 (2018: £98,000) in interest and dividends, and incurred management fees of £54,000 (2018: £66,000). The funds generated unrealised gains of £491,000 (2018: losses of £397,000). The total return for the year, taking into account all income, management fees and market value movements, was an increase of 9.4% (2018: decrease 5.8%).

No further disinvestments were made in 2019. A disinvestment of £1,250,000 was made in 2019, the majority of which was transferred as a lump sum payment to the defined benefit pension scheme as part of the agreed recovery plan.

The market value of the investment portfolio at 31 December 2019 was £5,274,000 (2018: £5,210,000).

All income received during the year has been re-invested. The Institution's investments are recorded at market value. The gains and losses on revaluation have been transferred to the Statement of Financial Activities.

Investments are held in accordance with the By-laws of the Institution. The Trustees have the power to invest all monies not immediately required for operational activities as it sees fit and to appoint advisers to make such investments on its behalf.

IChemE continues to use the services of an independent financial advisor to review and monitor the investment portfolio. The performance of the funds was formally reviewed by the Finance & HR Committee throughout the year.

Reserves policy

The Finance and HR Committee reviews the Institution's reserves policy and level of reserves held on an annual basis. The Committee considers all relevant information including the three-year budget and business plan, the strategic plan and the risks identified in the risk register.

The current reserves policy adopted by the Trustees is to hold free reserves equivalent to the level of committed costs plus a margin of 10%. This level of reserves is considered appropriate to demonstrate appropriate financial management of the Institution and to ensure the financial stability of the Institution in periods where there is a short to medium term shortfall in operating income. For 2019, the level of reserves required to meet this policy was £3,800,000.

The level of unrestricted reserves freely available at the year-end was £4,924,000 (2018: £4,323,000).

Unrestricted free reserves exclude the designated fund of £656,000 (2018: £1,000,000), fixed assets reserves of £885,000 (2018: £975,000), and are stated before taking account of the pension-funding deficit of £4,875,000 (2018: £3,696,000) calculated under FRS 102. Due to the extremely long-term nature of the pension reserve, the unrestricted reserves freely available are considered a more appropriate measure.

The current level of reserves held is in excess of the policy. The Trustees are comfortable holding excess reserves due to:

- the investment required to meet the Institution's strategy in the build up to our centenary some of which may require funding from reserves;
- the potential decline in the market value of the investment funds due to the continuing uncertainty in the investment market.

In 2018, the Trustees agreed to set aside £1,000,000 as a designated fund for an IT Transformation Programme to run over the next two to three year period. A transfer of £1,000,000 was made from general funds to designated funds in December 2018 to be allocated against the Programme during 2019 to 2021. Expenditure of £344,000 (2018: £nil) was incurred on the Programme in 2019. The budget, scope and timeline for the Programme is being closely managed and based on current estimates will be delivered as planned in line with the original designation.

The total funds held at year end, after taking into account the pension-funding deficit, amounted to £2,984,000 (2018: 3,920,000). The total fund balance includes restricted funds of £1,305,000 (2018: 1,318,000).

The Trustees have considered the level of reserves held at year end and believes they are sufficient to protect it from risk of insolvency or serious disruption to its work.

Structure, Governance and Management

Governing Document

The Institution of Chemical Engineers was founded in 1922 and incorporated by Royal Charter in 1957.

The governing documents under which the Institution operates comprise the Royal Charter, as amended, the By-laws of the Institution, and Regulations made from time to time by the Board of Trustees, which is the Institution's governing body.

The Institution is a registered charity in England & Wales and a charity registered in Scotland.

Appointment of Trustees

The Board of Trustees are elected in accordance with the Royal Charter and By-laws and is comprised of the following roles:

- President
- Deputy President
- Immediate Past President
- Honorary Treasurer
- three Vice-Presidents
- three ordinary members
- two regional members

The Honorary Officers, consisting of the President, Deputy President, Immediate Past President and Honorary Treasurer, are elected annually. Those eligible for election as President shall be the Deputy President or, if in the opinion of the Board of Trustees special circumstances exist, a Fellow. The person eligible as Immediate Past President shall be the retiring President. Those eligible for Honorary Treasurer shall be as determined by the Nominations Committee.

The Vice-Presidents, ordinary members and regional members of the Board shall be elected for a term not exceeding three years nor less than one year.

Trustee induction and training

All new Trustees receive an induction pack including the By-laws and Regulations of the Institution, recent minutes of meetings, and the relevant Charity Commission publications outlining their roles and responsibilities as a Charity Trustee. Trustees are also encouraged to attend appropriate external training events where these will facilitate the undertaking of their role. An annual Trustee induction day is held for all new and existing Trustees to get an oversight of the structure of the Institution and its activities.

Trustees have a legal duty to avoid conflicts of interest so that they can focus exclusively on the best interests of the Institution. The Institution maintains a register of interests, which is updated annually or when any changes are reported by Trustees. Procedures are in place for managing conflicts of interest that may arise during Trustee meetings.

Institution structure

The Board of Trustees is the governing body of the Institution and has ultimate responsibility for the strategic direction and for ensuring that the charitable objects set out in the governing document are met. The Board of Trustees meets at least five times a year to review performance against these objects.

Congress is the newly established advisory body serving as a link between the Institution's members and the Board of Trustees. Congress consists of up to forty members, all members of the Institution, who are nominated and elected by their peers from a functional or geographical college. The functional college consists of up to 15 representatives to broadly reflect the Institution's membership across the various grades. The regional college consists of up to 25 representatives to reflect the geographical footprint of the Institution's membership. Congress members are elected for a term of three years, renewable up to a maximum term of six years.

The Congress Steering Group is responsible for the oversight and facilitation of the conduct of Congress and the engagement of Congress members. The Steering Group consists of the Congress Chair, Vice-Chair, the Chief Executive and a designated Trustee lead.

Congress holds up to six sessions a year, five of which will be held as online open forums and each lasting up to thirty days. The agenda for the sessions is determined by the Chair of Congress in consultation with the Congress Steering Group.

The Chief Executive is appointed by the Board of Trustees and has delegated authority for the day to day operation of the Institution, its branches and subsidiary undertakings. The Chief Executive is supported by the Senior Management Team.

The Board of Trustees are the registered Trustees of IChemE's branch in Australia, which is registered with the Australian Charities and Not-for-profits Commission. The branch has a National Board to advise the Trustees on how IChemE's strategy can be delivered locally.

The Institution's operations in Malaysia, New Zealand and Singapore, each have their own National Boards operating under delegated authority from the Board of Trustees and in compliance with local regulatory requirements.

The Institution has a wholly owned trading subsidiary in the UK, IChemE Ltd, established to operate the sale of advertising space in the Institution's journals and publications. The company gift aids its taxable profits to the Institution.

In addition to Congress and the local National Boards, there are a number of standing Committees operating under delegated authority from the Board of Trustees which have been established to facilitate the operation of the charity. These consist of:

- Qualifications Committee
- Learned Society Committee
- Regions Committee
- Communications Panel
- Commercial Panel
- Finance & HR Committee
- Audit and Risk Committee
- Succession Planning Committee
- Nominations Committee
- Disciplinary Committee
- Appeals Committee

The Institution also has an extensive network of National, Regional and Special Interest Groups enabling members to get involved in the Institution's activities. Each group has its own committee, made up of members of the Institution, who meet regularly throughout the year. The activities conducted by the Groups include technical meetings, continuing professional development, school liaison visits, and networking events.

