

# **Institution of Chemical Engineers**

Council's annual report and  
consolidated financial statements for the  
year ended 31 December 2017

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## Council's Report

Council is pleased to present its annual report together with the financial statements of the charity and its subsidiaries for the year ending 31 December 2017.

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*

Hill Hofstetter, Trigen House, Central Boulevard, Blythe Valley Park, Solihull, B90 8AB  
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:

##### **Council Members**

**1 January 2017 – 10 May 2017**

##### **Elected members**

Prof JPK Seville  
Dr A Jamieson  
Mr JM McGagh  
Mr KJ Rivers  
Mr SF Harrow  
Mr IJ Martin  
Dr J Glassey  
Prof L Gladden

##### **Co-opted members**

Mr WJ Harper  
Mr PR Ellis  
Dr JP Sherlock  
Prof R Amal  
Dr Abdul Aziz Abdul Raman  
Mr D Platts  
Mrs AMW Black  
Prof C Webb  
Mrs JV Atkinson

##### **Council Members**

**From 10 May 2017**

##### **Elected members**

Mr JM McGagh  
Prof JPK Seville  
Mr KJ Rivers  
Mr IJ Martin  
Dr J Glassey  
Prof L Gladden  
Mr S Moran (to 27 Sept 2018)

##### **Co-opted members**

Mr WJ Harper  
Mr PR Ellis  
Prof D York  
Prof R Amal (to 1 Jan 2018)  
Dr Abdul Aziz Abdul Raman (to 1 Jan 2018)  
Mr D Platts  
Mrs AMW Black  
Prof C Webb  
Mrs JV Atkinson

#### *Chief Executive*

Mr J Prichard (*from 30 Jan 2017*)

#### *Senior Management Team*

Mr N Atkinson: Director Qualifications & International Development (*to 28 Jul 2017*)

Mr J Blades: Deputy Chief Executive, Chief Operating Officer

Ms J Downham: Director Finance & Business

Mrs C Flavell-While: Director of Policy & Publications

Mr A Furlong: Director of Communication & Brand Development

Mr P Slane: Director Australia & New Zealand

Mr M Cloke: Director South East Asia (*3 Jan 2017 to 22 Dec 2017*)

## 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 Institution's *Strategy 2022* identified seven key strategic goals and activities to achieve these objects:

- Reach out globally to attract, recruit, develop, retain and recognise chemical engineers through internationally recognised professional qualifications.
- Grow our international footprint to become the organisation of choice for chemical engineers.
- Involve, enable, and support our members to create a committed and empowered community.
- Develop insight and opinion to offer an authoritative voice on issues that affect chemical engineers and chemical engineering.
- Inform and influence others to strengthen relationships with key stakeholders, and become a trusted advisor and valued contributor.
- Embrace digitalisation to deliver content and services anytime, anywhere.
- Develop our organisational capability to drive effective and efficient delivery.

*Strategy 2022* sets out an aim to achieve these seven strategic goals over a six-year period, from 2017 to 2022. Each goal is supported by a range of projects and aims, of which progress has already been made in 2017.

### ***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

The Institution welcomed a new CEO, Jon Prichard in February 2017. His first year in post was underpinned by a review of the Institution's governance, and finalisation of the organisation's strategy set out in the 'objectives and activities' above.

### ***We will reach out globally to attract, recruit, develop, retain and recognise chemical engineers through internationally-recognised professional qualifications***

IChemE's 2017 year-end membership total was 42,699 (2016: 44,278). This represents a 4% fall on the previous year end. The drop can be attributed to several factors; notably the ending of an Affiliate Society agreement with COIQCV in Spain and further rationalisation of our South African membership list. IChemE also experienced a higher number of deletions of members in two year's arrears, notably in South East Asia, with double digit percentage drops reported for both Malaysia and Singapore. Work on the development of a sustainable membership model remains a key element of Strategy 2022.

Despite this downward trend, the Institution elected 85 new FIChemE (Fellow) members and 459 MIChemE (Chartered Chemical Engineer) members in 2017. In addition, there were 1,416 new AMIChemE (Associate) members (direct route or upgraded from Student/Affiliate).

Training and guidance materials for Chartered Membership, Accredited Company Training Scheme and University Accreditation Assessors and Interviewers were improved. Over 230 member-volunteers received individual training, with a further 500 volunteer professional review interviewers completing their online refresher training.

The number of students applying to study undergraduate programmes at UK universities, this has reduced for the second year, including in most science-based disciplines. The number of applications and in-take for chemical engineering reduced by 12% and 4% respectively. However, IChemE's *OnCampus* work continued and 33 presentations were delivered to chemical engineering students in Australia, Europe, and South East Asia. New chemical engineering programmes were introduced at the University of Greenwich and Queen Mary University.

Significant enhancement was made to the Institution's university course accreditation documentation in August. The changes reflect the introduction of Virtual Accreditation Panels (VAPs), new information on Benchmarking, and arrangements for joint visits.

Five new degree programmes received IChemE accreditation including Charles Darwin University in Australia's Northern Territory; Chester, Huddersfield and Hull in the UK; and the University of Patras – the first university programme in Greece to receive such recognition. In total, 67 chemical engineering degree programmes were reviewed in 2017.

### ***We will grow our international footprint to become the organisation of choice for chemical engineers***

A diverse range of international activities shaped the Institution's continued commitment to sharing knowledge and best practice in 2017.

IChemE Safety Centre (ISC) speakers delivered 12 keynote presentations – in Australia, Bahrain, the Czech Republic, Malaysia, New Zealand, Norway, Portugal, Singapore, South Africa, Spain, the UK and the US. In collaboration with the Mary Kay O'Connor Process Safety Center (MKOPSC), ISC also launched *Process Safety for the 21st Century and Beyond* at the 10th World Congress of Chemical Engineering in Barcelona, Spain, and at the annual MKOPSC Symposium in Texas, US.

The report examines current challenges in process safety and sets out the latest thinking from industry, academia and regulators.

In Malaysia, IChemE delivered the Symposium of Malaysian Chemical Engineers (SOMChE) for the first time – previous events have been hosted by a Malaysian University. The Institution also recognised a century of progress in the palm oil sector at a special event – *100 Years in the Palm Oil Industry: 50 Years of Process Engineering*. The meeting considered the importance of chemical and process engineering in the sustainable development of the world's second-largest palm oil producer.

In October, IChemE in Singapore became a U-Associate of the National Trade Union Congress of Singapore. The Institution joined a unique alliance of oil, petrochemical, energy and chemicals sector stakeholders to accredit and raise safety standards among Singapore's process technicians and engineers.

The Middle East also saw a new development with the appointment of Petroleum Development Oman's Henry Mangkusasono as an IChemE Senior Ambassador. Mangkusasono's role was confirmed at the inaugural meeting of IChemE's new Omani Member Group, which had over 150 attendees.

The IChemE Global Awards programme recognised excellence in chemical engineering from around the world, with more than 140 entries from 25 countries in 2017. Ceremonies were held in Birmingham, UK, Kuala Lumpur, Malaysia, and Singapore.

There was further recognition for outstanding achievement with 22 recipients of IChemE medals and prizes in 2017.

***We will involve, enable, and support our members to create a committed and empowered community***

IChemE depends on its professional membership to develop the next generation of chemical engineers, influence policy, and promote best practice.

8 new training courses and 5 new online courses were introduced in 2017. More than 200 delegates participated in the online training, 150 attended re-vamped HAZOP training, and Henry Kister's practical distillation technology training attracted 70 delegates from around the world. In-house company training was delivered in Belgium, Canada and Finland. A record level of in-company training was delivered through IChemE's Australian operation during the year, including process safety training to remote parts of Western Australia and Indonesia.

