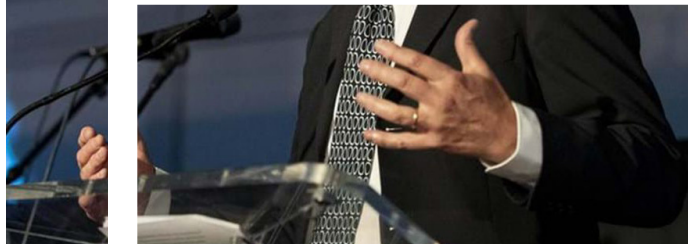
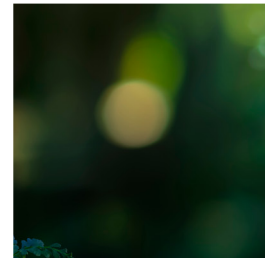


Annual Review 2022



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IChemE in numbers

The infographic below provides a snapshot of IChemE.

Around **30,000**
IChemE members



114 countries
where IChemE
members
are based

7 membership grades

10 licences held to award
professional registrations

300+ academic
programmes accredited



55 accredited company
training schemes

33 corporate
partners



49 company members of
the IChemE Safety Centre

38 supporting
partners of the
IChemE Safety Centre



19 special interest groups

34 member groups



979 editions of *The
Chemical Engineer*
since launch

8 IChemE journals

24,000+ items on
the Knowledge Hub



300+ resources
in Knovel

288 editions of the
Loss Prevention Bulletin



3,000+
members in
volunteer roles

Achievements

The infographics below showcase some of IChemE's key highlights from 2022.





IChemE's strategic aims

The purpose of IChemE is to advance chemical engineering's contribution for the benefit of society. Chemical engineering matters. Its contribution to the advancement of society is clear to see in every home, hospital, school, factory and high street across the world. Looking forward, societal improvement and protection, as set out in the global grand challenges and UN Sustainable Development Goals (SDGs) will require chemical engineers to play a significant role and provide expertise in collaboration with others to deliver solutions that will have a positive impact, globally.

IChemE's strategic plan, *Strategy 2024*, covers the period 2019–2024 and describes how the Institution will achieve its objectives with the programme of work, broken down into four aims:

- Aim 1: to be respected for professionalism and technical competence;
- Aim 2: to be recognised as a vibrant learned society that materially impacts on the global grand challenges for engineering;
- Aim 3: to be acknowledged as a peer-group leader in which an engaged membership receives and adds value; and
- Aim 4: to be known as a high-performing organisation delivering significant value.

The achievements shared within this Annual Review demonstrate progress against all four aims.

Introduction from IChemE President David Bogle

It has been a great honour to lead IChemE during the second half of our centenary year. The centenary gave us a fantastic opportunity to celebrate our great profession and the many achievements of chemical engineers over the last 100 years. From the inaugural meeting of the Institution in 1922 to today's vibrant membership body, it is wonderful to reflect on the fact that IChemE has been advancing chemical engineering's contribution for 100 years. And we intend to continue doing so for the next 100 years.

We commemorated this remarkable milestone by highlighting the impact of chemical engineering over the last century and showcasing the ideas and solutions for a progressive future through monthly webinars, events and thought-provoking articles hosted on a dedicated website. I would like to extend my gratitude to all our members for helping to make our centenary year a success.

As I read through this year's Annual Review, I am incredibly proud of IChemE's achievements during the year, with outstanding work being delivered by all aspects of the Institution. From welcoming a raft of new members and Fellows to the influential outputs from the Learned Society, from the new initiatives led by the Member Engagement Committee to the delivery of invigorating networking events, what a year it has been.

As well as the centenary, some of my highlights from 2022 include the launch of the Sustainability Hub and the *Serving Society* film produced in partnership with ITN Business. The Sustainability Hub was developed to support chemical engineers in making a positive contribution to the world's sustainability challenges, and *Serving Society* gave us the opportunity to demonstrate how the profession is addressing some of the biggest challenges in our society today. If you haven't already, please take a look at both of these resources and share with your peers, colleagues and future engineers.

With many of the travel restrictions from the pandemic being lifted, I was grateful for the opportunity to meet members and partners across the world face to face during the year. At my Presidential Address in June, I was delighted to be joined by my family, members, colleagues and peers to talk about *Chemical Engineering: An Ethical Profession*. Ethics is a topic that is close to my heart, and I have welcomed the

opportunity to talk about the importance of chemical engineering being an ethical profession at various meetings and events during the year.

In September we were saddened to learn of the death of Her Majesty The Queen. The Institution has been privileged to receive the support of Her Majesty, having been granted a Royal Charter in 1957, shortly after which time Her Majesty's late husband, His Royal Highness The Prince Philip, Duke of Edinburgh, became IChemE's first Royal Patron.

I would like to take the opportunity to thank Jon Prichard, IChemE Chief Executive, who stepped down in September to take up a new appointment at another organisation. Jon provided outstanding leadership to the Institution since 2017 and oversaw significant progress towards the aims of Strategy2024 and the transformation of IChemE's operations to provide a streamlined and more contemporary member experience. Jon leaves the Institution in a strong and stable position, and I thank him for his service. I now look forward to working with Jon's successor, Yvonne Baker, who took up the post as CEO in April 2023.

Observing the UN International Volunteer Day in December, we recognised the contribution of our member volunteers. On behalf of the Board of Trustees I would like to thank all our volunteers across the world. Sharing your knowledge and skills to advance chemical engineering across the globe is hugely significant, and your efforts are very much appreciated.

IChemE exists to represent and support our profession, and through our commitment to safety, sustainability, diversity and ethics, we can work together to raise the profile of chemical engineering and the vital role that it has to play in addressing the global grand challenges. As we look forward to developing a new strategy that will take us to 2028, these areas will come to the forefront and I look forward to working with you all to make a difference.

As I approach the end of my presidency, I would like to thank IChemE members for your support throughout my term in office. It has been an invigorating, inspiring and rewarding year, and I wish my successor all the best in his role leading the Institution into, what I am confident will be, a successful future.

“ From the inaugural meeting of the Institution in 1922 to today's vibrant membership body, it is wonderful to reflect on the fact that IChemE has been advancing chemical engineering's contribution for 100 years. ”



A handwritten signature of David Bogle in black ink.

David Bogle CEng FEng FIChemE
President 2022–2023

Introduction from Chief Executive Officer Yvonne Baker

Reflecting on the many achievements in this 2022 Annual Review, I am delighted to have joined IChemE at a time when chemical engineering is at the centre of the global ambition to deliver a more sustainable society. The skills held by chemical, biochemical and process engineers are critical to meeting the significant global challenges that the world now faces, and it is inspiring to see the progress made by IChemE in raising awareness of the contribution of our profession.

I have always been proud to be a chemical engineer and therefore I feel extremely fortunate that my career journey has led me to become CEO of my own professional institution. It is incredible to comprehend the sheer number of members supported at all stages of their careers, the breadth and quality of activities delivered by our member committees and special interest groups, and the impact made externally to achieve our strategic aims. All of these activities highlight exactly why our institution is so active, vibrant and welcoming.

I would like to thank Jo Downham for stepping into the role of Interim CEO before I joined, and for her commitment and leadership during this time. I look forward to working with members, volunteers, staff and other organisations to build on the achievements of 2022 to engineer a more sustainable future.

“The skills held by chemical, biochemical and process engineers are critical to meeting the significant global challenges that the world now faces, and it is inspiring to see the progress made by IChemE in raising awareness of the contribution of our profession.”



Yvonne Baker

Yvonne Baker
Chief Executive Officer

Supporting members

Find out how IChemE supported and engaged with members, volunteers and corporate partners during the year.

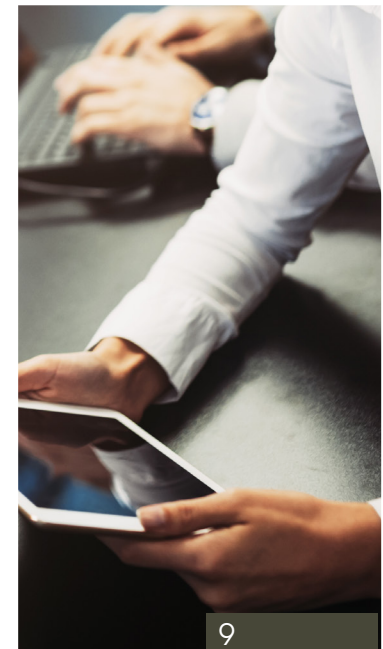
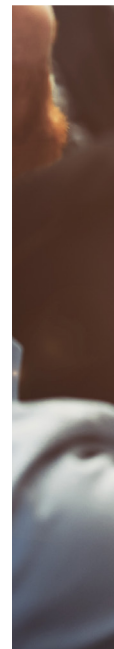
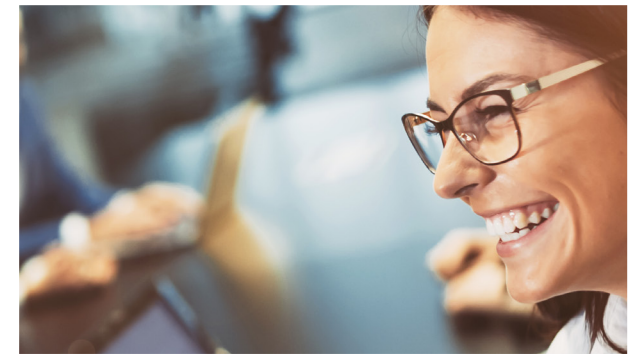
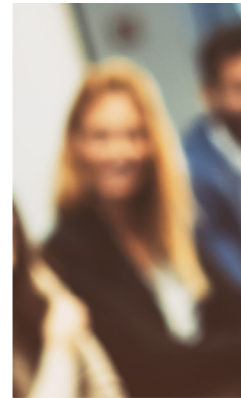
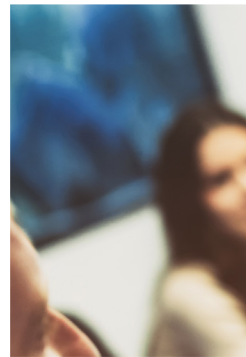


Supporting members

Over 1,500 members have benefited from professional recognition, earning the right to use post-nominals including FIChemE and MIChemE. Of those, over 300 gained additional registrations such as the Chartered Engineer (CEng) registration awarded by the Engineering Council.