The Terms of Reference, which include the delegated powers and membership of the Boards, Committees and Panels are set by the Board of Trustees and reviewed regularly.

Staff participation is encouraged at all levels in the making of decisions which affect the Institution's management and future development. Formal meetings are held to update all staff on the Institution's activities and other emerging issues.

Volunteers

All Trustees and the various members of boards, committees and panels give their time on a voluntary basis. The voluntary effort and contribution on the part of the members is at the heart of the Institution's success.

Fundraising

The Institution does not actively undertake any fundraising activities from the general public or use the services of professional fundraisers or commercial participators.

The Institution is not bound by any regulatory scheme and is not subject to any voluntary code of practice regulating fundraising.

No complaints have been received by the Institution in relation to fundraising activities.

Remuneration policy for key management personnel

The Institution considers its key management personnel to comprise the Board of Trustees, the Chief Executive and the Senior Management Team. All Trustees give their time freely and no Trustee received remuneration in the year. Details of Trustees' expenses and related party transactions can be found in note 9 and 22 to the accounts.

The pay of the Chief Executive and Senior Management Team is set by the Finance & HR Committee in line with the Institution's Remuneration Policy.

The Institution is committed to ensuring that it pays its staff fairly and in a way which ensures it attracts and retains appropriately qualified staff to lead, manage, support and deliver the Institution's charitable objects.

The objective of the Policy is to ensure that the Chief Executive and staff team are provided with appropriate incentives to encourage enhanced performance and are, in a fair and responsible manner, rewarded for their individual contributions to the success of the Institution.

The Policy is based on an aspiration to be the exemplary membership organisation of its type and an articulate advocate of chemical engineering. In determining remuneration levels, the Committee take into account all factors which are deemed necessary.

The Committee secure professional advice where appropriate to establish appropriate benchmark levels for each position or group of positions. These benchmark rates are reviewed regularly. When inflation is relatively low this review may not be annual and so an interim inflationary adjustment to the benchmark salary level may be made.

The Institution does not employ interns without pay and it complies with the living wage for all staff.

In addition to financial remuneration, the Institution seeks to provide staff with a supportive working environment and wherever possible works to promote the wellbeing of staff and satisfactory work-life balance.

The appropriateness and relevance of the Remuneration Policy is reviewed annually by the Committee.

Risk management

The Trustees are responsible for overseeing risk management across the organisation and for maintaining a sound system of internal control that supports the achievement of its strategic aims and objectives. The Audit & Risk Committee is responsible for assessing the effectiveness of risk management and internal controls across the organisation, and for reviewing the Institution's risk policy on an annual basis.

A strategic and operational risk register is maintained by the senior executive team and is formally reviewed on a quarterly basis. A change risk register is overseen by the Future Institution Transformation (FIT) Board. The risk registers capture the types of risk internally and externally, prioritises them in terms of potential impact, likelihood and reputational impact, and identifies means of mitigating those risks or minimising the impact on the Institution should those risks materialise. Both the senior executive team and the FIT Board regularly review the classification of the risks and the effectiveness of the control measures. The Audit & Risk Committee regularly review the risk registers, concentrating on the significant strategic risks and their control measures.

To improve overall awareness of risk management, and to develop a more consistent approach to the identification, management and control of change related risk, the FIT Board has introduced a series of measures. These include:

- a requirement to create a Risk, Assumptions, Issues and Dependencies (RAID) Log before approval is given to commit significant resources
- a requirement to populate the RAID log using a standard template to ensure risks can be managed across the change portfolio and promote standardisation
- a requirement for projects and programmes to self-assess the current risks and the mitigation strategies as part of any request to progress to the next stage of the project lifecycle
- a requirement to submit the RAID log for regular peer review.

The business planning and budgeting cycle is used to set objectives for the following three years, agree action plans, allocate resources, and to identify new risks or changes in existing risks or their control measures. Progress towards meeting the objectives and annual budget is monitored on a monthly basis by the Senior Management Team.

A number of internal policies and procedures form part of the internal control process which are reviewed on a regular cycle. These include policies and procedures for Finance, HR, IT, Data Protection, Health & Safety, Conflicts of Interest, Corporate Gifts and Hospitality, Anti-Bribery and Corruption, and Acceptance and Refusal of Donations.

The Trustees receive an annual report from the Audit & Risk Committee highlighting the top strategic and operational risks. Key changes in risk items will also be reported to the Trustees as required.

The top risks identified in 2019 which could impact the delivery of the strategy were:

Risk	Control and Mitigation Measures
Staff lack capability and or capacity to deliver the strategy	<ul style="list-style-type: none"> ▪ Establish skills and capability requirements to support the strategy and business plan. ▪ Understand the current skills and capabilities. ▪ Build capability and resilience through succession planning and deputisation of key roles. ▪ Embed project management and risk management across the organisation at all levels. ▪ Prioritise projects and business as usual activity within resource constraints. ▪ Use external contractors to deliver key projects or activities where the skill doesn't exist in house but take the opportunity to transfer skills knowledge during the process.
Insufficient funds to deliver strategy	<ul style="list-style-type: none"> ▪ Strategic objectives are clearly defined in Strategy 2024 and change projects to deliver the strategy are identified within the FIT (Future Institution Transformation) portfolio. ▪ Ensure appropriate governance of the FIT portfolio so that projects are prioritised in line with any resource restrictions, both budget and staff resource. ▪ Ensure that benefits realisation is clearly defined for all IT Programme and FIT portfolio projects to ensure return on investment and/or efficiency savings. ▪ Review of the current product and service offering and pricing model by Commercial Panel.
Unforeseen significant growth in the pension deficit	<ul style="list-style-type: none"> ▪ Maintain a dialogue with the Pension Trustees to understand position of pension scheme funding and investment performance impacting valuation. ▪ Keep Pension Trustees informed of Institution plans in terms of expenditure from reserves which impacts strength of the employer covenant which may in term determine level of risk the pension trustees take in their investment strategy.
Insufficient volunteer capacity / capability to deliver a member led organisation	<ul style="list-style-type: none"> ▪ Establish a Volunteer Management Strategy and develop a project plan to deliver sustainable, capable volunteer resource. ▪ Assign resource to managing the project.
Congress is ineffective as the voice of members	<ul style="list-style-type: none"> ▪ Provide more feedback and direction to Congress via the Congress Steering Group. ▪ Establish the Communications Panel which includes members of Congress. ▪ Re-recruit staff resource to provide support to Congress and a link between organisation activities and Congress.

The Trustees are satisfied that reasonable steps are being taken to limit the probability and the impact of risk.

At the time of preparing the Trustees' Report and Financial Statements, it is clear that there will be significant disruption to the work of the Institution over the coming year as a result of the COVID-19 outbreak which has occurred since the financial year end. Due to the progress made on the IT Transformation Programme, IChemE staff were able to quickly move to a homeworking approach and have been working remotely since the Government's advice to work from home where possible. The Trustees and executive team have put in place additional measures to mitigate the financial impact of the outbreak, at the same time as delivering against Strategy 2024 in the most appropriate way given the current COVID-19 control measures.

Statement of Trustees' responsibilities

The Trustees are responsible for preparing the trustees' annual report and the financial statements in accordance with applicable law and regulations.

Charity law requires the Trustees to prepare financial statements for each financial year in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law). Under Charity law the Trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the group and charity and of the incoming resources and application of resources, including the income and expenditure, of the group and charity for that period.

In preparing those financial statements, the Trustees are required to:

- select suitable accounting policies and then applies them consistently;
- 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;
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the Institution will continue its activities.

The Trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charity's transactions and disclose with reasonable accuracy at any time the financial position of the charity and enable them to ensure that the financial statements comply with the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005 and regulations 6 and 8 of the Charities Accounts (Scotland) Regulations 2006. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Approved by the Board of Trustees on 23 April 2020 and signed on its behalf by:



Prof SM Richardson
President



Mr IJ Martin
Honorary Treasurer

Davis Building
165-189 Railway Terrace
Rugby
CV21 3HQ

Independent Auditor's Report to the Trustees of the Institution of Chemical Engineers

Opinion

We have audited the financial statements of the Institution of Chemical Engineers (the 'charity')(the 'parent charity') and its subsidiaries (the 'group') for the year ended 31 December 2019 which comprise Consolidated and Charity Statements of Financial Activities, the Group and Charity Balance Sheets, the Consolidated and Charity Cash Flow Statements 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 parent charity's affairs as at 31 December 2019 and of the group's and parent charity's incoming resources and application of resources for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities and Trustee Investment (Scotland) Act 2005, regulations 6 and 8 of the Charities Accounts (Scotland) Regulations 2006 (as amended) and the Charities Act 2011.

Basis for opinion

We have been appointed auditors under section 44(1)(c) of the Charities and Trustee Investment (Scotland) Act 2005 and under section 151 of the Charities Act 2011 and report in accordance with regulations made under those Acts.

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 parent 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 parent 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 Annual 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 Accounts (Scotland) Regulations 2006 (as amended) and the Charities Act 2011 require us to report to you if, in our opinion:

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

Responsibilities of trustees

As explained more fully in the Statement of Trustees' responsibilities set out on page 16, 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 and parent 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 parent charity or to cease operations, or have no realistic alternative but to do so.

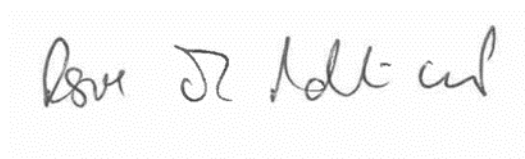
Auditor's responsibilities for the audit of the financial statements

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 located 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 this report

This report is made solely to the charity's trustees, as a body, in accordance with section 44(1)(c) of the Charities and Trustee Investment (Scotland) Act 2005, and regulation 10 of the Charities Accounts (Scotland) Regulations 2006 (as amended) and 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 its trustees as a body, for our audit work, for this report, or for the opinions we have formed.



RSM UK Audit LLP
Statutory Auditor
St Philips Point
Temple Row
Birmingham
B2 5AF

Date 24 April 2020

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

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

	Notes	Unrestricted Funds £000	Restricted Funds £000	Total 2019 £000	Unrestricted Funds £000	Restricted Funds £000	Total 2018 £000
INCOME							
Donations & legacies	4	-	29	29	210	13	223
Charitable activities:							
Qualifying Chemical Engineers		3,907	-	3,907	3,873	-	3,873
Operating a Learned Society for Chemical Engineers		3,852	25	3,877	4,138	27	4,165
Other trading activities:							
Trading operations	3	148	-	148	223	-	223
Investments	6	77	-	77	98	-	98
TOTAL INCOME		7,984	54	8,038	8,542	40	8,582
EXPENDITURE ON							
Raising funds:							
Trading operations	3	(89)	-	(89)	(128)	-	(128)
Investment management costs		(54)	-	(54)	(66)	-	(66)
Charitable activities:							
Qualifying Chemical Engineers		(3,056)	-	(3,056)	(2,891)	-	(2,891)
Operating a Learned Society for Chemical Engineers		(4,943)	(67)	(5,010)	(5,231)	(70)	(5,301)
TOTAL EXPENDITURE		(8,142)	(67)	(8,209)	(8,316)	(70)	(8,386)
Net gains / (losses) on investments	12	491	-	491	(397)	-	(397)
NET INCOME / (EXPENDITURE)		333	(13)	320	(171)	(30)	(201)
Transfer between funds	18	-	-	-	-	-	-
Actuarial (losses) / gains on defined benefit pension schemes	23	(1,256)	-	(1,256)	389	-	389
NET MOVEMENT IN FUNDS		(923)	(13)	(936)	218	(30)	188
Fund balances brought forward at 1 January		2,602	1,318	3,920	2,384	1,348	3,732
Fund balances carried forward at 31 December		1,679	1,305	2,984	2,602	1,318	3,920

The results relate to the continuing activities of the Institution. The group has no recognised gains or losses other than the net movement in funds for the year.

The notes on pages 23 to 39 form part of these financial statements.

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

	<i>Notes</i>	Unrestricted Funds	Restricted Funds	Total 2019	Unrestricted Funds Restated £000	Restricted Funds Restated £000	Total 2018 Restated £000
		£000	£000	£000			
INCOME							
Donations & legacies	4	-	29	29	210	13	223
Gift aid from subsidiary company	3	59	-	59	95	-	95
Charitable activities:							
Qualifying Chemical Engineers		3,762	-	3,762	3,725	-	3,725
Operating a Learned Society for Chemical Engineers		3,691	25	3,716	3,830	27	3,857
Investments	6	77	-	77	98	-	98
TOTAL INCOME		7,589	54	7,643	7,958	40	7,998
EXPENDITURE ON							
Raising funds:							
Investment management costs		(54)	-	(54)	(66)	-	(66)
Charitable activities:							
Qualifying Chemical Engineers		(2,972)	-	(2,972)	(2,850)	-	(2,850)
Operating a Learned Society for Chemical Engineers		(4,772)	(67)	(4,839)	(4,929)	(70)	(4,999)
TOTAL EXPENDITURE		(7,798)	(67)	(7,865)	(7,845)	(70)	(7,915)
Net gains / (losses) on investments	12	491	-	491	(397)	-	(397)
NET INCOME / (EXPENDITURE)		282	(13)	269	(284)	(30)	(314)
Transfer between funds	18	-	-	-	-	-	-
Actuarial (losses) / gains on defined benefit pension schemes	23	(1,256)	-	(1,256)	389	-	389
NET MOVEMENT IN FUNDS		(974)	(13)	(987)	105	(30)	75
Fund balances brought forward at 1 January		2,476	1,318	3,794	2,371	1,348	3,719
Fund balances carried forward at 31 December		1,502	1,305	2,807	2,476	1,318	3,794

Balance sheets at 31 December 2019

	<i>Note</i>	Group	Charity
		2019	2018
		2019	2018 Restated
		£000	£000
Fixed assets			
Tangible assets	11	885	975
Investments	12	5,724	5,210
		<u>6,609</u>	<u>6,185</u>
Current assets			
Debtors	13	794	1,418
Cash at bank and in hand		3,027	2,889
		<u>3,821</u>	<u>4,307</u>
Creditors: Amounts falling due within one year	14	(2,661)	(2,876)
Net current assets		1,160	1,431
		<u>7,769</u>	<u>7,616</u>
Pension scheme funding deficit	23	(4,785)	(3,696)
Total net assets after pension deficit		2,984	3,920
		<u><u>2,984</u></u>	<u><u>3,920</u></u>
Income Funds			
Unrestricted funds			
General funds		5,808	5,298
Designated funds	19	656	1,000
Pension reserve	23	(4,785)	(3,696)
		<u>1,679</u>	<u>2,602</u>
Restricted funds	18	1,305	1,318
Total funds		2,984	3,920
		<u><u>2,984</u></u>	<u><u>3,920</u></u>

These financial statements were approved by the Board of Trustees and authorised for issue on 23 April 2020.