2017 saw GlaxoSmithKline, GHD, and T Musk Engineering awarded their first Accredited Company Training Schemes (ACTS), and reaccreditation of a further 14 schemes. ACTS are designed to develop the competencies of graduate chemical engineers, to help them achieve Chartered status.

Member-led groups continued work to increase knowledge of technical subjects and encourage networking in specific regions. IChemE's Water Special Interest Group celebrated their 30<sup>th</sup> anniversary with a Young Process Engineer Prize, sponsored by Arup. More than 110 online technical presentations were held, and 34 technical meetings – including a new Food & Drink conference organised by the Food & Drink Special Interest Group. There were 168 member events around the world, including 8 in Malaysia, 15 in New Zealand and 4 local annual dinners in Aberdeen, Cork, Hull and Humberside.

The dissemination of process safety knowledge is critical to ensuring chemical engineers are operating safely, without risk to themselves or others. The IChemE Safety Centre grew during the year, welcoming 10 new operating partners; 2 additional operating partners and 6 new industry partners. The Centre also launched a new interactive case study, part of its interactive training offering. The new addition focuses on process safety challenges within an offshore platform environment.

Two successful *Hazards* process safety conferences were delivered in Birmingham, UK and Kuala Lumpur, Malaysia. Leading motorsport analyst Mark Gallagher delivered the Trevor Kletz Memorial Lecture at *Hazards 27* in the UK, drawing parallels between risk management in the world of motorsport and the process industries.

Working with the Process Management & Control Special Interest Group, IChemE delivered *Advances in Process Automation and Control* – a specialist conference focusing on automation in the process industries, digitalisation, and Industry 4.0. Dow Chemical CEO Andrew Liveris gave the welcome address at *Chemeca* – Australasia's premier chemical engineering conference.

***We will develop insight and opinion to offer an authoritative voice on issues that affect chemical engineers and chemical engineering***

The UK's academic and postgraduate community came together for the annual *ChemEngDayUK* at the University of Birmingham. 300 participants discussed new developments in research and teaching under the broad theme "Better Life, Better World". University College London scooped 5 best poster awards at the event, as well as best three-minute research highlight talk.

Leading thinker in industrial ecology and sustainability, Professor Roland Clift CBE FICHEM, became the 12th recipient of the George E Davis Medal in July and delivered a lecture on the role of chemical engineers in delivering a resource efficient and more sustainable world.

IChemE's Energy Centre led a workshop at the *World Engineers Summit* in Singapore. The workshop focussed on energy issues in the region and the role of chemical engineers in climate change mitigation. The Centre also co-ordinated IChemE's response to the energy and clean growth section of the UK government's Industrial Strategy Green Paper. This contributed to a collective response from UK engineering, *Engineering an economy that works for all*, which was published by the Royal Academy of Engineering in April.

IChemE's *BioFutures* work programme stepped up a gear with the establishment of four priority work strands: careers, skills, SMEs, and policy challenges. Member-led groups will work to identify how the Institution can better engage with, and support, bio-chemical engineers.

Influential members of the Institution were invited to attend *Parliamentary Links Day* with Jon Prichard, the largest science event in the Parliamentary calendar. The event saw a record turn-out of scientists and engineers, keen to discuss how the UK political landscape impacted their industry and work.

Separately, four early-career members were asked to represent the profession at *Voice of the Future* in Westminster. The event provided an opportunity for them to cross-examine UK parliamentarians on science and technology policy issues, and experience life inside the House of Commons.

Postgraduate Erin Johnson, of Imperial College London, UK, was awarded the Ashok Kumar Fellowship 2017 and a three-month work placement at the Parliamentary Office for Science and Technology (POST). Her parliamentary briefing note looked at the fire safety of building materials, in response to the UK's Grenfell Tower tragedy.

Submissions for consideration by IChemE's learned journals increased by 9% in 2017. *Process Safety and Environmental Protection* saw its Impact Factor jump by 40% to 2.905 – the highest ever reported for an IChemE journal. *Chemical Engineering Research and Design* also saw continued growth.

***We will inform and influence others to strengthen relationships with key stakeholders, and become a trusted advisor and valued contributor***

IChemE's Corporate Partner programme continued to grow in 2017, helping the Institution to establish productive links with industry. Amec Foster Wheeler, ExxonMobil, Lilly, and Process Systems Enterprise achieved Gold Corporate Partner status, with GHD, Jacobs Douwe Egberts, PM Group and Tarmac achieving Bronze.

Active engagement with the Royal Academy of Engineering's diversity concordat continued with participation in a sector-wide benchmarking exercise for diversity and inclusion. In July the Institution's Diversity and Inclusion Working Group published *Social mobility and the chemical engineering profession in the UK*. The study examined the influence of social factors, including childhood household income, on career progression.

IChemE's contribution to the *Future Climate – Engineering Solutions (FC-ES)* alliance continued with a well-attended side meeting at COP23, the United Nations Climate Change Conference in Bonn, Germany. The event focussed on good practice in national energy planning.

The well-respected IChemE Model Forms of Contract welcomed a new addition with the arrival of *The Silver Book*. Drafted with performance-based projects in mind, the publication provides a professional services contract for global use. It received a positive response from the legal community and was referenced in several legal blogs and articles. Following a nomination by IChemE, Madeleine Jones, a Chartered Chemical Engineer at Sellafield, UK, was awarded the Women's Engineering Society's Karen Burt Award. The Institution also supported WES through the promotion of International Women in Engineering Day, sharing case studies that focused on its female cohort.

***We will embrace digitalisation to deliver content and services anytime, anywhere***

Digitalisation is a key priority for the Institution, and projects will be phased throughout *Strategy 2022*.

In 2017, this began with a review of the organisations website offering. The lack of smart phone compatibility was identified as a major issue by members and this functionality is set to become a standard feature for IChemE's web presence. A new Content Management System (CMS) to deliver these capabilities was identified following extensive research by the IT team.

The first IChemE web-platform to undergo changes was [www.thechemicalengineer.com](http://www.thechemicalengineer.com) – the website for the Institution's in-house magazine. It was launched in September, providing members with a great reading experience via a multitude of platforms – from smartphone devices to tablet computers. A new booking system for events is currently in development. EventsForce Online Events started to be tested in Q4 of the year.

In terms of back-office operations, Office 2016 was installed for all UK staff, to make way for the migration of email and desktop services Office 365 – a cloud-based exchange server. Cloud storage, via One Drive has now replaced individual hard-drives. IChemE aims to become ISO:9001 certified by 2020, so further work on document control and storage is planned for 2018.



***We will develop our organisational capability to drive effective and efficient delivery***

Following a member consultation launched by IChemE (Immediate Past) President Professor Jonathan Seville in December 2016, the Institution consulted its members on options for governance reform in August and September 2017. Over 300 members shared their detailed opinions via an online survey and in one-to-one conversations. A report was prepared, and in October, Council considered the findings. Strong support was evident for several of the proposals – including more transparency for electing honorary officers, switching from Council to a smaller Board of Trustees, introducing a Congress to be the voice of the membership and scrutinise the Board, and adopting a ‘hub and spoke’ approach to the Institution’s international operations.

The pace of change was too slow for some and an Extraordinary General Meeting was called at the end of the year. This followed a motion of no-confidence in Council submitted by 50 IChemE members. Council tabled an alternative motion restating confidence in its leadership and seeking approval for the ongoing programme of strategy and governance reform. The Extraordinary General Meeting took place on 11 January 2018. Council’s position received clear support from a majority of the voting members who took part.