One of IChemE's four strategic aims is to be acknowledged as a peer group leader in which an engaged membership receives and adds value. Throughout the year, IChemE has worked to provide members with access to the tools, services, support, networks, infrastructure and resources to enable each individual to:

- achieve peer recognition;
- undertake professional development and growth;
- successfully apply their expertise and experience;
- widen their professional network;
- meet their professional obligations; and
- advance the profession.



Benefits of membership

Membership resources and benefits continued to be enhanced during the year. The number of items of technical content added to the **Knowledge Hub** was more than doubled in 2022, with over 24,000 items of technical content, often created by members, all freely available via a single searchable index.

Delivering news, views and jobs from the chemical, biochemical and process engineering sectors via its website and within ten issues of the magazine during the year, **The Chemical Engineer** continues to be a popular member resource.

IChemE published 60 editions and 21 special issues of eight peer-reviewed **journals** in partnership with Elsevier and the Royal Society of Chemistry during 2022, with members gaining free online access to all wholly-owned IChemE journals as well as to the IChemE journal archive. Journal titles include *Sustainable Production and Consumption*, *Process Safety and Environmental Protection* and *Digital Chemical Engineering*.

With free online access for members, IChemE's flagship safety publication, the **Loss Prevention Bulletin (LPB)** published six new issues in 2022, with members also having access to 40 years of previous articles in the *LPB* archive.

Knovel gives members free online access to over 300 books, technical references, interactive equations and analytical tools. In 2022, 25 new books were added, including: *Chemical and Process Plant Commissioning Handbook – A Practical Guide to Plant System and Equipment Installation and Commissioning (2nd Edition)*, *Process Intensification and Integration for Sustainable Design and Process Safety Calculations (2nd Edition)*.

IChemE members also continued to benefit from a discount on products including **conferences**, online and in-person **training**, various events and **books**. This included discounted access to the *Hazards 32* conference, training on topics including Fundamentals of Process Safety and Practical Distillation Technology, IChemE's bookshop and free access to training courses within the **Sustainability Hub**.



Membership engagement

Membership engagement remained a priority during the year, with the **Member Engagement Committee** selecting three areas to focus on following the recommendations from the last member survey:

- **career journey support** – the ambition is to improve communication around the breadth of continuing professional development (CPD) and to refresh mentoring to be scalable and accessible for the whole career journey;
- **students and early careers** – an early careers working group has been formed to better understand the needs and expectations of student and early careers members; and
- **volunteer engagement** – the goal is to ensure all volunteering opportunities are openly advertised, to help volunteers build their networks, and to improve recognition of volunteer contributions.

Member communities' activity remained predominantly virtual in 2022 enabling members in all regions to access knowledge sharing and networking opportunities.

34 member groups and 19 special interest groups delivered programmes of networking events, webinars and dinners with some of the most active groups including the Aberdeen Member Group, the Process Management & Control Special Interest Group (SIG), Biochemical SIG, Fluid Mixing SIG, Pharma SIG and various groups across Malaysia.

More than 10,000 people attended 219 technical webinars, plus face to face events were re-introduced following the pandemic, with more and more physical events taking place by the end of the year. Special interest groups held 11 physical events and member groups held 32, including annual dinners in Ireland and Aberdeen. Feedback from the dinners was overwhelmingly positive with more groups declaring their wish to hold annual dinners from 2023.

To further support early career chemical engineers, IChemE held a **Global Careers Day** in October, with over 360 students and recent graduates receiving advice and guidance from practicing chemical engineers from a wide variety of industries. The sessions were held

across four different time zones to cater to a global audience. The recordings from the webinars held during the day are available in the **early career area** of the IChemE website.

Following a two-year hiatus in overseas travel due to the pandemic, IChemE's President visited members and stakeholders in Australia, Malaysia and Singapore in September. With over 5,000 IChemE members based in these regions, the purpose of the President's visit was to demonstrate the Institution's continued commitment to members based outside of the UK.

Two town hall sessions were held virtually in May and November giving members the opportunity to hear from their senior leaders and put questions to the panel on topics ranging from sustainability, collaboration with other engineering institutions and membership growth.



Volunteering at IChemE

Volunteering represents the foundations that IChemE has been built on during its first one hundred years, and to support and recognise volunteers going forward, there was an increased focus on volunteer engagement during the year. Over 3,000 volunteers shared their expertise and contributed to the achievements of the Institution in a wide range of roles, from professional reviewer to mentor, member group treasurer to net zero working group member.

Working with an independent external agency, IChemE commissioned a piece of research to explore volunteering and understand how the many volunteers who play a critical role in the running of the Institution felt about their experience. This was the first time that comprehensive feedback has been sought from the full complement of volunteers, with 453 volunteers taking part in the research. Undertaken in collaboration with the Volunteer Engagement Committee, the project was instigated to fully understand the needs of volunteers with the aim of improving the volunteer experience and engagement across the Institution. The research findings led to a series of recommendations which were formulated into a programme of work which began towards the end of the year.

During the year, 265 applications were received for volunteering roles with all new volunteer opportunities continuing to be advertised on the [volunteer](#) area of the IChemE website.

In June 2022, IChemE established a volunteer engagement function within the organisation to provide ongoing staff resource and

expertise, ensuring consistency of good practice and to drive forward the programme of work that was developed following the research recommendations.

The Institution celebrated the UN International Volunteer Day in December with the launch of a [video](#) celebrating the contribution of volunteers across IChemE. Demonstrating the span of roles and opportunities within volunteering, a range of volunteers took part including a mentor, a member of the Australian Board, the chair of the Covid-19 Response Team, a member of the Sustainability Hub's Technical Advisory Group and a professional reviewer trainer.

IChemE's achievements in 2022 are a direct result of the contribution of the 3,000 volunteers – thank you to you all.



Industrial and academic engagement

Engagement activities to support the development of chemical engineers in the workplace continued through working with employers on corporate partner programmes and Accredited Company Training Schemes (ACTS).

Strengthening the links with **corporate partners**, IChemE's President undertook a programme of industrial visits in November, meeting senior representatives and members in organisations including United Utilities, Syngenta, Astra Zeneca and Costain.

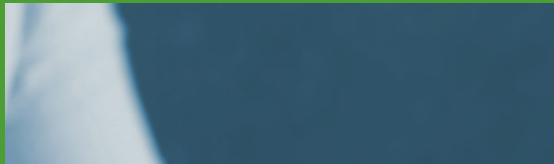
The President officially opened new state of the art facilities at the **University of Southampton** in November. The new facilities demonstrate the University's strong commitment to the profession and include a new teaching laboratory, a virtual control room and computing, design and study spaces. These resources will enable study to support the needs of society with greater emphasis on sustainability, ethics and diversity.

Engagement with universities continued with 40 presentations carried out during the year with the aim of exploring career and membership pathways with students. Some of these presentations remained virtual but more physical presentations took place than in the previous two years due to the pandemic.



Professional competence

Read more on how IChemE continued to uphold professional standards and implement flexible pathways to professional recognition.



Professional competence

IChemE continued to uphold standards by regulating professional conduct, instilling appropriate ethics and setting the bar for the appropriate standards. Implementing flexible pathways to achieve professional recognition by offering routes to qualifications for all chemical engineers who wish to gain professional recognition was a key focus during the year, as well as the provision of support to education providers, employers and industry partners.



Pathway to professional qualifications

2022 has been a year of consolidating the three-stage membership application process that was introduced in 2021 and developing enhancements to the application and assessor portals. The solutions launched in 2021 were time-critical and interim because of the replacement of the membership database and old application portal. Enhancements have been developed through 2022 to improve the experience for both applicants and volunteer members involved in the assessments. Applications will be made via online forms rather than uploaded application documents which will permit smarter tailoring of applications at Stage 1 so that applicants are only presented with sections of forms relevant to their specific circumstances. New functionality has also been developed to link the applications with the panels responsible for reviewing assessments and electing and transferring members. These enhancements are being launched at the beginning of 2023.

Following the introduction of the new Stage 1 route, Individual Case Procedure (ICP), towards the end of 2021, the first full year saw 271 applications received, 183 applications considered at the Individual Case Panel, and 96 applications fully completed and assessed as meeting the educational base for Chartered Engineer status (CEng). The application and assessment process has been continually assessed and refined during the year, to make the best use of volunteer resource and ensure a smooth application journey. The annual continuing professional development (CPD) sampling took place with 268 CPD records sampled across 13 categories of professionally qualified membership to meet the requirements of five regulators. Five members were removed from membership for failing to engage with the CPD sampling audit and a further 66 CPD records were reviewed from former members seeking reinstatement.

Throughout 2022 there was a recruitment and training drive for more **volunteers**, especially Professional Reviewers, with 55 new Professional Reviewers starting in 2022 as well as 43 Individual Case Procedure Reviewers. 11 new Initial Professional Development (IPD) Assessors were trained to assist with Stage 2 of the membership application process along with nine new Accredited Company Training Scheme (ACTS) Assessors. This regular programme of training will continue into 2023 to build a solid pool of Professional Reviewers in order to handle expected increased application volumes.