Prof SM Richardson
President

Mr IJ Martin
Honorary Treasurer

Consolidated cash flow statement for the year ended 31 December 2019

	<i>Note</i>	2019 £000	2018 £000
Cash flows from operating activities	<i>21</i>	223	(749)
Cash flows from investing activities:			
Dividends and interest from investments	<i>6</i>	77	98
Purchase of fixed asset investments	<i>12</i>	(77)	(98)
Disposal of fixed asset investments	<i>12</i>	-	1,250
Purchase of furniture and equipment	<i>11</i>	-	(10)
Net cash provided by / (used in) investing activities		-	1,240
Change in cash and cash equivalents in the reporting period		223	491
Cash and cash equivalents at the start of the reporting period		2,889	2,459
Change in cash and cash equivalents due to exchange rate movements		(85)	(61)
Cash and cash equivalents at the end of the reporting period		3,027	2,889

Charity cash flow statement for the year ended 31 December 2019

	<i>Note</i>	2019 £000	2018 Restated £000
Cash flows from operating activities	<i>21</i>	195	(981)
Cash flows from investing activities:			
Dividends and interest from investments	<i>6</i>	77	98
Purchase of fixed asset investments	<i>12</i>	(77)	(98)
Disposal of fixed asset investments	<i>12</i>	-	1,250
Purchase of furniture and equipment	<i>11</i>	-	(10)
Net cash provided by / (used in) investing activities		-	1,240
Change in cash and cash equivalents in the reporting period		195	259
Cash and cash equivalents at the start of the reporting period		2,444	2,180
Change in cash and cash equivalents due to exchange rate movements		(11)	5
Cash and cash equivalents at the end of the reporting period		2,628	2,444

Notes forming part of the financial statements for the year ended 31 December 2019

1 Accounting policies

Basis of preparation

The financial statements have been prepared in accordance with the Statement of Recommended Practice: 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) (effective 1 January 2015) – (Charities SORP (FRS 102)); and the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005 and regulations 6 and 8 of the Charities Accounts (Scotland) Regulations 2006.

The financial statements have been prepared under the historical cost convention with items recognised at cost or transaction value unless otherwise stated in the relevant note(s) to these accounts.

The financial statements are presented in Sterling (£).

The Institution meets the definition of a public benefit entity as defined by FRS 102.

Preparation of the accounts on a going concern basis

Since the significance of the economic impacts of the COVID-19 outbreak have become apparent, the Trustees have reviewed in detail the Institution's position and the appropriate basis on which to prepare the financial statements. The Trustees anticipate that there will be significant adverse impacts in several of its income streams as noted in note 24, Post Balance Sheet Events. The Trustees have considered projections to the end of 2021, together with a longer term assessment, to stress test the financial resilience of the Institution which take into account the fall in value of investments and potential decline in income. Whilst the Trustees recognise that 2020 will be a challenging year and it is likely that it will be necessary to draw on some of the Institution's reserves, which have been established to provide financial resilience, they have considered that it remains appropriate to prepare the financial statements on a going concern basis. The full impact of the COVID-19 outbreak cannot presently be estimated with any certainty, but the stress testing of the Institution's financial position has satisfied the Trustees that it has adequate reserves and mitigation strategies available to deal with the impact of the outbreak as it unfolds.

The principal accounting policies adopted by the Institution are set out below:

Basis of consolidation

The financial statements consolidate the financial statements of the UK and Australian charitable bodies, its wholly owned UK trading subsidiary IChemE Ltd and its not-for-profit subsidiaries IChemE in Malaysia, IChemE in New Zealand and IChemE in Singapore Ltd, by virtue of the control exercised by the charity. The results of the subsidiaries are consolidated on a line by line basis. The results of the subsidiaries are summarised in note 3 of the financial statements.

Income

Income is recognised when the Institution has entitlement to the income, any performance conditions attached to the income have been met, it is probable that the income will be received, and the amount can be measured reliably.

Donations are recognised when the Institution has entitlement to the funds, it is probable that the income will be received, and the amount can be measured reliably.

Legacy gifts are recognised on a case by case basis following the granting of probate when the administrator of the estate has communicated in writing both the amount and settlement date. In the event that the gift is in the form of an asset other than cash or financial asset traded on a recognised stock exchange, recognition is subject to the value of the gift being reliably measurable with a degree of reasonable accuracy and the title to the asset having been transferred to the charity.

Subscriptions and events income are accounted for in the year to which they apply. Subscription income received during the year that relates to a subsequent financial accounting period is carried forward as a creditor in the balance sheet and shown as deferred income.

Interest and dividends on investments are accounted for when receivable.

Expenditure

Liabilities are recognised as expenditure as soon as there is a legal and constructive obligation committing the Institution to the expenditure, it is probable that settlement will be required, and the amount of the obligation can be measured reliably.

1 Accounting policies (continued)

All expenditure is included in the statement of financial activities on an accruals basis.

Expenditure is recorded net of value added tax unless irrecoverable.

All expenditure, including support costs, are allocated or apportioned to the applicable expenditure headings in the statement of financial activities.

Allocation of support and governance costs

Governance costs comprise all costs involving the public accountability of the charity and its compliance with regulation and good practice.

Governance and support costs relating to charitable activities have been apportioned on the basis of staff costs associated with each activity. The allocation of support and governance costs is analysed in note 8.

Operating leases

Operating lease rentals are charged to the statement of financial activities on a straight line basis over the terms of the lease.

Tangible fixed assets and depreciation

Fixed assets are recorded at cost or valuation, net of depreciation and any provision for impairment. Expenditure on individual fixed assets costing over £2,500 is capitalised.

Depreciation is charged on a straight line basis to write off the cost or valuation less the estimated residual value of assets over their estimated useful lives as at the following rates:

Freehold buildings	-	5%
Leasehold buildings	-	20%
Office equipment	-	15%
Computer software	-	33%

Freehold land is not depreciated.

Freehold property at Rugby was valued on the basis of open fair value for their existing use by Chartered Surveyors in 1999. Depreciation is charged on the building element of property at Rugby at the rate of 5% per annum.

Investments

Fixed asset investments are initially recorded at their transaction value and subsequently measured at their fair value as at the balance sheet date using the closing bid price. The statement of financial activities includes the net gains or losses arising on revaluation and disposals throughout the year.

Realised gains or losses on investments are calculated as the difference between the sales proceeds and their fair value at 31 December (or historical cost if purchased within the year). Unrealised gains or losses are derived from the movement in fair values during the year.

The Institution does not acquire put options, derivatives or other complex financial instruments.

Fund accounting

The Institution has different types of funds which require separate disclosure. These are as follows:

- **Restricted income funds**

These are earmarked by the donor for specific purposes within the overall aims of the Institution. The income generated must be used in accordance with the specific purpose.

- **Unrestricted funds**

Unrestricted funds comprise funds which are expendable at the discretion of the Board of Trustees in connection with the objects of the Institution.

Foreign exchange gains and losses

Foreign currency transactions are translated into sterling at the rates ruling when they occurred. Foreign currency monetary assets and liabilities are translated at the rates ruling at the balance sheet dates. Any differences are taken through the statement of financial activities.

1 Accounting policies (continued)

Pension costs

Employees of the charity are entitled to join a group personal pension plan. This is a defined contribution pension scheme with assets held in the names of the individual members and managed by Standard Life Assurance Co Ltd. The charity contribution is restricted to the contributions disclosed in note 23. The costs of the defined contribution scheme are included within staff costs and are charged to the statement of financial activities in the year in which they become payable.