Key developments on the governance reform process were announced in December in advance of the Extraordinary General Meeting. This included proposals for a 12-member Board of Trustees to replace Council – with all posts open for nomination and election by the wider membership – and the creation of a new virtual Congress. The proposed Congress would scrutinise the Board’s decisions and act as an effective voice for members in all parts of the Institution. Work also started on the design of the ‘hub and spoke’ management structure - the new arrangements will deliver aligned self-sufficiency for the different parts of IChemE’s international community.

Council will continue to engage and consult with members on proposed changes to governance in 2018. The proposals and related changes to the Institution’s Charter and By-Laws will be communicated, and voted on, by members at the Annual General Meeting in May.

## **Plans for the future**

*Strategy 2022* will continue to deliver on several frontiers in 2018. In some ways, the year will be shaped by the outcomes of the AGM in May. The priorities will be based on the seven strategic pillars of *Strategy 2022*:

### ***Reach Out Globally***

- Continued progress in the area of qualifications, to ensure a sustainable professional membership. This includes work on the current registration process, and routes to becoming professionally qualified.

### ***International Footprint***

- A “Hub & Spoke” model will be introduced, to align IChemE’s international communities with the central function and improve self-sufficiency

### ***Involve & Enable Members***

- Further work in member engagement, and the appointment of a UK Country Manager to oversee member group support.
- Following a vote in favour of the governance reform proposals a Congress will be created to act as the ‘voice’ of membership, to feed into the Board of Trustees.
- A Learned Society Committee will be created to consult on the Institution’s policy priorities

### ***Inform & Influence***

- Improving internal communications to communicate IChemE’s value proposition to key stakeholders – including members, corporate partners, and other professional engineering bodies
- External campaigns that hold engineering and chemical engineers in high regard

### ***Embrace Digitalisation***

- Members will be provided with an online forum, for members-only to discuss IChemE initiatives
- The Institution will turn its focus to centralised document control and storage in 2018 using SharePoint. The Office365 upgrade will roll-out to international offices, and IChemE’s Task Centre integration software will also be upgrade in 2018.

### ***Develop Organisational Capability***

- The Governance Reform proposals will be finalised, and steps taken to ensure the membership is well-informed before they vote on changes to the Institution’s Charter and By-Laws at the AGM in May 2018. A vote in favour of the proposals will initiate a transitional period.
- IChemE’s processes will be evaluated, with plans for improvement developed – the next step towards ISO:9001 certification

## Financial Review

The financial statements for the year ended 31 December 2017 are set out on pages 17 to 35.

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 Australia, Malaysia, New Zealand and Singapore.

Council is pleased to report that 2017 was a positive year financially and the group ended the year ahead of budget.

### *Unrestricted funds*

Total group income for the year was £7,845,000 (2016: £7,663,000). The principal sources of income were:

- Membership subscription and accreditation fees totalling £3,765,000 (2016: £3,735,000).
- Within the Learned Society activity the delivery of training courses showed signs of a recovery in the second half of the year with delegate income increasing to £1,685,000 (2016: £1,524,000). Income from journals and publications saw a further increase to £957,000 (2016: £851,000) largely as a result of the continued growth in journal sales. Conferences, seminars and events generated £631,000 (2016: £909,000). Income from the Institution's knowledge communities, which includes company subscriptions to the IChemE Safety Centre and Special Interest Group activity, increased to £386,000 (2016: £247,000). Other income generated from collaboration with other entities was £36,000 (2016: £28,000).
- The sale of advertising space through the trading subsidiary IChemE Ltd saw a further decline to £212,000 (2016: £236,000) as anticipated due to organisations continuing to move away from the traditional print to online advertising.
- Within Donations and Legacies £31,000 (2016: £60,000) was received in donations for the *whynotchemeng* campaign and in December 2017 the Institution was informed that it had been left a legacy by a former member. An interim payment of £100,000, which is due to be paid in the first quarter of 2018, has been recognised in the 2017 financial statements and a further sum of money, which at the point of signing the accounts is unknown, will be paid over on finalisation of the member's estate.
- Dividends and interest on the investment portfolio was £101,000 (2016: £73,000).

Total group expenditure for the year was £7,532,000 (2016: £7,671,000). The decrease in expenditure was largely a result of the programme of cost reduction measures put in place in 2016 aimed at bringing the Institution back into a surplus position following a decline in the training and events activity in 2015 and 2016 as companies in the oil and gas sectors cut their discretionary spend.

After allowing for gains on investments of £247,000 (2016: £439,000) and a transfer from restricted funds of £402,000 (2016: £nil) the group generated net income of £962,000 (2015: £431,000). The actuarial gain on the defined benefit pension scheme of £253,000 (2016: loss £3,059,000) resulted in an increase of £1,215,000 (2016: decrease £2,628,000) in the unrestricted fund balance to £2,384,000 (2016: £1,169,000).

The Institution's wholly owned trading subsidiary, IChemE Ltd, achieved an operating profit of £95,000 (2016: £123,000), which has been gift aided to the Institution.

The results of the UK trading subsidiary and of the subsidiary undertakings in Australia, Malaysia, New Zealand and Singapore are set out in note 2 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.

During the year, the assets of the European Process Safety Centre were transferred to a new separate legal entity registered in Belgium, whose objects are aligned to the restrictions placed on the fund. The new entity, which is no longer under the control of Council, received a transfer of £180,000. A further £55,000 was transferred into unrestricted funds which represents the settlement of the liability in the defined benefit pension scheme of a former EPSC staff member.

A transfer of £347,000 was made from the Andrew Legacy Fund to unrestricted funds in 2017. This was to correct the allocation of income and unrealised gains on investment funds which had been erroneously allocated to restricted funds in previous years.

The net expenditure in restricted funds was £242,000 (2016: net income £5,000). After allowing for a transfer to unrestricted funds of £402,000 (2016: £nil) the total restricted fund balance at year end was £1,348,000 (2016: £1,992,000). The movement in restricted income funds is set out in note 17 to the financial statements.

### ***Investment policy and powers***

The investment policy adopted by Council 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 for both IChemE and the Andrew legacy restricted fund are 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 £101,000 (2016: £94,000) in interest and dividends, and generated unrealised gains of £247,000 (2016: £573,000). After taking into account management fees of £68,000 (2016: £75,000) the net return on investment funds was 3.8% (2016: 8.9%) for the year.

The market value of the combined investment funds at 31 December 2017 was £6,825,000 (2016: £6,545,000), of which £5,585,000 (2016: £4,958,000) relates to the Institution's unrestricted fund and £1,240,000 (2016: £1,587,000) relates to the Andrew legacy fund.

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. Council has 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 & Investment Committee throughout the year.

### ***Reserves policy***

The Finance and Investment 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 Council 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 2017, the level of reserves required to meet this policy was £3,500,000. The required level of reserves has decreased over the last few years as we approach the end of the lease period at our London office.

The level of unrestricted reserves freely available at the year-end was £6,671,000 (2016: £5,646,000).

This level of free reserves is stated before taking account of the pension-funding deficit of £5,344,000 (2016: £5,615,000) 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. Council is comfortable holding excess reserves due to:

- the potential increase in defined benefit pension scheme contributions which will be determined as part of the triennial valuation exercise as at 31 January 2018 which is currently underway;
- the continuing challenging economic environment in which the Institution operates which led to the drawdown of reserves in 2015 and 2016 and which is still impacting some of the Institution's key income streams;
- 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.

The total funds held at year end, after taking into account the pension-funding deficit, amounted to £3,732,000 (2016: 3,161,000). The total fund balance includes restricted funds of £1,348,000 (2016: 1,992,000).

Council has 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 Institution's governing Council.

The Institution is a registered charity in England & Wales and a charity registered in Scotland. The members of Council are the Trustees of the charity.