IChemE had previously undertaken licence reviews with the UK's Engineering Council, Science Council, Society for the Environment and the Energy Savings and Opportunity Scheme. These reviews are undertaken every five years and allow IChemE to continue to offer the professional registrations these regulators control. Throughout the year the team worked on implementing all actions and recommendations for improvements received from the Engineering Council, Science Council, Society for the Environment and the Energy Savings and Opportunity Scheme reviews. All were implemented well within the end-of-year deadline given.

In Australia, IChemE successfully renewed the Registered Professional Engineer Queensland assessment scheme.

To support members in applying for Chartered status, *Get Chartered* presentations explaining the process were delivered and more mentors were trained.

At the end of 2022, IChemE's headline membership figure exceeded 29,000 with 41% professionally qualified.



Accrediting qualifications

The Institution continued to support universities and training providers by accrediting educational programmes and fostering good practice.

12 virtual university accreditation visits took place internationally. As well as the UK, IChemE also carried out accreditation visits to universities in Ireland, West Indies, New Zealand, Australia, France, Malaysia and China. In order to review laboratories and facilities at the universities, eight in-person follow-up visits took place plus two virtual follow-up visits where in-person visits were not possible. 18 desktop reviews were completed to review programme changes made by universities or progress against conditions of accreditation.



Sharing knowledge

Learn how IChemE facilitated knowledge transfer and professional networks as part of our Learned Society activities.



Sharing knowledge

To achieve IChemE's strategic aim to be a vibrant learned society that materially impacts on global challenges, the key elements are to encourage knowledge transfer and facilitate professional networks.

Through IChemE's **Communities of Practice** on Energy and Research & Innovation, members developed projects on topics including electrolytic hydrogen, early career researchers and entrepreneurship.

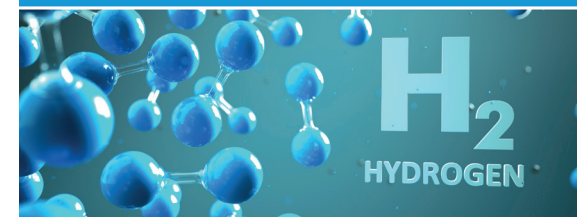
Member groups and **special interest groups** continued to deliver a variety of opportunities for members to provide networking and knowledge sharing opportunities. Over 200 technical webinars were delivered with the most popular webinar being 'Blue and Green Hydrogen in a Pathway to Net Zero' which was run by the Process Management & Control Special Interest Group (SIG) in September. The topic of the second most popular webinar was also hydrogen entitled 'ITM Power and the development of the global green hydrogen industry' as run by the Clean Energy SIG in February.

Ensuring members are equipped with an abundance of technical knowledge so they can continue creating impactful and safe solutions to help society and the environment, content on the **Knowledge Hub** was doubled during 2022 with all IChemE's peer-reviewed journal papers now included.

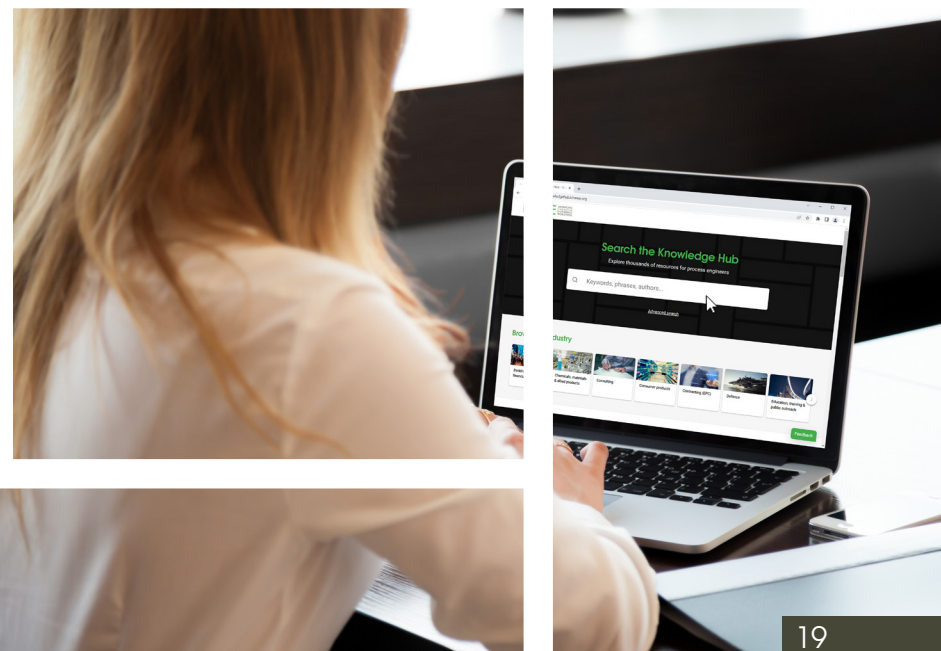
25 new books were added to **Knovel**, the online resource for books and technical information, interactive equations and analytical tools. This new content helped increase the number of visits over the year by 90%. Among over 300 different resources available, the most popular titles of the year included:

- Coulson and Richardson's Chemical Engineering Volume 6 – Chemical Engineering Design (4th Edition);
- Chemical Engineering Design – Principles, Practice and Economics of Plant and Process Design (2nd Edition);
- Lees' Loss Prevention in the Process Industries, Volumes 1–3 – Hazard Identification, Assessment and Control (4th Edition); and
- Yaws' Critical Property Data for Chemical Engineers and Chemists.

Most popular
webinar of 2022



Blue and Green
Hydrogen in a
Pathway to Net Zero



Priority topics

A focus for 2022 was delivering outputs for the Learned Society Committee's three **priority topics**: Responsible Production, Major Hazards Management and Digitalisation.

An updated **priority topics document** was launched in April which recognised the achievements made and reflected new trends in these areas. This update guided work within the priority topics during the year and into 2023.

Responsible Production

Ahead of the COP27 climate change conference held in Sharm el-Sheikh, Egypt, in November, IChemE launched a campaign to share its progress made against commitments stated within the

Institution's **position on climate change**, first launched in 2020, with the #ChemEngatCOP27 campaign gaining more than 20,000 social media impressions.

The working group formed to monitor IChemE's **delivery against the commitments** reported that good progress has already been made, noting particular successes in the areas referenced below.

Net zero and climate change have been key topics for IChemE policy work in recent years. Between January 2021 and the COP27 conference, IChemE published ten contributions to **policy** issues on its website. Of these, nine represented chemical engineering or general engineering input and advice relating to addressing climate issues and progressing towards net zero.

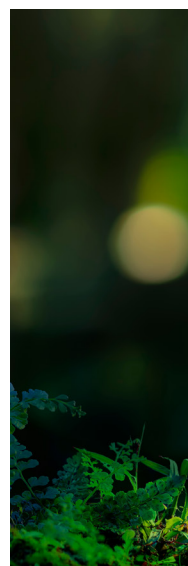
IChemE's member communities were encouraged to host webinars that both build skills for zero carbon futures and help members to understand climate risks. By the end June 2022, 37 out of 95 technical webinars held during the year were aligned with sustainability and responsible production. A compendium of freely available **climate-related webinar recordings** delivered by IChemE's special interest and member groups was also been produced, with 30 new recordings added during the year.

Two of IChemE's special interest groups (SIGs), the Pharma and Clean Energy SIGs, published their Climate Change Action Plans bringing the total to 13. To drive action on climate change

throughout IChemE's Learned Society, the Institution's member communities developed **action plans** on how chemical engineers can help mitigate climate change with the two new plans now available to view.

More information on progress against the commitments is available in the responsible production area of the website.

Following the launch of its climate change position statement in 2020, IChemE committed to review the statement every two years.



During the 2022 review, the volunteer committee determined that the statement was still relevant with only one update being required. The update strengthened the requirement for members' continuing professional development (CPD) to include activities which provide the knowledge and skills to support members and their organisations in the transition to a net zero carbon economy and in climate change adaptation.

IChemE committed to develop its own **plans for achieving net zero** carbon emissions from direct operations globally by 2025, and to publish greenhouse gas emissions data and progress each year. Annual reports showing a reduction in emissions in recent years have been published and an expert advisory group has developed guidance on good practice for minimising emissions from rented property and advised IChemE regarding carbon offsets.

Emissions data from 2019–2022 can be found on IChemE's **website** with emissions levels calculated and reported annually. In 2022, IChemE's emissions were 36.4 tCO₂e*, which is 46% lower than in 2019. These savings are mainly attributable to reduced electricity consumption (44%) in the Rugby offices and decarbonisation of the UK's national grid.

Emissions from IChemE's direct operations

- total scope one and scope two emissions**
2022: 36.4 tCO₂e (2019: 67.5 tCO₂e);
- emissions intensity: total annual emissions per full time equivalent (FTE) employee:
2022: 422 kgCO₂e/FTE (2019: 758 kgCO₂e/FTE); and
- emissions intensity: total annual emissions per m² of office space:
2022: 15 kgCO₂e/m² (2019: 56 kgCO₂e/m²).

Major Hazards Management

The Major Hazards Committee made good progress with two key projects during the year. The working group for the process safety competencies project determined what process safety competence looks like for chemical engineers in terms of skills and knowledge expected during the various stages of their career,

with the final report of findings and recommendations due to be published in 2023. Subsequent phases of the project will look at process safety competencies for the Professional Process Safety Engineer, and for organisations.

The discovery phase of the lessons learned project was concluded with the working group establishing that there are plentiful tools and information available within IChemE and hence the requirement is to effectively disseminate lessons learned with members. The next stage of the project is to establish methods to engage members with the information and encourage their advocacy with lessons learned.