The charity also operates a defined benefit pension scheme. The scheme was closed to new members and future service accruals in 2006. The assets of the scheme are held separately from those of the Institution in an independently administered fund.

The difference between the fair value of the assets held in the defined benefit pension scheme and the scheme's liabilities measured on an actuarial basis using the projected unit method are recognised in the balance sheet as a pension asset or liability as appropriate. Changes in the defined pension scheme asset or liability arising from factors other than cash contribution by the Institution are charged to the Statement of Financial Activities in accordance with FRS 102.

Provisions

Provisions are recognised when the Institution has a present obligation, legal or constructive, as a result of a past event, it is probable that the Institution will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Financial instruments

Financial assets, other than fixed asset investments, are initially measured at transaction price (including transaction costs) and subsequently held at cost, less any impairment.

Financial liabilities are classified according to the substance of the financial instrument's contractual obligations, rather than the financial instrument's legal form. Financial liabilities are initially measured at transaction price (including transaction costs) and subsequently held at amortised cost.

Judgements in applying accounting policies and key sources of estimation uncertainty

In preparing these financial statements, the Trustees are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from those estimates and underlying assumptions are continually reviewed.

The following are critical judgements that the Trustees have made in the process of applying the Institution's accounting policies:

- determining whether leases entered into by the group either as a lessor or a lessee are operating leases or finance leases. These decisions depend on an assessment of whether the risks and rewards of ownership have been transferred from the lessor to the lessee on a lease by lease basis.

Other key sources of estimation uncertainty:

- Tangible fixed assets (see note 11). Tangible fixed assets are depreciated over their useful lives taking into account residual values where appropriate. The actual lives of these assets are assessed annually and may vary depending on a number of factors. In assessing asset lives, factors such as life cycle and maintenance programmes are taken into account. Residual value assessments consider issues such as the remaining life of the asset and project disposal values.
- Trade debtors (see note 13). At each reporting date, trade debtors are assessed for recoverability. If there is any evidence of impairment, the carrying amount of the debtor is reduced to its recoverable amount. The impairment loss is recognised immediately in the income statement.
- Pensions costs (see note 23). The defined benefit pension scheme obligations are based on actuarial assumptions such as discount rate, the expected rate of return on scheme assets, and mortality rates, which are extensively detailed in note 23.

2 Prior period adjustment

Reconciliation of funds:

	1 Jan 2018 £000	31 Dec 2018 £000
Funds as previously stated	2,375	2,155
Adjustments arising:		
Reclassification of subsidiary operations as a branch	1,344	1,639
	<u>3,719</u>	<u>3,794</u>

Reconciliation of net income / (expenditure) to the previous financial period:

	2018 £000
Net income / (expenditure) as previously reported	(609)
Adjustments arising:	
Reclassification of subsidiary operations as a branch	295
	<u>(314)</u>

The prior period adjustment has arisen as a result of a review of the legal status of the Charity's operations in Australia. These activities have previously been reported as a subsidiary undertaking but following a review in the year the Trustees have confirmed that these operations should be reported as a branch inline with the requirements of the Charities SORP. The impact of the adjustment is to include the branch income / expenditure and assets and liabilities in the charity only Statement of Financial Activities and Balance Sheet, the consolidated position has been unaffected by the adjustment.

	31 Dec 2018 As previously stated £000	31 Dec 2018 As restated £000	Prior period Adjustment £000
Income			
Qualifying Chemical Engineers	3,268	3,725	457
Operating a Learned Society for Chemical Engineers	3,111	3,857	746
Expenditure			
Qualifying Chemical Engineers	2,695	2,850	155
Operating a Learned Society for Chemical Engineers	4,246	4,999	753
Fixed assets			
Computers	12	21	9
Current assets			
Debtors	1,505	1,651	146
Cash at bank	658	2,444	1,786
Creditors amounts due within one year	2,486	2,788	302
Funds			
General funds	3,533	5,172	1,639

3 Results of subsidiaries

The summary financial performance and position of the subsidiaries is shown below:

	IChemE Ltd	IChemE in Malaysia	IChemE in New Zealand	IChemE in Singapore Ltd	2019 Total	2018 Restated Total
	£000	£000	£000	£000	£000	£000
Income	148	226	80	0	454	680
Expenditure	(89)	(178)	(70)	(2)	(339)	(469)
Net Income / Expenditure	59	48	10	(2)	115	211
Amount gift aided to the Institution	(59)	-	-	-	(59)	(95)
Retained in subsidiary	-	48	10	(2)	56	116

Balance sheets

	IChemE Ltd	IChemE in Malaysia	IChemE in New Zealand	IChemE in Singapore Ltd	2019 Total	2018 Restated Total
	£000	£000	£000	£000	£000	£000
Fixed assets	-	-	1	-	1	2
Current assets	101	194	223	-	518	534
Current liabilities	(101)	(169)	(60)	(12)	(342)	(410)
Net current assets	-	25	163	(12)	176	124
Total net assets	-	25	164	(12)	177	126

IChemE Ltd (company number 2817128) is a company limited by shares, incorporated in the United Kingdom.

IChemE in Malaysia (PPM-026-14-23111988) is a registered society in Malaysia.

IChemE in New Zealand (society number 980425) is an incorporated society in New Zealand.

IChemE in Singapore Ltd (201523087E) is a company limited by guarantee in Singapore.

4 Income from donations and legacies

Group and Charity	2019	2018
	£000	£000
Donations	29	73
Legacies	-	150
	29	223

5 Analysis of income from charitable activities

	Group		Charity	
	2019	2018	2019	2018 Restated
	£000	£000	£000	£000
<i>Qualifying Chemical Engineers:</i>				
Membership subscription and accreditation fees	3,907	3,873	3,762	3,725
<i>Operating a Learned Society for Chemical Engineers:</i>				
Journals & publications	989	1,009	989	1,009
Knowledge communities	394	395	390	394
Conferences, seminars & events	723	812	656	608
Provision of training	1,730	1,891	1,640	1,788
Other income	16	31	16	31
Subscriptions to technical centres (restricted funds)	25	27	25	27
	<u>7,784</u>	<u>8,038</u>	<u>7,478</u>	<u>7,582</u>

6 Investment income

Group and Charity	2019 £000	2018 £000
Interest receivable	2	9
Dividends receivable	75	89
	<u>77</u>	<u>98</u>

7 Analysis of expenditure on charitable activities

Group	Direct activity costs £000	Support costs £000	2019 Total £000	2018 Total £000
Qualifying Chemical Engineers	1,875	1,181	3,056	2,891
Operating a Learned Society for Chemical Engineers	3,689	1,321	5,010	5,301
	<u>5,564</u>	<u>2,502</u>	<u>8,066</u>	<u>8,192</u>

Expenditure on charitable activities was £8,066,000 (2018: £8,192,000) of which £7,999,000 was unrestricted (2018: £8,122,000) and £67,000 was restricted (2018: £70,000).