In 2016 Council initiated a governance review and following a period of consultation with its members the Institution will be putting forward proposed changes to its Royal Charter and By-Laws at the Annual General Meeting in May 2018.

### ***Appointment of Trustees***

The members of Council are elected in accordance with the Royal Charter and By-Laws.

Council is made up of:

- The Honorary Officers - President, Deputy President, Immediate Past President and Honorary Treasurer all of whom must be Fellows of the Institution. The President, Deputy President and Honorary Treasurer are elected annually by Council, with the President usually having been Deputy President in the previous year. The Presidential Nominations Commission recommends to Council the nominee for Deputy President.

The President serves for a term of one year plus one year preceding that as Deputy President and one year following as Immediate Past President.

The Honorary Treasurer is eligible for re-election annually up to a maximum of six years.

- Four elected ordinary members of whom at least three shall be Fellows or Chartered Members of the Institution. Ordinary members serve for a term not exceeding four years and at least one ordinary member is elected annually. In accordance with the By-Laws, voting members are invited to propose alternative nominations to those put forward by Council. In the event that more than one candidate is nominated for a vacancy, a direct election is conducted and the results are announced at the Annual General Meeting.
- Co-opted members who are appointed by Council and serve for a term not exceeding three years. The By-Laws currently allow for:

Four co-opted Vice Presidents (Qualifications, Technical, International, Australia);

One co-opted member elected by each country with more than 10% of the voting membership. These additional co-options currently apply to the UK and Australia;

Not more than three other co-opted members.

### ***Trustee induction and training***

All new members of Council receive an induction pack including the By-laws of the Institution, recent Council minutes, 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.

Council members 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 interest, which is updated annually or when any changes are reported by Council members. Procedures are in place for managing conflicts of interest that may arise during Council meetings.

### ***Institution structure***

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

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

The Institution's operations in Australia, Malaysia, New Zealand and Singapore, reported as subsidiary undertakings in the financial statements, each have their own local Boards operating under delegated authority from Council and in compliance with local regulatory requirements. In 2013, Council established a similar UK Board to enable Council itself to focus on strategic matters affecting the profession globally.

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.

There are a number of standing Boards and Committees, operating under delegated authority from Council, which have been established to facilitate the operation of the charity:

- HR & Remuneration Committee
- Audit and Risk Committee
- Finance and Investment Committee
- Nominations Committee
- Presidential Nominations Commission
- Disciplinary Committee
- Qualifications Committee
- IChemE Safety Centre Advisory Board
- Energy Centre Board
- Research Committee
- Medals and Prizes Committee
- Contracts Committee
- Disputes Resolution Committee

In addition, the Institution has an extensive network of National, Regional and Specialist 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, schools liaison visits, and networking events.

The Charter, delegated powers, membership and reporting line into Council for all Boards and Committees are set by Council.

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 members of Council and of the various Boards and Committees 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.

### ***Remuneration policy for key management personnel***

The Institution considers its key management personnel to comprise Council, the Chief Executive and the Senior Management Team. All Council members give their time freely and no Council member received remuneration in the year. Details of Council member expenses and related party transactions can be found in note 8 and 20 to the accounts.

The pay of the Chief Executive and Senior Management Team is set by the HR & Remuneration 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.

New staff will normally be appointed between 80% and 100% of the benchmark rate for their position depending on prior experience and the calibre of the appointee. They should expect to advance to the benchmark levels by approximately five percentage points a year assuming a fully satisfactory performance.

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***

Council is 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. The risk register involves identifying the types of risk the Institution faces, both internally and externally, prioritising them in terms of potential impact, likelihood and reputational impact, and identifying means of mitigating those risks or minimising the impact on the Institution should those risks materialise. The risk owners report annually on the adequacy and effectiveness of the control measures in place. The Audit & Risk committee regularly review the risk registers, concentrating on the significant strategic risks and their control measures.

A full business case, including a risk log, is populated as part of IChemE's project management process for all new ventures and activities. The risk log is maintained by the project leader and reviewed by the senior executive team.

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, Acceptance and Refusal of Donations, and PR.

Council receives 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 Council as required.

Risks are categorised between governance and management risks, compliance risks, operational risks, financial risks, reputational risks and external risks. The top risks identified in the risk register in 2017 were:

<b><i>Risk</i></b>	<b><i>Mitigation measure</i></b>
Failure to respond or respond adequately to global changes in the industry and profession.	<i>Strategy 2022</i> , developed in 2016, was launched in 2017 together with an updated three year business plan. This includes proposed governance reform and increased engagement with members and stakeholders to ensure the Institution remains relevant.
Insufficient IT capacity to deliver the strategy.	The three year business plan and budgets include investment in IT systems and processes.
Over extension of staff resource.	The refocused three year business plan has set priority. Lower priority projects will be deferred where necessary.
Compliance with international legislation.	Increased local staff capability and use of local professional advisors for key legislative areas.
Impact of the defined benefit pension scheme on future cashflows.	The annual operating budget is set to cover employer contributions. Free reserves are held in excess of the reserves policy in case of an increase in the pension deficit at the triennial valuation in 2018 and subsequent increase in contribution levels.

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

## Statement of Council's responsibilities

Council is responsible for preparing the trustees' annual report and the financial statements in accordance with applicable law and regulations.

Charity law requires Council 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 Council 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, Council is 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.

Council is 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 Council on 12 April 2018 and signed on its behalf by:



**Mr J McGagh**  
*President*



**Mr KJ Rivers**  
*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 2017 which comprise Consolidated and Charity Statement of Financial Activities, the Group and Charity Balance Sheets, the Consolidated Cash Flow Statement 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 2017 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 14, 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.

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

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 2017

	<i>Notes</i>	<b>Unrestricted Funds £000</b>	<b>Restricted Funds £000</b>	<b>Total 2017 £000</b>	Unrestricted Funds £000	Restricted Funds £000	Total 2016 £000
<b>INCOME</b>							
<b>Donations &amp; legacies</b>	3	131	-	131	60	-	60
<b>Charitable activities:</b>							
Qualifying Chemical Engineers		3,765	-	3,765	3,735	-	3,735
Operating a Learned Society for Chemical Engineers		3,636	29	3,665	3,559	270	3,829
<b>Other trading activities:</b>							
Trading operations	2	212	-	212	236	-	236
Other operating income	2	-	-	-	-	-	-
<b>Investments</b>	5	101	-	101	73	21	94
<b>TOTAL INCOME</b>		<b>7,845</b>	<b>29</b>	<b>7,874</b>	7,663	291	7,954
<b>EXPENDITURE ON</b>							
<b>Raising funds:</b>							
Trading operations	2	(117)	-	(117)	(113)	-	(113)
Investment management costs		(68)	-	(68)	(58)	(17)	(75)
<b>Charitable activities:</b>							
Qualifying Chemical Engineers		(2,716)	-	(2,716)	(2,788)	-	(2,788)
Operating a Learned Society for Chemical Engineers		(4,631)	(271)	(4,902)	(4,712)	(403)	(5,115)
<b>TOTAL EXPENDITURE</b>		<b>(7,532)</b>	<b>(271)</b>	<b>(7,803)</b>	(7,671)	(420)	(8,091)
Net gains on investments	11	247	-	247	439	134	573
<b>NET INCOME / (EXPENDITURE)</b>		<b>560</b>	<b>(242)</b>	<b>318</b>	431	5	436
Transfer between funds	17	402	(402)	-	-	-	-
Actuarial gains/(losses) on defined benefit pension schemes	21	253	-	253	(3,059)	-	(3,059)
<b>NET MOVEMENT IN FUNDS</b>		<b>1,215</b>	<b>(644)</b>	<b>571</b>	(2,628)	5	(2,623)
Fund balances brought forward at 1 January		1,169	1,992	3,161	3,797	1,987	5,784
<b>Fund balances carried forward at 31 December</b>		<b>2,384</b>	<b>1,348</b>	<b>3,732</b>	1,169	1,992	3,161

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 21 to 35 form part of these financial statements.