A new series was published in *The Chemical Engineer* on **Safety is My Job** profiling chemical engineering careers working in safety, published in partnership with IChemE's Safety and Loss Prevention Special Interest Group.

Other features published in the magazine from within the major hazards management priority topic looked at how safe is **hydrogen in the home**, as well as a call for the UK to create a separate process industry accidents investigation unit that rapidly shares safety lessons with the engineers who need them before **more mistakes are repeated**.

Digitalisation

The digitalisation technical advisory group continued their dedicated series in *The Chemical Engineer* on digitalisation and chemical engineering, including articles on **digital twins** in the chemical process industries and **digitalising process safety**.

Other features covered in the magazine from within the digitalisation priority topic included an article explaining how 3D printing can help with process intensification, new reactor designs and better mixing, and an article on how researchers at the University of Nottingham and Torftech R&D have outlined the promise of a new high-temperature, hybrid **microwave reactor for large-scale industrial use**.



*Tonnes (t) of carbon dioxide (CO₂) equivalent (e)

**Greenhouse gas emissions are divided into three categories. Scope one emissions are direct emissions from owned or controlled sources. Scope two emissions are indirect emissions from the generation of purchased/acquired electricity, heating and cooling. Scope three emissions are the indirect greenhouse gas emissions from sources not directly owned or controlled by an organisation.

The Chemical Engineer also covered the Learned Society's priority topics including a feature on processing options to clean up **persistent PFAS contaminants** within the responsible production priority topic.

Policy engagement

IChemE's technical roadmap, *Chemical Engineering Matters*, was reviewed and updated in 2022, its first update since 2016. The document provides a framework for society and stakeholders to explore how chemical engineers are central to addressing our global challenges, and identifies four key areas where our profession can create, maintain and improve quality of life, now and in the future:

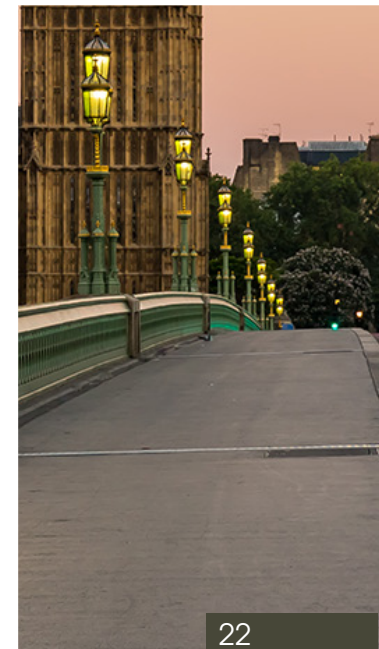
- water;
- energy;
- food; and
- wellbeing.

Chemical Engineering Matters reflects on the diverse perspectives of IChemE's international membership, placing particular emphasis on areas where chemical engineering has a significant global impact. The report identified a series of strategic challenges, highlighting current capabilities and developments, as well as future priorities, needs and opportunities. In the development of *Chemical Engineering Matters*, sixty member groups provided written input during the consultation process.

Policy consultations are one method IChemE can use to ensure that chemical engineers' voices are heard by government. In 2022, IChemE contributed to six published pieces of policy work, covering consultation responses and technical policy reports in UK and Australia. A new fast-track policy process was developed, allowing the Institution to respond to consultations with short turnaround times, thereby increasing engagement with policy makers.

Active engagement with the National Engineering Policy Centre (NEPC) has continued to benefit IChemE's UK policy work. The NEPC operates as a hub for developing and disseminating engineering policy advice by working collaboratively with a cross section of 42 professional engineering institutions in the UK.

In a UK Government **roundtable discussion** held on sustainability education, IChemE recommended that the Department for Education (DfE) works with higher education institutions to enable the upskilling and reskilling of practising and future engineers to effectively perform roles that deliver sustainable solutions. IChemE Fellow Jarka Glassey represented IChemE at the roundtable held virtually in February as part of a consultation ahead of the publication of the Department's strategy on sustainability and climate change education, launched in April.



Publications

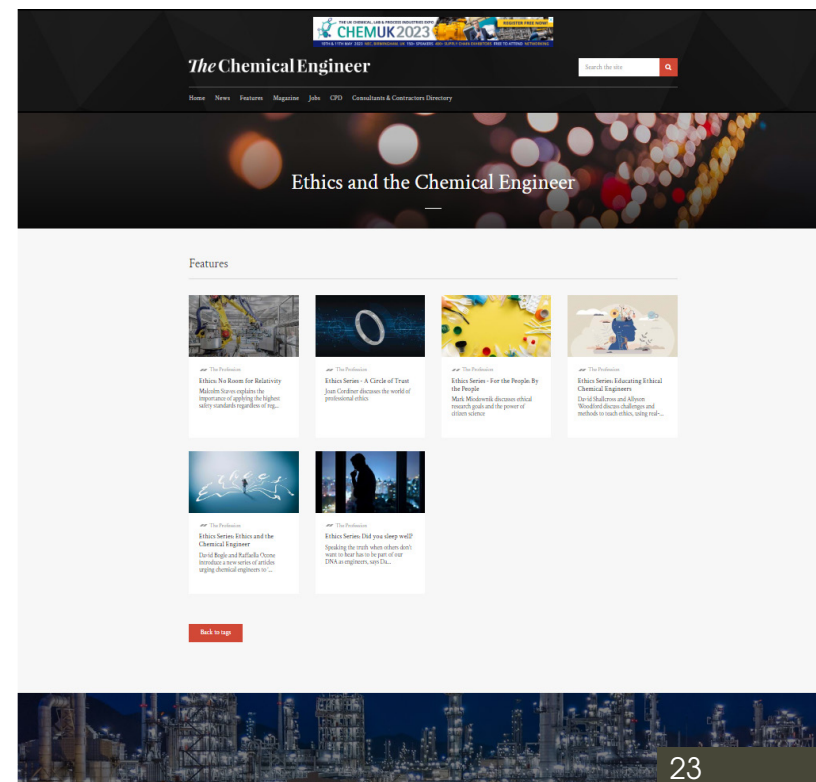
All wholly-owned IChemE journals saw a rise in their Impact Factor in 2022, a quantitative measure of a journal in relation to its competitors. The *Sustainable Production and Consumption* journal achieved the highest ever Impact Factor for any IChemE journal with a score of 8.921.

Multiple collections of invited papers on topical areas across the breadth and depth of chemical engineering were published in IChemE journals throughout the year, including a special issue of *Chemical Engineering Research and Design* celebrating IChemE's centenary. This featured forward-looking perspective articles on core chemical engineering topics from experts in their respective fields.

The number of papers published in IChemE journals during 2022 approached 2,300, an increase of 30% since 2021. The number of manuscripts submitted was over 12,000, an increase of 23% in the same period.

The ten issues of *The Chemical Engineer* magazine published during the year included a new series on *Ethics and The Chemical Engineer*. Launched in partnership with volunteers, the series urged the community to 'think ethics before taking action'.

Readers of the *Loss Prevention Bulletin* (LPB) were invited to contribute their predictions for accidents of the future i.e. accidents that are typically repeated because lessons aren't learnt, or accidents that could arise from new technology. This resulted in a special issue of the bulletin which was shared with *Hazards 32* delegates and is also free to download from the [website](#).



Fellowships

Josh Fearn, a chemical engineering graduate of the University of Surrey, UK, was awarded the 2022 **Ashok Kumar Fellowship** which was established to enable chemical engineers to inform the work of UK Members of Parliament (MPs) and policy makers. In partnership with the Materials Processing Institute, IChemE funds a three-month placement with the UK Parliamentary Office for Science and Technology (POST), where Josh will contribute to an area of public policy.

On completion on her placement, the 2021 Ashok Kumar Fellow, Amber Keegan, a chemical engineering postgraduate student from the University of Sheffield, produced a briefing note (POSTnote) entitled **States' use of cyber operations**, exploring how and why states use cyber operations against other nations, and the threats that these activities pose to the UK.

A new bursary to fund 20 postgraduate students to attend a summer school to enhance their knowledge in catalysis was introduced under the **Andrew Legacy scheme**. The scheme aims to support scores of students in enhancing their knowledge in catalysis and is funded following a donation made to the Institution by the late Professor Syd Andrew, an IChemE Fellow and distinguished expert in the field of catalysis. The summer school was organised by, and held at, the University of Liverpool's Department of Chemistry in July and runs every two years. The 20 recipients of the bursary gave positive feedback about the summer school and some have gone on to join IChemE special interest groups.



Events and training

Events

Knowledge-sharing and supporting continuing professional development (CPD) activities continued at the *Hazards 32* conference in Harrogate, UK, delivered face-to-face for the first time since 2019. Held in October, 290 delegates attended to listen to a range of technical presentations from industry practitioners, researchers and regulators designed to help advance the understanding and application of managing major hazards.

The prestigious Trevor Kletz Lecture was given by Dame Judith Hackitt who led the independent review into building regulations and fire safety for the UK Government after the Grenfell Tower fire in 2017. Emphasising the importance of cross-sector hazards learnings, Dame Judith reflected on her personal journey in process safety and related it to the challenges in the built environment sector as it faces new and tougher regulation in the wake of the Grenfell Tower tragedy.

For the first time, and to mark IChemE's centenary year, the *Chemeca* conference was held in conjunction with *Hazards Australasia* in Melbourne, Australia, in September.

At *Hazards Australasia*, delegates learnt how to improve process safety practices in uncertain times, including the impact of sustained pressures and strains on workforces from the Covid-19 pandemic and Australian bush fires. Attendees had the opportunity to gain further knowledge at *Chemeca* with the sharing of engineering research and innovations helping to make a greener, safer, cleaner future. New to *Chemeca* this year was a panel discussion on the next 100 years of chemical engineering and a Hackathon competition.