Charity	Direct activity costs £000	Support costs £000	2019 Total £000	2018 Restated Total £000
Qualifying Chemical Engineers	1,832	1,140	2,972	2,850
Operating a Learned Society for Chemical Engineers	3,554	1,285	4,839	4,999
	<u>5,386</u>	<u>2,425</u>	<u>7,811</u>	<u>7,849</u>

7 Analysis of expenditure on charitable activities (continued)

Net income for the year is stated after charging / (crediting):

	Group		Charity	
	2019	2018	2019	2018
	£000	£000	£000	Restated £000
Depreciation	90	92	89	84
Operating leases:				
Plant and machinery	16	18	16	18
Land and buildings	67	229	42	199
Exchange rate differences	(68)	(61)	(24)	6
	<u>90</u>	<u>92</u>	<u>89</u>	<u>84</u>

8 Analysis of governance and support costs

Included within expenditure on charitable activities are governance and support costs amounting to £2,502,000 (2018: £2,546,000). These are analysed as:

	Group		Charity	
	2019	2018	2019	2018
	£000	£000	£000	Restated £000
Staff costs	1,026	1,077	984	1,040
Finance	243	225	228	201
IT	446	373	440	366
Facilities & HR	585	622	576	621
Management	137	146	135	143
Governance costs	65	103	62	100
	<u>2,502</u>	<u>2,546</u>	<u>2,425</u>	<u>2,471</u>

Finance costs for the group include exchange differences arising on the translation of the assets and liabilities of the Institution's overseas subsidiaries from their functional currency to sterling (£) using the closing exchange rate. The total amount included in finance costs was an exchange loss of £76,000 (2018: £68,000).

The governance and support costs have been apportioned across the charitable activities on the basis of staff time associated with each activity. The charge to each activity was as follows:

	Group		Charity	
	2019	2018	2019	2018
	£000	£000	£000	Restated £000
Qualifying Chemical Engineers	1,181	1,144	1,140	1,123
Operating a Learned Society for Chemical Engineers	1,321	1,402	1,285	1,348
	<u>2,502</u>	<u>2,546</u>	<u>2,425</u>	<u>2,471</u>

Analysis of governance costs:

	Group		Charity	
	2019	2018	2019	2018
	£000	£000	£000	Restated £000
External audit	32	25	32	25
General meeting costs	14	29	13	27
Legal & professional fees	18	25	16	24
Governance reform	1	24	1	24
	<u>65</u>	<u>103</u>	<u>62</u>	<u>100</u>

9 Analysis of trustee remuneration and expenses

Group and Charity	2019 £000	2018 £000
Expenses paid to or on behalf of 13 (2018:17) Trustees in respect of travel, subsistence and accommodation costs	46	51

The Trustees give freely their time and expertise without any form of remuneration or other benefit in cash or kind (2018: £nil).

10 Analysis of staff costs and remuneration to key management personnel

The average monthly headcount for the group and charity during the year was 99 (2018: 97). The number of full time equivalent persons employed by the group and charity during the year was as follows:

	Group		Charity	
	2019	2018	2019	2018 Restated
Qualifying Chemical Engineers	32	30	28	27
Operating a Learned Society for Chemical Engineers	36	33	34	30
Management and Administration	21	25	20	24
	<u>89</u>	<u>88</u>	<u>82</u>	<u>81</u>

The aggregate payroll costs of these persons were as follows:

	Group		Charity	
	2019 £000	2018 £000	2019 £000	2018 Restated £000
Wages and salaries	3,133	3,066	3,026	2,949
Social security costs	267	262	265	261
Pension scheme contributions	282	274	269	260
Defined benefit pension scheme operating costs	82	83	82	82
Employee benefits	40	43	40	43
	<u>3,804</u>	<u>3,728</u>	<u>3,682</u>	<u>3,595</u>

During 2019, £31,000 (2018: £80,000) was paid out as redundancy or termination payments.

The numbers of employees, including the Chief Executive, whose total employee benefits, excluding employer pension contributions, exceeded £60,000, fell within the following ranges:

	Group		Charity	
	2019	2018	2019	2018
£60,001 - £70,000	1	-	1	-
£70,001 - £80,000	1	-	1	-
£80,001 - £90,000	2	3	2	3
£90,001 - £100,000	1	1	1	1
£100,001 - £110,000	1	2	1	2
£200,001 - £210,000	1	1	1	1

The number of employees who earned more than £60,000 for whom pension benefits are accruing under the defined contribution pension scheme is 5 (2018: 5). Contributions in respect of these employees amounted to £53,000 (2018: £60,000).

The Institution considers its key management personnel to comprise the Board of Trustees, the Chief Executive and the Senior Management Team. The total employment benefits of 5 (2018: 7) key management personnel staff, including employer pension contributions and employer's national insurance, were £662,000 (2018: £824,000).

11 Tangible fixed assets

Group	Freehold Property	Short leasehold property	Office equipment	Computers	Total
	£000	£000	£000	£000	£000
Cost or valuation					
At beginning of year	1,800	18	215	480	2,513
Additions	-	-	-	-	-
Disposals	-	-	(2)	(71)	(73)
At end of year	1,800	18	213	409	2,440
Depreciation					
At beginning of year	851	18	212	457	1,538
Charge for the year	76	-	2	12	90
Disposals	-	-	(2)	(71)	(73)
At end of year	927	18	212	398	1,555
<i>Net book value</i>					
At 31 December 2019	873	-	1	11	885
At 31 December 2018	949	-	3	23	975
Charity					
	£000	£000	£000	£000	£000
Cost or valuation					
At beginning of year	1,800	18	216	443	2,477
Additions	-	-	-	-	-
Disposals	-	-	(2)	(71)	(73)
At end of year	1,800	-	214	372	2,404
Depreciation					
At beginning of year	851	18	213	422	1,504
Charge for the year	76	-	2	11	89
Disposals	-	-	(2)	(71)	(73)
At end of year	927	18	213	362	1,520
<i>Net book value</i>					
At 31 December 2019	873	-	1	10	884
At 31 December 2018	949	-	3	21	973

Freehold property at 31 December 2019 includes land at valuation of £280,000 (2018 £280,000) which is not depreciated.

12 Fixed asset investments

Group and Charity	2019	2018
	£000	£000
Fair value at 1 January	5,210	6,825
Acquisitions at cost	1,866	3,190
Proceeds of disposals	(1,843)	(4,408)
Net gains / (loss) on revaluation	491	(397)
	<hr/>	<hr/>
Fair value at 31 December	5,724	5,210
	<hr/> <hr/>	<hr/> <hr/>
Historical cost at 31 December	3,721	3,698
	<hr/> <hr/>	<hr/> <hr/>

All investments are carried at their fair value. An analysis of the fair value of the investments at 31 December 2019 is as follows:

Group and Charity	2019	2018
	£000	£000
Equities	3,428	2,919
Fixed Interest	1,349	1,406
Other	678	542
Cash	269	343
	<hr/> <hr/>	<hr/> <hr/>

Investments in Subsidiaries

The Charity holds 2 shares of £1 each in its wholly owned trading subsidiary company IChemE Ltd which is incorporated in the United Kingdom. These are the only shares allotted, called up and fully paid. The activities and results of this company are summarised in note 3.

13 Debtors

	Group		Charity	
	2019	2018	2019	2018
	£000	£000	£000	Restated £000
Trade debtors	238	736	192	710
Amount due from subsidiaries	-	-	244	321
Other debtors	32	28	29	40
Prepayments and accrued income	524	654	453	580
	<hr/>	<hr/>	<hr/>	<hr/>
	794	1,418	918	1,651
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

14 Creditors: amounts falling due within one year

	Group		Charity	
	2019	2018	2019	2018
	£000	£000	£000	Restated £000
Trade creditors	400	355	385	354
Other creditors	376	401	376	401
Taxation and social security	106	96	100	92
Accruals	232	274	201	249
Deferred income	1,547	1,750	1,500	1,692
	<hr/>	<hr/>	<hr/>	<hr/>
	2,661	2,876	2,562	2,788
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

Deferred income relates to annual subscriptions payments and events income which have been paid to the Institution in advance. All deferred income is released to the statement of financial activities in the following year.