## Charity statement of financial activities for the year ended 31 December 2017

	<i>Notes</i>	<b>Unrestricted Funds £000</b>	<b>Restricted Funds £000</b>	<b>Total 2017 £000</b>	Unrestricted Funds £000	Restricted Funds £000	Total 2016 £000
<b>INCOME</b>							
<b>Donations &amp; legacies</b>	3	131	-	131	60	-	60
<b>Gift aid from subsidiary company</b>	2	95	-	95	123	-	123
<b>Charitable activities:</b>							
Qualifying Chemical Engineers		3,166	-	3,166	3,131	-	3,131
Operating a Learned Society for Chemical Engineers		2,713	29	2,742	2,759	270	3,029
<b>Investments</b>	5	101	-	101	73	21	94
<b>TOTAL INCOME</b>		<b>6,206</b>	<b>29</b>	<b>6,235</b>	6,164	291	6,455
<b>EXPENDITURE ON</b>							
<b>Raising funds:</b>							
Investment management costs		(68)	-	(68)	(58)	(17)	(75)
<b>Charitable activities:</b>							
Qualifying Chemical Engineers		(2,453)	-	(2,453)	(2,664)	-	(2,664)
Operating a Learned Society for Chemical Engineers		(3,707)	(271)	(3,978)	(3,850)	(403)	(4,253)
<b>TOTAL EXPENDITURE</b>		<b>(6,228)</b>	<b>(271)</b>	<b>(6,499)</b>	(6,572)	(420)	(6,992)
Net gains on investments	11	247	-	247	439	134	573
<b>NET INCOME / (EXPENDITURE)</b>		<b>225</b>	<b>(242)</b>	<b>(17)</b>	31	5	36
Transfer between funds	17	402	(402)	-	-	-	-
Actuarial gains/(losses) on defined benefit pension schemes	21	253	-	253	(3,059)	-	(3,059)
<b>NET MOVEMENT IN FUNDS</b>		<b>880</b>	<b>(644)</b>	<b>236</b>	(3,028)	5	(3,023)
Fund balances brought forward at 1 January		147	1,992	2,139	3,175	1,987	5,162
<b>Fund balances carried forward at 31 December</b>		<b>1,027</b>	<b>1,348</b>	<b>2,375</b>	147	1,992	2,139

## Balance sheets at 31 December 2017

	<i>Note</i>	<b>2017</b>	<b>Group</b>	<b>2016</b>	<b>2017</b>	<b>Charity</b>	<b>2016</b>
		<b>£000</b>		<b>£000</b>	<b>£000</b>		<b>£000</b>
<b>Fixed assets</b>							
Tangible assets	10	<b>1,057</b>		1,138	<b>1,041</b>		1,119
Investments	11	<b>6,825</b>		6,545	<b>6,825</b>		6,545
		<b>7,882</b>		7,683	<b>7,866</b>		7,664
<b>Current assets</b>							
Debtors	12	<b>1,198</b>		1,163	<b>1,172</b>		1,162
Cash at bank and in hand		<b>2,459</b>		2,740	<b>684</b>		1,042
		<b>3,657</b>		3,903	<b>1,856</b>		2,204
<b>Creditors: Amounts falling due within one year</b>	13	<b>(2,382)</b>		(2,769)	<b>(1,922)</b>		(2,073)
<b>Net current assets</b>		<b>1,275</b>		1,134	<b>(66)</b>		131
<b>Provisions for liabilities</b>	14	<b>(81)</b>		(41)	<b>(81)</b>		(41)
		<b>1,194</b>		1,093	<b>(147)</b>		90
<b>Pension scheme funding deficit</b>	21	<b>(5,344)</b>		(5,615)	<b>(5,344)</b>		(5,615)
<b>Total net assets after pension deficit</b>		<b>3,732</b>		3,161	<b>2,375</b>		2,139
<b>Income funds</b>							
Fixed asset reserves		<b>1,057</b>		1,138	<b>1,041</b>		1,119
Free reserves		<b>6,671</b>		5,646	<b>5,330</b>		4,643
Pension reserves	21	<b>(5,344)</b>		(5,615)	<b>(5,344)</b>		(5,615)
Unrestricted funds		<b>2,384</b>		1,169	<b>1,027</b>		147
Restricted income funds	17	<b>1,348</b>		1,992	<b>1,348</b>		1,992
		<b>3,732</b>		3,161	<b>2,375</b>		2,139

These financial statements were approved by the Council and authorised for issue on 12 April 2018.



**Mr J McGagh**  
*President*



**Mr K Rivers**  
*Honorary Treasurer*

## Consolidated cash flow statement for the year ended 31 December 2017

	<i>Note</i>	<b>2017</b> <b>£000</b>	2016 £000
<b>Cash flows from operating activities</b>	<i>19</i>	<b>(226)</b>	(35)
<b>Cash flows from investing activities:</b>			
Dividends and interest from investments	<i>5</i>	<b>101</b>	94
Purchase of fixed asset investments	<i>11</i>	<b>(101)</b>	(94)
Disposal of fixed asset investments	<i>11</i>	<b>-</b>	500
Purchase of furniture and equipment	<i>10</i>	<b>(25)</b>	(5)
<b>Net cash (used in)/provided by investing activities</b>		<b>(25)</b>	495
<b>Change in cash and cash equivalents in the reporting period</b>		<b>(251)</b>	460
<b>Cash and cash equivalents at the start of the reporting period</b>		<b>2,740</b>	2,043
<b>Change in cash and cash equivalents due to exchange rate movements</b>		<b>(30)</b>	237
<b>Cash and cash equivalents at the end of the reporting period</b>		<b>2,459</b>	2,740

## Charity cash flow statement for the year ended 31 December 2017

	<i>Note</i>	<b>2017</b> <b>£000</b>	2016 £000
<b>Cash flows from operating activities</b>	<i>19</i>	<b>(342)</b>	(296)
<b>Cash flows from investing activities:</b>			
Dividends and interest from investments	<i>5</i>	<b>101</b>	94
Purchase of fixed asset investments	<i>11</i>	<b>(101)</b>	(94)
Disposal of fixed asset investments	<i>11</i>	<b>-</b>	500
Purchase of furniture and equipment	<i>10</i>	<b>(16)</b>	(1)
<b>Net cash (used in)/provided by investing activities</b>		<b>(16)</b>	499
<b>Change in cash and cash equivalents in the reporting period</b>		<b>(358)</b>	203
<b>Cash and cash equivalents at the start of the reporting period</b>		<b>1,042</b>	815
<b>Change in cash and cash equivalents due to exchange rate movements</b>		<b>-</b>	24
<b>Cash and cash equivalents at the end of the reporting period</b>		<b>684</b>	1,042

# Notes forming part of the financial statements for the year ended 31 December 2017

## 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.

Income and expenditure on charitable activities has been reclassified into two new headings in the financial statements to better align with the new strategy and business plan. There is no impact on the net income for 2016 as a result of this reclassification.

### *Preparation of the accounts on a going concern basis*

Council consider that there are no material uncertainties about the Institution's ability to continue as a going concern.

In arriving at this decision Council has taken into account the group's financial performance, operational budgets for the period 2018 to 2020, and the reserves position as at 31 December 2017. Council therefore consider it appropriate to continue to prepare the financial statements on a going concern basis.