11 teams of students entered the *Chemeca Future Fuels Hackathon* which saw teams pitch their net zero carbon fuel infrastructure solutions to a panel of industry experts. The winning team was announced as The Future Shapers from the University of Melbourne, with the runners up, Fuelture, from the University of New South Wales being awarded the Australian Gas Industry Trust prize for innovative use of existing gas infrastructure.

IChemE Honorary Fellow and Chair of the Major Hazards Committee, Dr Marlene Kanga, gave the keynote address at the joint events' dinner and encouraged chemical and process safety

engineers to focus on not just their technical abilities, but also their personal responsibility as they lead the transition to a greener world.

Focusing on the specific challenges facing process safety practitioners, 296 people registered for the IChemE Regional Process Safety Seminar, held virtually in March.

Training

More than 80 live public training courses were delivered to over 900 attendees from all over the world. Eight new training courses were launched including *Plant and Production Management* and *What Engineers Need to Know About Hydrogen Safety*.

Over 3,500 registrations were received for on-demand Sustainability Hub courses, designed to further chemical engineer's knowledge and understanding around subjects that can contribute to sustainable development. Read more about the [Sustainability Hub](#) in this dedicated section of the Annual Review.





ChemEng Evolution: IChemE at 100

Find out how IChemE marked our centenary and celebrated 100 years of the Institution.

ChemEng Evolution: IChemE at 100

2022 marked IChemE's centenary as the inaugural meeting of the Institution was held at the Hotel Cecil in London on 2 May 1922. From that first meeting, where approximately 100 chemical engineers attended, to the vibrant membership body which achieved an extensive global reach by the time of the centenary, IChemE has been advancing chemical engineering's contribution for 100 years.

View IChemE's milestones

Ahead of the centenary, a committed group of member volunteers worked to determine the most effective way to mark this milestone under the banner of 'ChemEng Evolution'. This name was given to the celebrations to celebrate chemical engineering achievements of the past whilst recognising the importance of permanently evolving to continue to contribute to global grand challenges in the future.

Nine themes were examined throughout the year, selected to highlight the enormous contribution that chemical engineering has made to society over the last century, and will continue to do so over the next 100 years. Thousands of members got involved by submitting thought-provoking articles, joining in with discussions in a programme of webinars, attending volunteer events, engaging with the centenary blog series and following #ChemEngEvolution on social media.

Find out more on the centenary activities below:

ChemEng Evolution – celebrating the evolution of chemical engineering

Bringing the centenary year to a close, the Presidential team of David Bogle, Nigel Hirst and Jane Cutler recorded a finale video where the team reviewed the year's activities which took place to commemorate this important milestone. Sharing their highlights

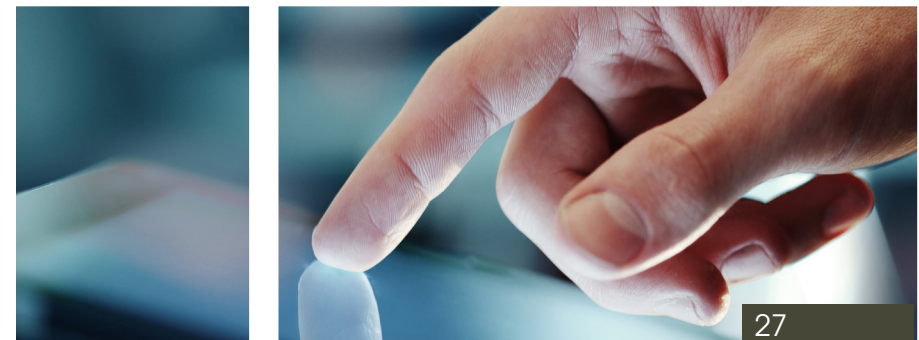
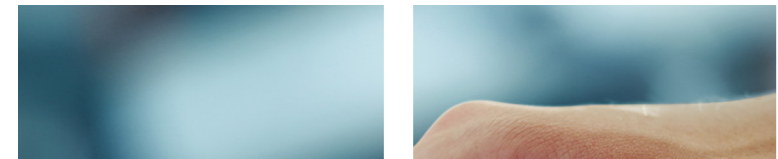
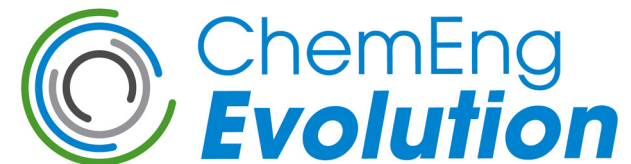
from within the nine themes, the team discussed the actions that chemical engineers should take to help society to continue to evolve in a sustainable way.

Watch the video

Visit the dedicated centenary website

A centenary website was developed hosting a vast collection of articles written by members on topics that ranged from '*COVID-19, an impact on the whole world*' to '*Message in a plastic bottle – the search for sustainability*'. Another section of the website detailed the chemical engineers who inspired IChemE's Past Presidents. These range from Margaret Hutchinson Rousseau as nominated by Past President Julia Higgins to Trevor Kletz as nominated by Past President Ken Rivers.

Visit the website



IChemE at 100, a year of celebrations by David Bogle

In the final blog of the [centenary series](#), IChemE President David Bogle reflected on the array of activities that have taken place to mark the centenary and expresses his thoughts on the important role chemical engineers will have in delivering sustainable development over the next 100 years.

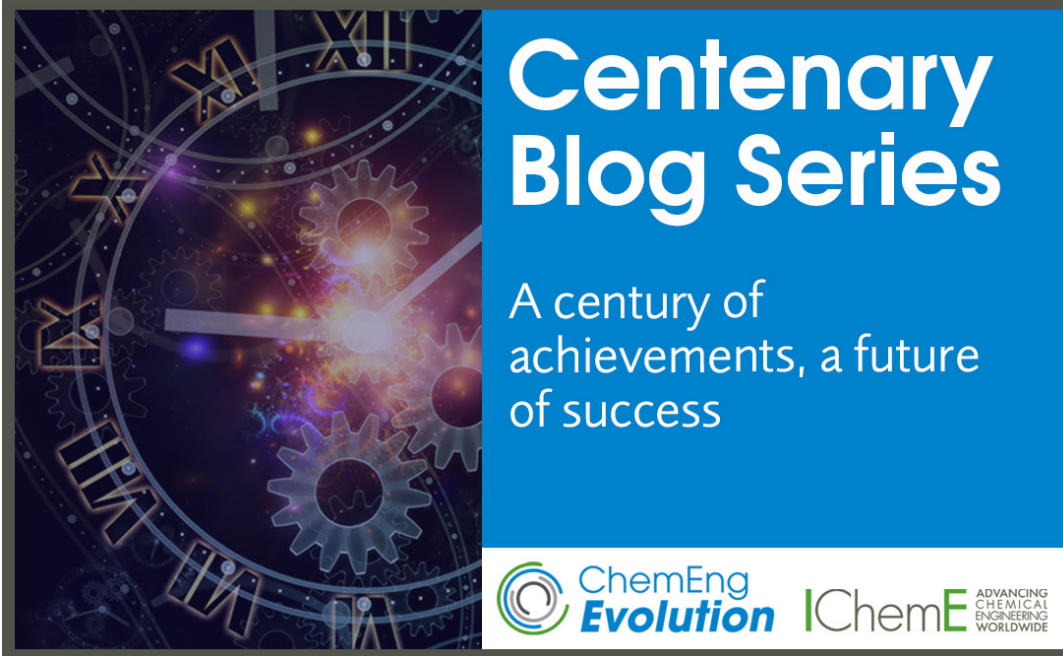
[Read the blog](#)

Catch up on the volunteer recognition event held in Manchester, UK

To mark the centenary, all volunteers were invited to volunteer recognition events to celebrate the contribution of IChemE's volunteer community. Attendees at the event held in Manchester in November 2022 were welcomed by IChemE Deputy President Nigel Hirst and Professor Lev Sarkisov from The University of Manchester before listening to Professor Adisa Azapagic's keynote address on 'Systems, life cycles and sustainability: the role of chemical engineering'.



[View the recording](#)

The Board of Trustees would like to thank all those who engaged with the centenary celebrations with interest, enthusiasm and involvement. The invaluable contribution of IChemE members made the centenary a success, from those volunteers who shaped the celebrations, the members who submitted their own personal stories and those who shared their insight on how the future may look.

A banner for the Centenary Blog Series. The left side features a dark background with glowing gears and Roman numerals. The right side has a blue background with white text. At the bottom, there are logos for ChemEng Evolution and IChemE.

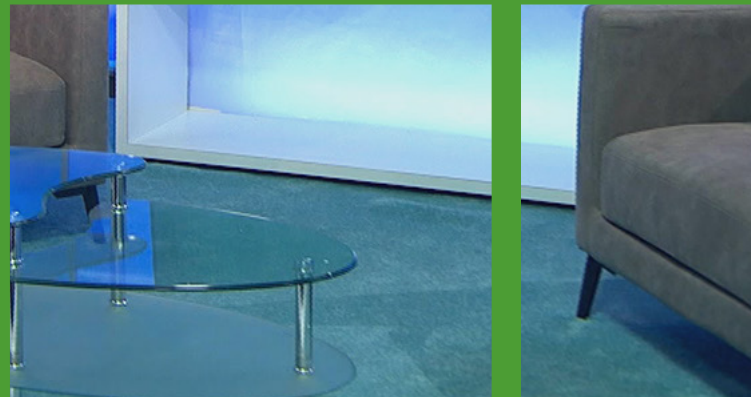
Centenary Blog Series

A century of achievements, a future of success

 ChemEng Evolution  IChemE ADVANCING CHEMICAL ENGINEERING WORLDWIDE

Serving Society

Find out how IChemE marked our centenary and celebrated 100 years of the Institution.