15 Provisions for liabilities

	Group		Charity	
	2019 £000	2018 £000	2019 £000	2018 £000
At 1 January	-	81	-	81
Additional provisions in the year	-	-	-	-
Amounts paid in the year	-	(69)	-	(69)
Transferred to Statement of Financial Activities	-	(12)	-	(12)
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
At 31 December	-	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

16 Commitments

Total future commitments under non-cancellable operating leases are as follows:

Group	2019		2018	
	Land and buildings £000	Other £000	Land and Buildings £000	Other £000
Amounts falling due:				
In less than one year	153	9	64	13
In the second to fifth years inclusive	531	25	121	-
Over five years	18	-	-	-
	<u>702</u>	<u>34</u>	<u>185</u>	<u>13</u>
	<u>702</u>	<u>34</u>	<u>185</u>	<u>13</u>

Charity	2019		2018 Restated	
	Land and buildings £000	Other £000	Land and Buildings £000	Other £000
Amounts falling due:				
In less than one year	135	9	50	13
In the second to fifth years inclusive	518	25	121	-
Over five years	18	-	-	-
	<u>671</u>	<u>34</u>	<u>171</u>	<u>13</u>
	<u>671</u>	<u>34</u>	<u>171</u>	<u>13</u>

A first charge of £500,000 was placed on the freehold premises at Rugby in favour of the Defined Benefit Pension Scheme in March 2017.

17 Financial instruments

	Group		Charity	
	2019 £000	2018 £000	2019 £000	2018 Restated £000
Financial assets				
Financial assets measured at fair value	5,724	5,210	5,724	5,210
Financial assets measured at amortised cost	270	764	465	1,071
	<u>6,000</u>	<u>5,974</u>	<u>6,189</u>	<u>6,281</u>
Financial liabilities				
Financial liabilities measured at amortised cost	1,008	1,030	962	1,004
	<u>1,008</u>	<u>1,030</u>	<u>962</u>	<u>1,004</u>

Financial assets measured at fair value comprise fixed asset investments. Financial assets measured at amortised cost comprise trade debtors, other debtors and amounts owed by subsidiary companies. Financial liabilities measured at amortised cost comprise trade creditors, other creditors, amounts owed to subsidiary companies and accruals.

18 Analysis of movements in restricted funds

Group and Charity	International Process Safety Group (IPSG)	Medals & Awards (MM Sharma / SIESO)	John Collier Memorial Fund	Andrew Legacy Fund	Total
	£000	£000	£000	£000	£000
At 1 January 2019	57	13	35	1,213	1,318
Income	25	29	-	-	54
Expenditure	(29)	(2)	-	(36)	(67)
Transfer between funds	-	-	-	-	-
At 31 December 2019	53	40	35	1,177	1,305

The IPSG funds relates to an industry funded technical centre which is administered in accordance with its Statute.

In 2018, the Institution received a donation of £13,000 from the JB Joshi Foundation which is to be used for the creation of a new award, to be known as the MM Sharma Medal, for excellence in the field of chemical engineering. An award of £1,000 will be made to the winner(s) of the medal, and the donation will also be used to fund administration expenses of up to £250 a year.

The SIESO Medal was launched early 2019 following a bequest of £29,500 from SIESO (a society that Shared Information and Experience for Safer Operation) which ceased operations in 2018. The medal seeks to raise awareness of process safety among science, business and engineering students. It consists of an award of £750 and up to £250 in travel allowance to attend the presentation, and is awarded to one or more students for an excellent presentation on major accidents and learning outcomes

The John Collier Memorial Fund seeks to have a two yearly Lecture and Medal ceremony. The capital and the income generated are to be used to fund the award and lectures in perpetuity.

The Andrew Legacy Fund seeks to hold an annual medal lecture on the theme of ‘The Science of Formulation of Heterogeneous Catalysts’ and to support academic research in enhancing the science of formulation of heterogeneous catalysts. The Institution has set up the Andrew Fellowship which funds up to two early career researchers a year to undertake research in the field of Heterogeneous Catalysts. The Fellowship consists of a stipend of £10,000 a year plus £5,000 a year in expenses for a period of up to four years.

19 Analysis of movements in unrestricted designated funds

Group and Charity	IT Transformation Programme	Total
	£000	£000
At 1 January 2019	1,000	1,000
Expenditure	(344)	(344)
	<hr/>	<hr/>
At 31 December 2019	656	656
	<hr/> <hr/>	<hr/> <hr/>

In 2018, the Trustees set aside £1,000,000 as a designated fund for an IT Transformation Programme which will run over a two to three year period. The Programme is made up of a number of projects to improve the Institution's IT services and to deliver the digitalisation strategy.

20 Analysis of group and charity net assets between funds

Fund balances at 31 December 2019 are represented by:

Group	Unrestricted funds £000	Restricted Funds £000	Total £000
Tangible fixed assets	885	-	885
Investments	4,585	1,140	5,724
Pension scheme funding deficit	(4,785)	-	(4,785)
Net current assets / (liabilities)	995	165	1,160
	<hr/>	<hr/>	<hr/>
Total net assets	1,679	1,305	2,984
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>
Charity	Unrestricted funds £000	Restricted Funds £000	Total £000
Tangible fixed assets	884	-	884
Investments	4,585	1,140	5,724
Pension scheme funding deficit	(4,785)	-	(4,785)
Net current assets / (liabilities)	819	165	984
	<hr/>	<hr/>	<hr/>
Total net assets	1,502	1,305	2,807
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

21 Reconciliation of net movement in funds to net cash flow from operating activities

Group	2019	2018
	£000	£000
Net Income	320	(201)
Adjustments for:		
Depreciation on tangible fixed assets	90	92
(Gains)/losses on investments	(491)	397
Dividends and interest from investments	(77)	(98)
Investment management fees	54	66
Difference between pension charge and cash contribution	(167)	(1,259)
Decrease/(increase) in debtors	624	(220)
(Decrease)/increase in creditors	(215)	494
(Decrease)/increase in provisions	-	(81)
Change in cash and cash equivalents due to exchange rate movements	85	61
	<hr/>	<hr/>
Net cash from/(used in) operating activities	223	(749)
	<hr/> <hr/>	<hr/> <hr/>
Charity	2019	2018
	£000	Restated £000
Net Income	269	(314)
Adjustments for:		
Depreciation on tangible fixed assets	89	85
(Gains)/losses on investments	(491)	397
Dividends and interest from investments	(77)	(98)
Investment management fees	54	66
Difference between pension charge and cash contribution	(167)	(1,259)
Decrease/(increase) in debtors	733	(333)
(Decrease)/increase in creditors	(226)	564
(Decrease)/increase in provisions	-	(81)
Change in cash and cash equivalents due to exchange rate movements	11	(5)
	<hr/>	<hr/>
Net cash from/(used in) operating activities	195	(981)
	<hr/> <hr/>	<hr/> <hr/>

22 Related party transactions

During the year recharges have been made between the charity and its subsidiary undertakings. These relate to direct costs and staff costs incurred by one party on behalf of the other, and for income collected by the overseas subsidiaries from members for third party registrations fees, journal subscription fees and benevolent fund donations. The net amount recharged was:

	Net amount recharged from / (to) the charity in the year		Balance outstanding at year end included in debtors / (creditors) for the charity	
	2019 £000	2018 £000	2019 £000	2018 £000
IChemE Ltd	32	51	90	151
IChemE in Malaysia	7	(48)	89	104
IChemE in New Zealand	9	10	18	10
IChemE in Singapore Ltd	2	(2)	12	10
	<hr/>	<hr/>	<hr/>	<hr/>
	50	11	209	275
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

IChemE Ltd gift aids its operating profit to the charity and the balance of £59,000 (2018: £95,000) is included in debtors for the charity at year end.