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

### *Basis of consolidation*

The financial statements consolidate the financial statements of the charity, its wholly owned UK trading subsidiary IChemE Ltd and its not-for-profit subsidiaries IChemE in Australia, 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 2 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.

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

## **1 Accounting policies (continued)**

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 7.

### ***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 £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	-	11% - 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 Council 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 21. 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, Council is 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 Council has 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 10). 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 12). 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 21). 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 21.

## 2 Results of subsidiaries

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

	IChemE Ltd	IChemE in Australia	IChemE in Malaysia	IChemE in New Zealand	IChemE in Singapore Ltd	2017 Total	2016 Total
	£000	£000	£000	£000	£000	£000	£000
Income	212	1,167	262	92	-	1,733	1,622
Expenditure	(117)	(825)	(239)	(87)	(2)	(1,270)	(1,241)
<b>Net Income / Expenditure</b>	<b>95</b>	<b>342</b>	<b>23</b>	<b>5</b>	<b>(2)</b>	<b>463</b>	381
Amount gift aided to the Institution	(95)	-	-	-	-	(95)	(123)
<b>Retained in subsidiary</b>	<b>-</b>	<b>342</b>	<b>23</b>	<b>5</b>	<b>(2)</b>	<b>368</b>	258

### Balance sheets

	IChemE Ltd	IChemE in Australia	IChemE in Malaysia	IChemE in New Zealand	IChemE in Singapore Ltd	2017 Total	2016 Total
	£000	£000	£000	£000	£000	£000	£000
Fixed assets	5	8	3	-	-	16	19
Current assets	74	1,791	145	198	-	2,208	2,133
Current liabilities	(79)	(455)	(251)	(75)	(8)	(868)	(1,130)
<b>Net current assets</b>	<b>(5)</b>	<b>1,336</b>	<b>(106)</b>	<b>123</b>	<b>(8)</b>	<b>1,340</b>	1,003
<b>Total net assets</b>	<b>-</b>	<b>1,344</b>	<b>(103)</b>	<b>123</b>	<b>(8)</b>	<b>1,356</b>	1,022

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

IChemE in Australia (ABN 75112253040) is a registered charity in Australia.

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.

## 3 Income from donations and legacies

Group and Charity	2017 £000	2016 £000
Donations	31	60
Legacies	100	-
	<b>131</b>	<b>60</b>

The donations received were in support of the Institution's *whynotchemeng* campaign.

#### 4 Analysis of income from charitable activities

	Group		Charity	
	2017 £000	2016 £000	2017 £000	2016 £000
<i>Qualifying Chemical Engineers:</i>				
Membership subscription and accreditation fees	3,765	3,735	3,166	3,131
<i>Operating a Learned Society for Chemical Engineers:</i>				
Journals & publications	957	851	957	851
Knowledge communities	386	289	93	41
Conferences, seminars & events	572	867	480	683
Provision of training	1,685	1,524	1,150	1,156
Other income	36	28	33	28
Subscriptions to technical centres (restricted funds)	29	270	29	270
	<u>7,430</u>	<u>7,564</u>	<u>5,908</u>	<u>6,160</u>

#### 5 Investment income

Group and Charity	2017 £000	2016 £000
Interest receivable	11	19
Dividends receivable	90	75
	<u>101</u>	<u>94</u>

#### 6 Analysis of expenditure on charitable activities

Group	Direct activity costs £000	Support costs £000	2017 Total £000	2016 Total £000
Qualifying Chemical Engineers	1,658	1,058	2,716	2,788
Operating a Learned Society for Chemical Engineers	3,718	1,184	4,902	5,115
	<u>5,376</u>	<u>2,242</u>	<u>7,618</u>	<u>7,903</u>

Expenditure on charitable activities was £7,618,000 (2016: £7,903,000) of which £7,347,000 was unrestricted (2016: £7,500,000) and £271,000 was restricted (2016: £403,000).

Charity	Direct activity costs £000	Support costs £000	2017 Total £000	2016 Total £000
Qualifying Chemical Engineers	1,486	967	2,453	2,664
Operating a Learned Society for Chemical Engineers	2,927	1,051	3,978	4,253
	<u>4,413</u>	<u>2,018</u>	<u>6,431</u>	<u>6,917</u>

## 6 Analysis of expenditure on charitable activities (continued)

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

	Group		Charity	
	2017 £000	2016 £000	2017 £000	2016 £000
Depreciation	106	185	94	174
Operating leases:				
Plant and machinery	18	24	15	21
Land and buildings	240	197	189	153
Exchange rate differences	16	(221)	(18)	(78)
	<u>106</u>	<u>185</u>	<u>94</u>	<u>174</u>

## 7 Analysis of governance and support costs

Included within expenditure on charitable activities are governance and support costs amounting to £2,242,000 (2016: £2,195,000). These are analysed as:

	Group		Charity	
	2017 £000	2016 £000	2017 £000	2016 £000
Staff costs	1,005	1,215	904	1,106
Finance	121	(73)	92	71
IT	210	274	199	261
Facilities & HR	710	628	641	560
Management	67	100	63	97
Governance costs	129	51	119	38
	<u>2,242</u>	<u>2,195</u>	<u>2,018</u>	<u>2,133</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 £34,000 (2016: exchange gain £143,000).

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	
	2017 £000	2016 £000	2017 £000	2016 £000
Qualifying Chemical Engineers	1,058	1,066	967	1,071
Operating a Learned Society for Chemical Engineers	1,184	1,129	1,051	1,062
	<u>2,242</u>	<u>2,195</u>	<u>2,018</u>	<u>2,133</u>

Analysis of governance costs:

	Group		Charity	
	2017 £000	2016 £000	2017 £000	2016 £000
External audit	25	32	17	23
General meeting costs	21	6	20	6
Legal & professional fees	83	13	82	9
	<u>129</u>	<u>51</u>	<u>119</u>	<u>38</u>

## 8 Analysis of trustee remuneration and expenses

Group and Charity	2017 £000	2016 £000
Expenses paid to or on behalf of 12 (2016: 10) Council members in respect of travel, subsistence and accommodation costs	27	34

Council members give freely their time and expertise without any form of remuneration or other benefit in cash or kind (2016: £nil).

## 9 Analysis of staff costs and remuneration to key management personnel

The average monthly headcount for the group and charity during the year was 96 (2016: 100). The number of full time equivalent persons employed by the group and charity during the year was as follows:

	Group		Charity	
	2017	2016	2017	2016
Qualifying Chemical Engineers	31	34	27	29
Operating a Learned Society for Chemical Engineers	31	35	25	30
Management and Administration	24	24	22	22
	<u>86</u>	<u>93</u>	<u>74</u>	<u>81</u>

The aggregate payroll costs of these persons were as follows:

	Group		Charity	
	2017 £000	2016 £000	2017 £000	2016 £000
Wages and salaries	3,035	3,408	2,509	2,900
Social security costs	252	279	251	279
Pension scheme contributions	283	284	232	231
Defined benefit pension scheme operating costs	67	87	67	87
Employee benefits	42	70	41	68
	<u>3,679</u>	<u>4,128</u>	<u>3,100</u>	<u>3,565</u>

During 2017, £29,000 (2016: £210,000) 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	
	2017	2016	2017	2016
£60,001 - £70,000	2	1	1	-
£70,001 - £80,000	2	3	2	3
£80,001 - £90,000	1	3	1	2
£90,001 - £100,000	2	2	1	1
£100,001 - £110,000	1	-	-	-
£160,001 - £170,000	1	-	1	-
£260,001 - £270,000	-	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 7 (2016: 7). Contributions in respect of these employees amounted to £62,000 (2016: £64,000).