Serving Society

IChemE partnered with ITN Productions Industry News to produce *Serving Society*, a programme looking at the role of the chemical engineer and how the profession is addressing some of the biggest challenges in society today.

Anchored by presenter Sharon Thomas, *Serving Society* featured industry experts along with informative interviews, news items and sponsored editorial profiles, filmed at the ITN Productions Industry News London studio and around the UK.

Jon Prichard, IChemE Chief Executive, and Jane Cutler, IChemE President, joined Sharon Thomas to discuss how chemical engineering is addressing climate change and sustainability, what the future looks like for the sector and how IChemE is encouraging more women into the profession.

The role of the chemical engineer has never been more important. *Serving Society* featured reports from IChemE exploring the evolution of the chemical engineering profession's place in society today and the incredible work being done to address the future of plastic recycling.

Two animations were included within the programme covering the evolution of chemical engineering and exploring how joined-up thinking by chemical engineers can deliver solutions to society's future challenges.

The programme also showcased films from businesses, universities and organisations from across the field of chemical engineering, demonstrating the enormous contributions they are making to our world.

Watch the programme



Sustainability Hub

Learn more about the resource launched to support chemical engineers in making a positive contribution to today's sustainability challenges.



Sustainability Hub

The **Sustainability Hub** was launched in February following a generous donation from former IChemE President, Ian Shott, to support the development of sustainability knowledge for chemical engineers.

The vision of the Sustainability Hub is to inspire and support chemical engineers to make a positive impact on global sustainability as defined by the UN Sustainable Development Goals (SDGs), focusing in particular on the following four SDGs:

- **SDG 3: good health and wellbeing;**
- **SDG 6: clean water and sanitation;**
- **SDG 7: affordable and clean energy; and**
- **SDG 12: responsible consumption and production.**

Two strands of resources were developed to help users throughout their learning and professional career; training and knowledge.

Training

A growing collection of training courses was made available through the Sustainability Hub to further chemical engineer's knowledge and understanding around subjects that can contribute to sustainable development. These courses were offered free of charge to IChemE members and for purchase by non-members.

The following four courses were available within the Sustainability Hub during the year, with more courses in development:

- **The Human Water Cycle: Water and Wastewater Treatment and Reuse;**
- **Life Cycle Assessment (LCA) for Chemical Engineers;**
- **An Introduction to Sustainability; and**
- **Ethical Decision-Making for Chemical Engineers.**

All courses are designed specifically for chemical engineers and are delivered online, on-demand, enabling delegates to learn interactively in bite-sized chunks.

Knowledge

Resources to support general SDG knowledge were also developed to equip chemical engineers with up-to-date, sustainability-related information and tools.

These resources were categorised within each of the target SDGs referenced above and include success stories, videos, links to relevant information within IChemE's **Knowledge Hub** as well as links to useful external information.

New resources will continue to be added regularly.

IChemE Past President, Stephen Richardson "As organisations navigate the challenges of climate change and sustainability, the systems-thinking skills of chemical engineers will become increasingly valuable. Many chemical engineers will be called upon to give advice and make informed decisions about issues they may not have faced before. This substantial donation will enable us to support our members with the knowledge required to contribute to sustainability goals in their professional day-to-day activities."



Promoting process safety

Find out how IChemE continued to promote process safety and advance the understanding and application of major hazards management techniques to benefit society.



Promoting process safety

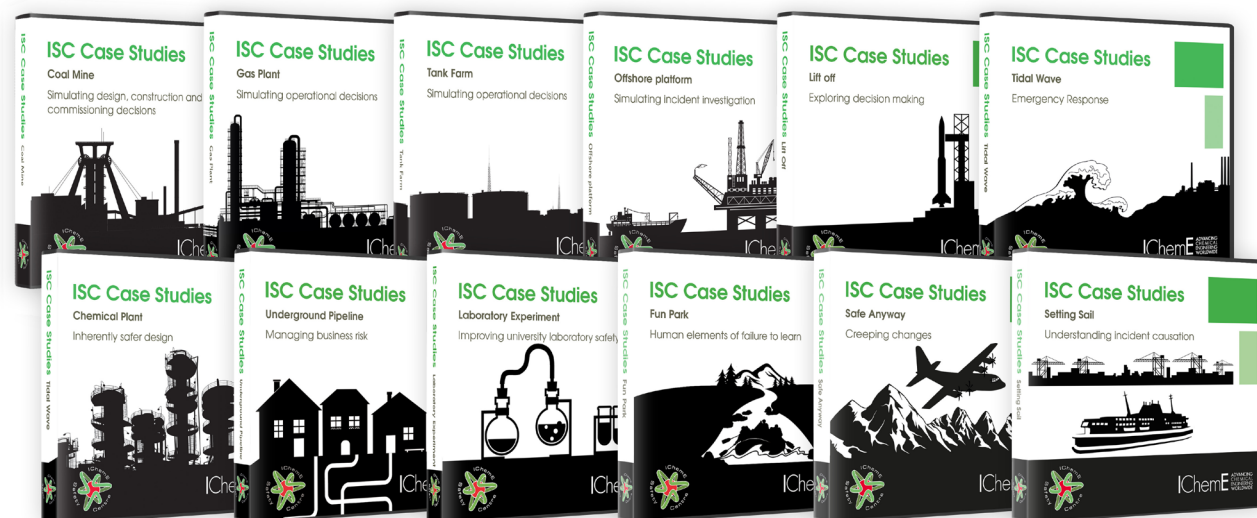
IChemE has continued to promote process safety and advance the understanding and application of major hazards management techniques to benefit society.

The IChemE Safety Centre (ISC) delivered 6 technical webinars and recorded a series of process safety podcasts in collaboration with *Chemical Processing* magazine, with the top-rated podcast being *Deadly lessons learned from a Permit-to-Work failure (Piper Alpha)*.

A new case study, *Setting Sail*, was launched, and added to the bank of ISC **case studies**, can be used as a training resource to communicate vital process safety lessons. *Setting Sail* explores the aftermath of an incident involving a ferry, with delegates working to establish who or what caused the event to occur.

The ISC's social media campaign #MinuteToLearn continued, sharing one-minute videos of incidents and related learnings on their anniversaries. 49 videos gained over 5,000 YouTube views during the year. The number of followers of the ISC's social media accounts increased across all channels, with an increase of 55% on LinkedIn.

As part of IChemE's centenary activities, the Safety and Loss Prevention Special Interest Group (SIG) compiled a series of 52 one-page summaries of major incidents from a variety of process industry sectors into a free-to-download e-book called '*Learning Lessons from Major Incidents*'. The one-page summaries were created to be used as handouts in university classrooms, posters in plant offices and control rooms or as attachments to process hazard analysis or business case documentation to help justify investment in process safety improvement initiatives.



Recognising excellence

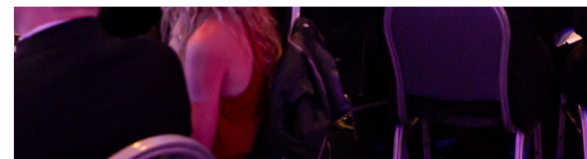
Discover how IChemE celebrated excellence in chemical, biochemical and process engineering.



Recognising excellence

IChemE recognised the importance of celebrating excellence in chemical, biochemical and process engineering with the world-renowned Global Awards and Malaysia Awards events as well as the IChemE medals and prizes programme.

Congratulations to all chemical engineers whose contributions are recognised by other institutions, bodies and governments across the globe.



Global Awards

The Global Awards celebrate excellence in chemical, biochemical and process engineering and are a mark of peer-recognition across the world within industry and academia.

Achievements across chemical engineering were celebrated across 18 categories at the **IChemE Global Awards 2022** ceremony, held in Manchester, UK, during November.

UK nuclear giant Sellafield Ltd and the National Nuclear Laboratory scooped the *Outstanding Achievement in Chemical and Process Engineering Award* for a collaborative project. Utilising digital twinning technology to optimise the facility used to treat radioactive effluent from nuclear decommissioning and operational facilities, the project won the *Water Award* earlier in the evening, and the judges were so impressed that they crowned Sellafield Ltd and the National Nuclear Laboratory overall winners of the IChemE Global Awards 2022.

The evening, hosted by television and radio host Reverend Richard Coles, saw 12 winning teams and two individual winners take home 18 coveted trophies from the most prestigious awards in the chemical engineering profession.

A joint project from the Department of Sewage Treatment Plants and Networks, Dubai Municipality, and Alserkal Group (Envirol), UAE, won the *Sustainability Award* and the *Innovative Product Award* was awarded to TRU-MK7, New Zealand. The Chemical Engineering Research Society (CERS) of the University of New South Wales, Australia, scooped the *Public Engagement Award* and the *Research Project Award* went to North Carolina State University, USA, Norwegian University of Science & Technology and SINTEF Industry, Norway.

Individual winners included Emma Claxton, Process Engineer at PM Group, UK, who was awarded the *Young Industrialist Award*, and Dr. Thomas Heenan from University College London, UK, who won the *Young Researcher Award*.

In other award categories there was global representation with winners and highly commended finalists from Norway, South Africa, Serbia, Germany, Saudi Arabia and Malaysia.