23 Pension scheme

Defined contribution scheme

The Institution's defined contribution pension scheme for UK based staff was established in April 2006 following the closure of the defined benefit scheme. The assets of the scheme are held separately from those of the charity and are currently administered by Standard Life Assurance Co Ltd. The Institution pays one and a half times the percentage that the employee contributes up to a maximum of 12%. The total pension cost charge to the Institution, representing contributions payable to the fund amounted to £231,000 (*£225,000*).

The total pension cost for the staff of the branch in Australia, which is paid under the superannuation scheme at 9.5% of base salary, was £38,000 (*£34,000*).

Pension costs relating to the employees of the Institution's subsidiaries IChemE in Malaysia, IChemE in New Zealand and IChemE in Singapore Ltd amounted to £13,000 (*£15,000*).

Defined benefit scheme

The Institution operates a defined benefit pension arrangement called the Institution of Chemical Engineers Pension Scheme. The Scheme provides benefits based on salary and length of service on retirement, leaving service or death. In 2006, the Scheme was closed to new members, future service accruals and salary revaluations were limited with effect from 5 April 2006.

The scheme is funded with the assets being held by the pension scheme's trustees separately from the assets of the Institution.

The Scheme is subject to the Statutory Funding Objective under the Pensions Acts 2004. A valuation of the Scheme is carried out at least every three years to determine whether the Statutory Funding Objective is met. As part of the process the Institution must agree with the trustees of the Scheme the contributions to be paid to address any shortfall against the Statutory Funding Objective.

The most recent comprehensive actuarial valuation of the Scheme was carried out as at 31 January 2018. The results of that valuation will be updated by an independent qualified actuary on an annual basis allowing for cashflows in and out of the Scheme and for changes to assumptions over that period.

The recovery plan, updated with the latest triennial valuation, agreed that the annual contribution level from the Institution into the Scheme would remain at £265,000 per annum, increasing in line with CPI, from 1 February 2018 to 31 January 2028. In addition, a lump sum payment of £1,150,000 was paid into the Scheme in December 2018. Administrative and other expenses of the Scheme are payable separately by the Institution.

The Institution has also provided additional security to the Scheme by way of a charge of £500,000 on the freehold property in Rugby. The security agreement to put the charge in place was submitted to the Land Registry in March 2017.

The principal assumptions used to calculate Scheme liabilities include:

	2019 %	2018 %
Discount rate	2.0% pa	2.9% pa
RPI Price Inflation	3.2% pa	3.4% pa
CPI Price Inflation	2.4% pa	2.4% pa
Pension increases applied to pensions accrued on or after 6 April 1997	2.3% pa	2.3% pa
Revaluation in deferment	2.4% pa	2.4% pa
Long term expected rate of return on the Scheme's assets net of expenses	2.0% pa	2.9% pa
Mortality assumption (see table below)	90% of 'S2NA' tables with CMI 2017 projections and a long-term rate of improvement of 1.25% pa	90% of 'S2NA' tables with CMI 2017 projections and a long-term rate of improvement of 1.25% pa
Tax-free cash	All members are assumed to take 25% of their pension as tax-free cash	All members are assumed to take 25% of their pension as tax-free cash

23 Pension scheme (continued)

The major categories of assets are as follows:

Asset category	2019 £000	2018 £000
Liability Driven Investment (LDI)	3,030	1,862
Multi-asset funds	6,101	5,236
Cash	74	1,177
	<hr/>	<hr/>
Total	9,205	8,275
	<hr/> <hr/>	<hr/> <hr/>

The return on the Scheme's assets (net of investment manager expenses) over the period to the Review Date was approximately 12.2%.

Amounts recognised in the balance sheet at 31 December 2019:

	2019 £000	2018 £000
Fair Value of Assets	9,205	8,275
Present Value of Funded Obligations	(13,990)	(11,971)
	<hr/>	<hr/>
(Deficit) in Scheme	(4,785)	(3,696)
	<hr/> <hr/>	<hr/> <hr/>

Amounts recognised in the statement of financial activities over the year:

	2019 £000	2018 £000
Interest on liabilities	342	334
Interest on assets	(239)	(198)
Past service cost	-	12
	<hr/>	<hr/>
Total	103	148
	<hr/> <hr/>	<hr/> <hr/>

Remeasurements over the year:

	2019 £000	2018 £000
(Gain) / loss on scheme assets in excess of interest	(768)	579
Experience (gains) / losses on liabilities	-	(362)
Losses / (gains) from changes to demographic assumptions	-	38
Losses / (gains) from changes to financial assumptions	2,024	(644)
	<hr/>	<hr/>
Total	1,256	(389)
	<hr/> <hr/>	<hr/> <hr/>

23 Pension scheme (continued)

Reconciliation of assets and defined benefit obligation:

	2019 £000	2018 £000
Value of assets at beginning of period	8,275	7,721
Interest on assets	239	198
Institution contributions	270	1,407
Benefits paid	(347)	(472)
Return on assets less interest	768	(579)
	<hr/>	<hr/>
Value of assets at end of period	9,205	8,275
	<hr/>	<hr/>

The change in the defined benefit obligation over the period was:

	2019 £000	2018 £000
Value of liabilities at the beginning of the period	11,971	13,065
Past service cost	-	12
Interest cost	342	334
Benefits paid	(347)	(472)
Experience (gains) / losses on liabilities	-	(362)
Changes to demographic assumptions	-	38
Changes to financial assumptions	2,024	(644)
	<hr/>	<hr/>
Defined benefit obligation at end of period	13,990	11,971
	<hr/>	<hr/>

	2019 £000	2018 £000
Actuarial (losses) / gains	(1,256)	389
	<hr/>	<hr/>

The cumulative amount of actuarial (losses) / gains recognised in the statement of financial activities is (£6,711,000) (2018: (£5,455,000)).

The annual contribution level for the period 1 February 2020 to 31 January 2021 will be increased in line with CPI from £270,300 to £274,080.

24 Post balance sheet event

The COVID-19 outbreak that has occurred since the financial year end is likely to have a significant effect on the financial position of the Institution during 2020. The Trustees anticipate significant impacts to several of its income streams, most notably to its training and events programme where physical meetings have had to be cancelled or postponed where it would have resulted in medium to large sized gatherings. In addition, the Institution's investment portfolio will be reduced as a result of the stock market falls around the world creating losses on investments. IChemE's investment policy, to hold investments in low to medium risk funds, and to diversify across two different fund managers, has helped to moderate these losses. The investments held by the Defined Benefit Pension Scheme (see note 23) are also expected to be affected by the losses in the global markets, which could impact the next triennial valuation due in January 2021 and in turn require a further deficit reduction plan to be agreed.

The full impact of the COVID-19 outbreak cannot presently be estimated with any certainty, but the stress testing of the Institution's financial position has satisfied the Trustees that it has adequate reserves and mitigation strategies to deal with the impact of the outbreak as it unfolds.