The Institution considers its key management personnel to comprise Council, the Chief Executive and the Senior Management Team. The total employment benefits of 8 (2016: 8) key management personnel staff, including employer pension contributions and employer's national insurance, were £871,000 (2016: £971,000).

## 10 Tangible fixed assets

Group	Freehold Property	Short leasehold property	Office equipment	Computers	Total
	£000	£000	£000	£000	£000
<b>Cost or valuation</b>					
At beginning of year	1,800	220	287	541	<b>2,848</b>
Additions	-	-	-	25	<b>25</b>
Disposals	-	-	-	(70)	<b>(70)</b>
At end of year	1,800	220	287	496	<b>2,803</b>
<b>Depreciation</b>					
At beginning of year	699	220	269	522	<b>1,710</b>
Charge for the year	76	-	10	20	<b>106</b>
Disposals	-	-	-	(70)	<b>(70)</b>
At end of year	775	220	279	472	<b>1,746</b>
<i>Net book value</i>					
<b>At 31 December 2017</b>	<b>1,025</b>	<b>-</b>	<b>8</b>	<b>24</b>	<b>1,057</b>
At 31 December 2016	1,101	-	18	19	<b>1,138</b>
<b>Charity</b>	<b>Freehold Property</b>	<b>Short leasehold property</b>	<b>Office equipment</b>	<b>Computers</b>	<b>Total</b>
	£000	£000	£000	£000	£000
<b>Cost or valuation</b>					
At beginning of year	1,800	202	287	490	<b>2,779</b>
Additions	-	-	-	16	<b>16</b>
Disposals	-	-	-	(61)	<b>(61)</b>
At end of year	1,800	202	287	445	<b>2,734</b>
<b>Depreciation</b>					
At beginning of year	699	202	269	490	<b>1,660</b>
Charge for the year	76	-	10	8	<b>94</b>
Disposals	-	-	-	(61)	<b>(61)</b>
At end of year	775	202	279	437	<b>1,693</b>
<i>Net book value</i>					
<b>At 31 December 2017</b>	<b>1,025</b>	<b>-</b>	<b>8</b>	<b>8</b>	<b>1,041</b>
At 31 December 2016	1,101	-	18	-	<b>1,119</b>

Freehold property at 31 December 2017 includes land at valuation of £280,000 (2016 £280,000) which is not depreciated.

## 11 Fixed asset investments

<b>Group and Charity</b>	<b>2017</b>	2016
	<b>£000</b>	£000
Fair value at 1 January	<b>6,545</b>	6,452
Acquisitions at cost	<b>1,217</b>	2,455
Proceeds of disposals	<b>(1,184)</b>	(2,935)
Net gain on revaluation	<b>247</b>	573
	<hr/>	<hr/>
<b>Fair value at 31 December</b>	<b>6,825</b>	6,545
	<hr/> <hr/>	<hr/> <hr/>
<b>Historical cost at 31 December</b>	<b>4,916</b>	4,883
	<hr/> <hr/>	<hr/> <hr/>

All investments are carried at their fair value. An analysis of the fair value of the investments at 31 December 2017 is as follows:

<b>Group and Charity</b>	<b>2017</b>	2016
	<b>£000</b>	£000
Equities	<b>3,905</b>	3,709
Fixed Interest	<b>1,809</b>	1,695
Cash	<b>826</b>	578
Other	<b>285</b>	563
	<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 is summarised in note 2.

## 12 Debtors

	<b>Group</b>		<b>Charity</b>	
	<b>2017</b>	2016	<b>2017</b>	2016
	<b>£000</b>	£000	<b>£000</b>	£000
Trade debtors	<b>697</b>	763	<b>479</b>	370
Amount due from subsidiaries	-	-	<b>254</b>	416
Other debtors	<b>31</b>	26	<b>38</b>	44
Prepayments and accrued income	<b>470</b>	374	<b>401</b>	332
	<hr/>	<hr/>	<hr/>	<hr/>
	<b>1,198</b>	1,163	<b>1,172</b>	1,162
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

## 13 Creditors: amounts falling due within one year

	<b>Group</b>		<b>Charity</b>	
	<b>2017</b>	2016	<b>2017</b>	2016
	<b>£000</b>	£000	<b>£000</b>	£000
Trade creditors	<b>253</b>	571	<b>242</b>	512
Amount due to subsidiaries	-	-	<b>96</b>	-
Other creditors	<b>156</b>	266	<b>63</b>	141
Taxation and social security	<b>105</b>	106	<b>64</b>	62
Accruals	<b>246</b>	247	<b>219</b>	226
Deferred income	<b>1,622</b>	1,579	<b>1,238</b>	1,132
	<hr/>	<hr/>	<hr/>	<hr/>
	<b>2,382</b>	2,769	<b>1,922</b>	2,073
	<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.

## 14 Provisions for liabilities

	Group		Charity	
	2017 £000	2016 £000	2017 £000	2016 £000
At 1 January 2017	41	-	41	-
Charged to Statement of Financial Activities	40	41	40	41
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
At 31 December 2017	<u>81</u>	41	<u>81</u>	41

An additional provision of £40,000 (2016: £41,000) has been made for costs relating to dilapidation expenses for the leasehold premises in London. A provision for the total expected dilapidation cost will be made over a three-year period which will be realised in November 2018 when the current lease on the premises expires.

## 15 Commitments

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

Group	2017		2016	
	Land and buildings £000	Other £000	Land and Buildings £000	Other £000
Operating leases which expire:				
In less than one year	231	18	272	18
In the second to fifth years inclusive	28	13	251	32
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
	<u>259</u>	<u>31</u>	<u>523</u>	<u>50</u>

  

Charity	2017		2016	
	Land and buildings £000	Other £000	Land and Buildings £000	Other £000
Operating leases which expire:				
In less than one year	184	15	231	15
In the second to fifth years inclusive	7	13	211	29
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
	<u>191</u>	<u>28</u>	<u>442</u>	<u>44</u>

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

## 16 Financial instruments

	Group		Charity	
	2017 £000	2016 £000	2017 £000	2016 £000
<b>Financial assets</b>				
Financial assets measured at fair value	6,825	6,545	6,825	6,545
Financial assets measured at amortised cost	728	789	771	830
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </u>
<b>Financial liabilities</b>				
Financial liabilities measured at amortised cost	655	1,084	620	879
	<u>          </u>	<u>          </u>	<u>          </u>	<u>          </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.



## 17 Analysis of movements in restricted funds

Group and Charity	International Process Safety Group (IPSG) £000	European Process Safety Centre (EPSC) £000	John Collier Memorial Fund £000	Andrew Legacy Fund £000	Total £000
At 1 January 2017	58	245	37	1,652	1,992
Income	28	1	-	-	29
Expenditure	(28)	(191)	-	(52)	(271)
Transfer between funds	-	(55)	-	(347)	(402)
<b>At 31 December 2017</b>	<b>58</b>	<b>0</b>	<b>37</b>	<b>1,253</b>	<b>1,348</b>

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 IPSG and EPSC funds relate to international industry funded technical centres administered in accordance with each Group's Statute. During the year, the assets of EPSC were transferred to a new separate legal entity registered in Belgium, whose objects are aligned to the restrictions placed upon the fund. The new entity, no longer under the control of Council, received a transfer of £180,000. A further £55,000 was transferred into unrestricted funds which represents the settlement of the liability in the defined benefit pension scheme of a former EPSC staff member.

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. The majority of the Fund balance was transferred to investments in 2012. The income and unrealised gains on the investment fund was incorrectly allocated to restricted funds in the financial statements for 2012 to 2016 and has been corrected by way of a transfer of £347,000 to unrestricted funds in 2017.