Reverend Richard Coles



Winners of the Outstanding Achievement in Chemical and Process Engineering Award, Sellafield Ltd and National Nuclear Laboratory

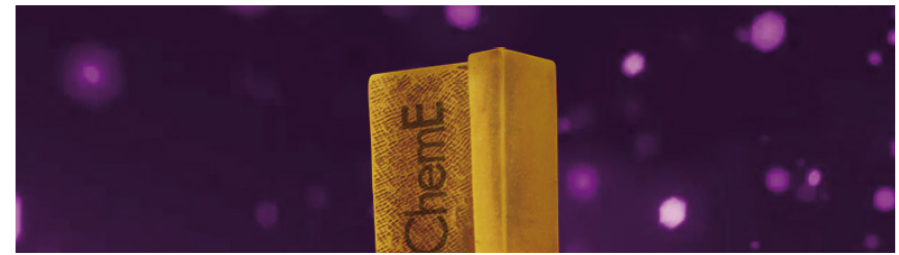


Malaysia Awards

The winners of the 11th IChemE Malaysia Awards 2022 were announced at a virtual awards ceremony held in October. Trophies were awarded in seven categories for excellence in chemical, biochemical and process engineering.

Sime Darby Plantation's innovative breakthrough in enzyme application to enhance palm oil recovery saw them crowned as winners of both the *Sustainability Award* and the *Palm Oil Award*. Their easily adaptable, low cost, and most importantly, more sustainable process improves palm oil extraction rate as well as increasing revenue.

The *Process Safety Award* was scooped by PETRONAS Penapisan who created Chemical Hazard Reactivity and Physical Hazard Compatibility Charts in response to the port warehouse explosion in Beirut on 4 August 2020. Implemented as part of a process to ensure adequate controls are taken on site, these charts were essential to maintaining compliance with regulatory standards.

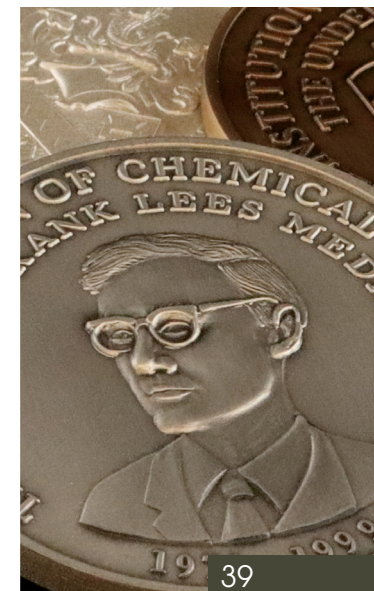
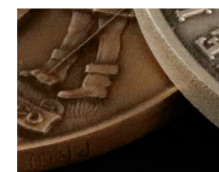


IChemE medal and prizes

IChemE's medals programme was modernised and reinvigorated in 2022, with changes enabling the recognition of people and processes that address climate change and drive greater sustainability. These improvements led to a 46% rise in nominations for IChemE medals compared to 2021.

The 2022 medal winners are listed below. For the full details, visit www.icheme.org/medals

| | |
|----------------------|---|
| Ambassador Prize | Yasmin Ali, UK |
| Andrew Medal | Junwang Tang, UCL, UK |
| Davidson Medal | Paul Witt, Dow Chemical Company, USA |
| Greene Medal | The late Tony Fishwick, UK |
| Hanson Medal | Marc Reid, University of Strathclyde, UK |
| Hutchinson Medal | Sarah Greenwood, University of Sheffield, UK Stuart Walker, University of Exeter and University of Sheffield, UK Harriet Baird, University of Sheffield, UK Rorie Parsons, University of Sheffield, UK Seth Mehl, University of Sheffield, UK Thomas Webb, University of Sheffield, UK Andrew Slark, University of Sheffield, UK Anthony Ryan, University of Sheffield, UK Rachael Rothman, University of Sheffield, UK |
| Junior Moulton Medal | Christopher Quarton, UK Sheila Samsatli, University of Bath, UK |



Junior Sargent Medal

Fani Boukouvala, USA

Lees Medal

Ashley Hynds, UK

Scott Templeton, UK

Macnab-Lacey Prize

Jack Pritchard, University of Manchester, UK

Seamus Turvill, University of Manchester, UK

James Ford, University of Manchester, UK

Harry Kay, Sam Kay, University of Manchester, UK

Thomas Hardwick, University of Manchester, UK

James Richards-Lendinez, University of Manchester, UK

Morton Medal

Jarka Glassey, University of Newcastle, UK

Nicklin Medal

Dr Hannah Leese, University of Bath, UK

Senior Moulton Medal

Matthew Sinnott, Australia

Simon Harrison, Australia

Paul Cleary, Australia

SIESO Medal

Joseph Carver, University of Bath, UK

Sophie Manton, University of Bath, UK

Steven Isaac, University of Bath, UK

Jake Bull, University of Bath, UK

Alana Jones, University of Bath, UK

Trustees Medal

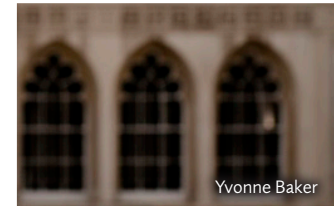
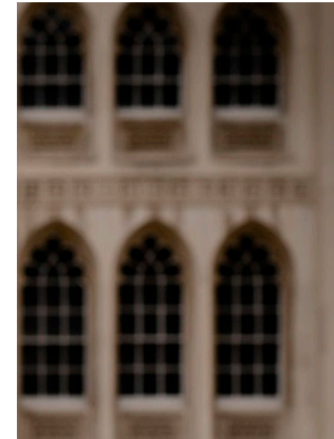
Jarka Glassey, University of Newcastle, UK



National honours

In the late Queen's 2022 New Year's Honours, Chartered Chemical Engineer **Yvonne Baker** was awarded an Officer of the Most Excellent Order of the British Empire (OBE) for services to STEM education. As Chief Executive of STEM Learning from 2010-2023, Yvonne brought STEM organisations together with the strong belief that STEM education delivers economic, social, cultural and ethical value, with positive impacts on social mobility, diversity and inclusion. Yvonne also volunteered with IChemE as a Membership Mentor for ten years, supporting members through the process to become professionally qualified as Chartered Chemical Engineers.

Chartered Chemical Engineer and IChemE Honorary Fellow **Dr Marlene Kanga**, was awarded an Officer of the Order of Australia (AO) in the late Queen's 2022 Birthday Honours List in Australia for distinguished service to engineering, particularly as a global leader and role model to women, to professional organisations and to business. While President of the World Federation of Engineering Organisations (WFEO), Marlene led the proposal for UNESCO member states to declare 4 March as World Engineering Day for Sustainable Development, with the first day being held in 2020.



Other awards

Andrea Hosey, IChemE Vice President Member Engagement was awarded the prestigious **Chemeca Medal** for outstanding contributions and leadership in chemical engineering. She was presented with the highest honour from the Australian and New Zealand Federation of Chemical Engineers (ANZChE) at the Awards of Excellence ceremony during the *Chemeca* conference held in Melbourne, Australia in September. As part of her award, Hosey presented a plenary lecture entitled, 'How many chemical engineers does it take to save the planet? The power of our profession to achieve change for good.' In this she explained her route into chemical engineering and the importance of volunteering and student engagement.

Many other chemical engineers were awarded during the **Awards of Excellence** at the conference.

Trish Kerin, Director of the IChemE Safety Centre (ISC), was awarded the **Women In Safety Leader of the Year Award**. The award recognises Kerin's outstanding leadership and contributions to driving change in process safety internationally, mainly through her activities with the ISC.



Trish Kerin



Alexandra Hosey

Governance and operations

Read more on how IChemE continued its activities to operate an efficient, high-performing organisation and strengthen the Institution's governance and operational model.



IChemE governance and operations

IChemE continued its activities to strengthen the Institution's governance and operational model.

61 members from across the world joined IChemE's virtual Annual General Meeting in June, 55 of whom were voting members. Following an election, a new Regional (Ordinary) Member was elected to the **Board of Trustees** with a new Deputy President and Honorary Treasurer standing uncontested. Two new members were elected as Early Career representatives on **Congress**, the advisory body to the Board of Trustees plus seven Congress candidates who stood uncontested.

David Bogle was inaugurated as the 81st President of the Institution, delivering his **Presidential Address** from Savoy Place, London, UK, only 100 metres from the site where IChemE's first meeting took place 100 years ago. An audience of around 100 members, trustees and invited guests were physically present with many more watching the Address live online. Entitled *Chemical Engineering: an Ethical Profession* the Address focused on the need to ensure that ethical thinking is placed at the forefront of chemical engineering professionalism and education, as safety and sustainability have been in recent years. Bogle commented that safety and sustainability are parts of the ethical code that chemical engineers must all aspire to and for which the next generation must be trained.

A new 35-day election process was rolled out for special interest groups and member groups to create greater objectivity and transparency around officer elections.

Jon Prichard, Chief Executive, stepped down from his role in September to take up a new appointment at another membership organisation. On announcing his departure, Prichard thanked all members, volunteers, staff and his peers for their continual support in advancing the contribution of chemical engineering. Jo Downham, Director, Finance and Business Support, was appointed Interim Chief Executive whilst the Institution recruited a successor. **Yvonne Baker**, a Chartered Chemical Engineer and Chief Executive of STEM Learning was appointed as IChemE's new Chief Executive Officer and will take up the post from April 2023.

The Institution has continued to extend the scope of the ISO:9001 quality management system with the HR, Governance, Membership, Qualifications, Learned Society Knowledge and Finance departments becoming compliant in 2022. Documenting these additional quality management systems provides the framework for continuous improvement to meet the needs and expectations of members and interested parties. IChemE remains committed to the ISO9001:2015 standard aiming to gain certification across the organisation in 2023.

During 2022, IChemE commenced and delivered a new digital logged-in area for members and non-members to pay subscriptions, update contact details and join a member group. This exciting new platform is part of the Institution's commitment to improving the digital experience.

As part of a series of subscription-related improvements that have taken place since 2017, a revised approach to international rate allocation came into effect in 2022 with IChemE now recognising three subscription tiers based on World Bank data. The new subscription model ensures an equitable approach to membership subscriptions wherever our members reside.