## 18 Analysis of group and charity net assets between funds

Fund balances at 31 December 2017 are represented by:

Group	Unrestricted funds £000	Restricted Funds £000	Total £000
Tangible fixed assets	1,057	-	1,057
Investments	5,585	1,240	6,825
Pension scheme funding deficit	(5,344)	-	(5,344)
Net current assets / (liabilities)	1,167	108	1,275
Provision for liabilities	(81)	-	(81)
<b>Total net assets</b>	<b>2,384</b>	<b>1,348</b>	<b>3,732</b>

  

Charity	Unrestricted funds £000	Restricted Funds £000	Total £000
Tangible fixed assets	1,041	-	1,041
Investments	5,585	1,240	6,825
Pension scheme funding deficit	(5,344)	-	(5,344)
Net current assets / (liabilities)	(174)	108	(66)
Provision for liabilities	(81)	-	(81)
<b>Total net assets</b>	<b>1,027</b>	<b>1,348</b>	<b>2,375</b>

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

<b>Group</b>	<b>2017</b>	<b>2016</b>
	<b>£000</b>	<b>£000</b>
Net Income	<b>318</b>	436
<b>Adjustments for:</b>		
Depreciation on tangible fixed assets	<b>106</b>	185
Gains) on investments	<b>(247)</b>	(573)
Dividends and interest from investments	<b>(101)</b>	(94)
Investment management fees	<b>68</b>	75
Difference between pension charge and cash contribution	<b>(18)</b>	(70)
Decrease / (increase) in debtors	<b>(35)</b>	(23)
(Decrease) / increase in creditors	<b>(387)</b>	225
Increase in provisions	<b>40</b>	41
Change in cash and cash equivalents due to exchange rate movements	<b>30</b>	(237)
	<hr/>	<hr/>
<b>Net cash (used in) operating activities</b>	<b>(226)</b>	(35)
	<hr/> <hr/>	<hr/> <hr/>
<b>Charity</b>	<b>2017</b>	<b>2016</b>
	<b>£000</b>	<b>£000</b>
Net Income	<b>(17)</b>	36
<b>Adjustments for:</b>		
Depreciation on tangible fixed assets	<b>94</b>	174
(Gains) on investments	<b>(247)</b>	(573)
Dividends and interest from investments	<b>(101)</b>	(94)
Investment management fees	<b>68</b>	75
Difference between pension charge and cash contribution	<b>(18)</b>	(70)
(Increase) / decrease in debtors	<b>(10)</b>	109
(Decrease) / increase in creditors	<b>(151)</b>	30
Increase in provisions	<b>40</b>	41
Change in cash and cash equivalents due to exchange rate movements	<b>-</b>	(24)
	<hr/>	<hr/>
<b>Net cash (used in) operating activities</b>	<b>(342)</b>	(296)
	<hr/> <hr/>	<hr/> <hr/>

## 20 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	
	2017 £000	2016 £000	2017 £000	2016 £000
IChemE Ltd	<b>31</b>	33	<b>74</b>	160
IChemE in Australia	<b>119</b>	103	<b>(96)</b>	55
IChemE in Malaysia	<b>20</b>	(32)	<b>168</b>	180
IChemE in New Zealand	<b>9</b>	27	<b>5</b>	16
IChemE in Singapore Ltd	<b>2</b>	5	<b>7</b>	5
	<hr/>	<hr/>	<hr/>	<hr/>
	<b>181</b>	136	<b>158</b>	416
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

IChemE Ltd gift aids its operating profit to the charity and the balance of £95,000 (2016: £123,000) is included in debtors for the charity at year end. The part-time employee of the New Zealand subsidiary has free use of hot desking facilities at the offices of PDV Consultants, which is owned by Mr David Platts, a current Council member.

## 21 Pension scheme

### Defined contribution scheme

The Institution's defined contribution pension scheme 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 £223,000 (*£2016: £222,000*).

Pension costs relating to the employees of the Institution's subsidiaries IChemE in Australia, IChemE in Malaysia, IChemE in New Zealand and IChemE in Singapore Ltd amounted to £60,000 (*2016: £62,000*).

### 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 2015. The results of that valuation are 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. A triennial valuation is being conducted as at 31 January 2018 but has not yet been finalised at the date of this report.

Based on the current recovery plan, the annual contribution level from the Institution into the Scheme will increase to £265,000 in 2018. In addition, 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:*

	2017	2016
	%	%
Discount rate	<b>2.6% pa</b>	2.8% pa
RPI Price Inflation	<b>3.4% pa</b>	3.5% pa
CPI Price Inflation	<b>2.4% pa</b>	2.5% pa
Pension increases applied to pensions accrued on or after 6 April 1997	<b>2.3% pa</b>	2.4% pa
Revaluation in deferment	<b>2.4% pa</b>	2.5% pa
Long term expected rate of return on the Scheme's assets net of expenses	<b>2.6% pa</b>	2.8% pa
Mortality assumption (see table below)	<b>90% of 'S2NA' tables with CMI 2016 projections and a long-term rate of improvement of 1.25% pa</b>	90% of 'S2NA' tables with CMI 2015 projections and a long-term rate of improvement of 1.25% pa
Tax-free cash	<b>All members are assumed to take 25% of their pension as tax-free cash</b>	All members are assumed to take 25% of their pension as tax-free cash

## 21 Pension scheme (continued)

*The major categories of assets are as follows:*

Asset category	2017 £000	2016 £000
Liability Driven Investment (LDI)	2,044	-
Multi-asset funds	5,629	7,349
Cash	48	33
Total	<u>7,721</u>	<u>7,382</u>

The return on the Scheme's assets (net of investment manager expenses) over the period to the Review Date was approximately 7.2%.

*Amounts recognised in the balance sheet at 31 December 2017:*

	2017 £000	2016 £000
Fair Value of Assets	7,721	7,382
Present Value of Funded Obligations	(13,065)	(12,997)
(Deficit) in Scheme*	<u>(5,344)</u>	<u>(5,615)</u>

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

	2017 £000	2016 £000
Interest on liabilities	359	415
Interest on assets	(204)	(314)
Total	<u>155</u>	<u>101</u>

*Remeasurements over the year:*

	2017 £000	2016 £000
(Gain) / loss on scheme assets in excess of interest	(328)	651
(Gains) from changes to demographic assumptions	(278)	(323)
Losses from changes to financial assumptions	353	2,731
Total	<u>(253)</u>	<u>3,059</u>

## 21 Pension scheme (continued)

### Reconciliation of assets and defined benefit obligation:

	2017 £000	2016 £000
Value of assets at beginning of period	7,382	7,965
Interest on assets	204	314
Institution contributions	173	170
Benefits paid	(366)	(416)
Return on assets less interest	328	(651)
	<hr/>	<hr/>
Value of assets at end of period	7,721	7,382
	<hr/>	<hr/>

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

	2017 £000	2016 £000
Value of liabilities at the beginning of the period	12,997	10,590
Interest cost	359	415
Benefits paid	(366)	(416)
Changes to demographic assumptions	(278)	(323)
Changes to financial assumptions	353	2,731
	<hr/>	<hr/>
Defined benefit obligation at end of period	13,065	12,997
	<hr/>	<hr/>

	2017 £000	2016 £000
Actuarial gains / (losses)	253	(3,059)
	<hr/>	<hr/>

The cumulative amount of actuarial gains / (losses) recognised in the statement of financial activities is (£5,844,000) (2016: (£6,097,000)).

The annual contribution level for the period 1 February 2018 to 31 January 2019 will be increased in line with the current Recovery Plan from £173,094 to £265,000.