To enable knowledge sharing and networking between members groups and special interest groups, Microsoft SharePoint sites were rolled out across several geographic regions.

Sharing knowledge via the Institution's social media platforms, including **LinkedIn**, **Twitter**, **Facebook** and **Instagram**, led to IChemE's posts being seen over 3.1 million times as well as nearly 70,000 views of **YouTube** video content and nearly 80,000 views of the **blogsite**. The Institution also took part in World Engineering Day which was introduced to celebrate the contribution of the world's engineers for a better, sustainable world, with IChemE-produced videos being aired as part of the 24-hour live broadcast.

Staff continue to work in a hybrid pattern, with a review of the UK offices planned for 2023. Successful off-site team building days were held in June for all offices across the globe, the first time

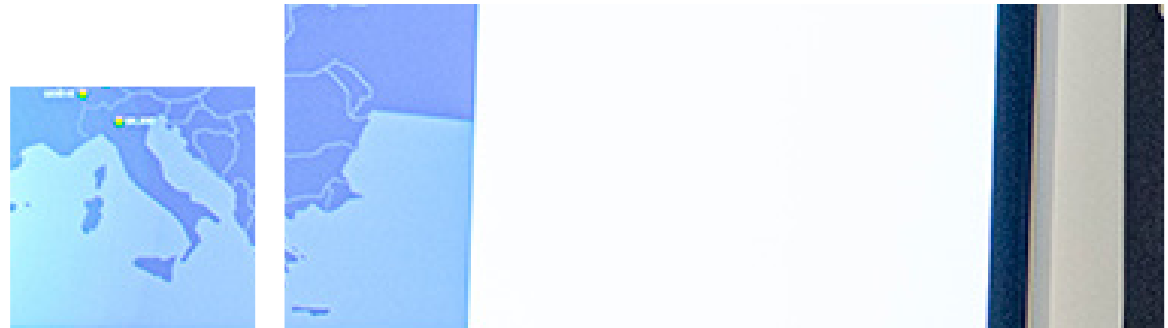
IChemE's social media posts received over

3 million views



this has happened since the pandemic. To improve the efficiency of managers across the organisation, the monthly Managers Masterclass training programme continued throughout the year. Staff wellbeing remained a priority with resources shared and campaigns rolled out to all staff. This included a campaign where the trained mental health first aiders shared their own stories with staff via an internal blog series.

A series of internal engagement campaigns were instigated throughout the year including 'Walking the Centenary' to encourage physical activity, a holiday photo competition and the Sustainability Festival. With sustainability being an important external focus for IChemE, this internal campaign aimed to engage staff on the topic providing events and opportunities for colleagues to find out how they could contribute to this priority area. A new internal newsletter, 'The Update' was launched to communicate key updates to staff with research showing good engagement levels with the newsletter and the Intranet.



Leadership

IChemE Board of Trustees

Jane Cutler

President (1 January–14 June 2022)
Immediate Past President (14 June–31 December 2022)
Councillor, Town of Cambridge, Australia

David Bogle FREng

Deputy President (1 January–14 June 2022)
President (14 June–31 December 2022)
Pro-Vice-Provost, Doctoral School, University College London

Stephen Richardson CBE FREng

Immediate Past President (1 January–14 June 2022)
Emeritus Professor of Chemical Engineering, Imperial College London, UK

Nigel Hirst

Deputy President (from 14 June 2022)
Chairman, HFL Building Solutions Ltd

Iain Martin

Honorary Treasurer (1 January–14 June 2022)
Consultant, Freshwater Consulting, UK

David Edwards

Honorary Treasurer (from 14 June 2022)
Visiting Professor of Safety & Loss Prevention, School of Aeronautical, Automotive, Chemical & Materials Engineering, Loughborough University UK

Rob Best

Vice President – Qualifications
Retired

Andrea Hosey

Vice President – Member Engagement
Managing Consultant Energy and Chemicals, Advisian, Australia

Alexandra Meldrum

Vice President – Learned Society
Facilitator in Charge, Australian Graduate School of Management, University of New South Wales, Australia

Wendy Wilson

Ordinary Member
Retired

Macsene Isles-Ahite

Ordinary Member
Managing Director, Browns Wood Services Ltd, UK

Mark Sutton

Ordinary Member
Engineering and Process Technology Director, Johnson Matthey, UK

Peter Ashman

Regional member (Australia) (1 January–14 June 2022)
Professor, School of Chemical Engineering & Advanced Materials, University of Adelaide, Australia

Rhys Tucker

Regional member (Australia) (from 14 June 2022)
Director, E2C Advisory, Australia

Jane Atkinson CBE FREng

Regional member (UK) (1 January–14 June 2022)
Executive Director, Engineering & Automation, Bilfinger UK, UK

Raffaella Ocone OBE FREng FRSE

Ordinary member (regional) (from 14 June 2022)
Professor of Chemical Engineering, Heriot-Watt University, UK

IChemE Executive Team (1 January–31 December 2022)

| | |
|------------------------------|--|
| Jon Prichard | Chief Executive (until 30 September 2022) |
| Jo Downham | Director, Finance and Business Support Interim Chief Executive (from 30 September 2022) |
| Claudia Flavell-While | Director, Learned Society |
| Andrew Foster | Director, Regions |
| Trish Kerin | Director, IChemE Safety Centre |
| David Lloyd-Roach | Director, Qualifications |

Financial results

View the Institution's financial results as of 31 December 2022.



Financial results

2022 resulted in another strong financial year for the Institution with total group income from unrestricted funds ending the year ahead of target at £8.64m. This represents a 10% increase on 2021.

Income chart for 2022

Income from membership subscriptions remained steady, whilst income from training courses, conferences and events increased back up to pre-covid levels as activities returned face to face.

Total expenditure on unrestricted funds was £8.23m, resulting in a net operating income of £406,000.

Income/expenditure chart for 2022

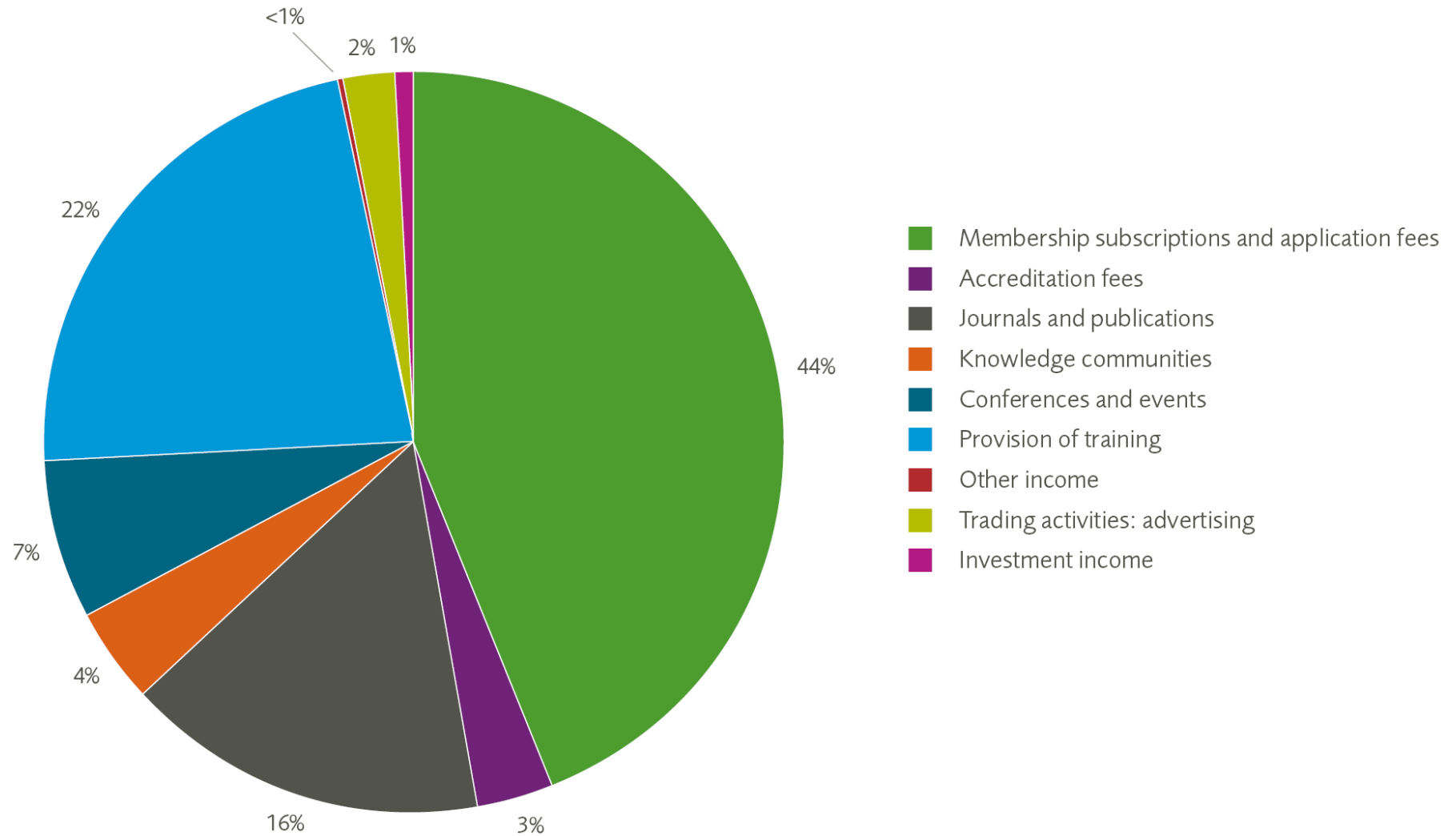
The level of free reserves held at year end was £6.73m with a further £0.35m held as a designated fund for future IT projects.

Reserves chart

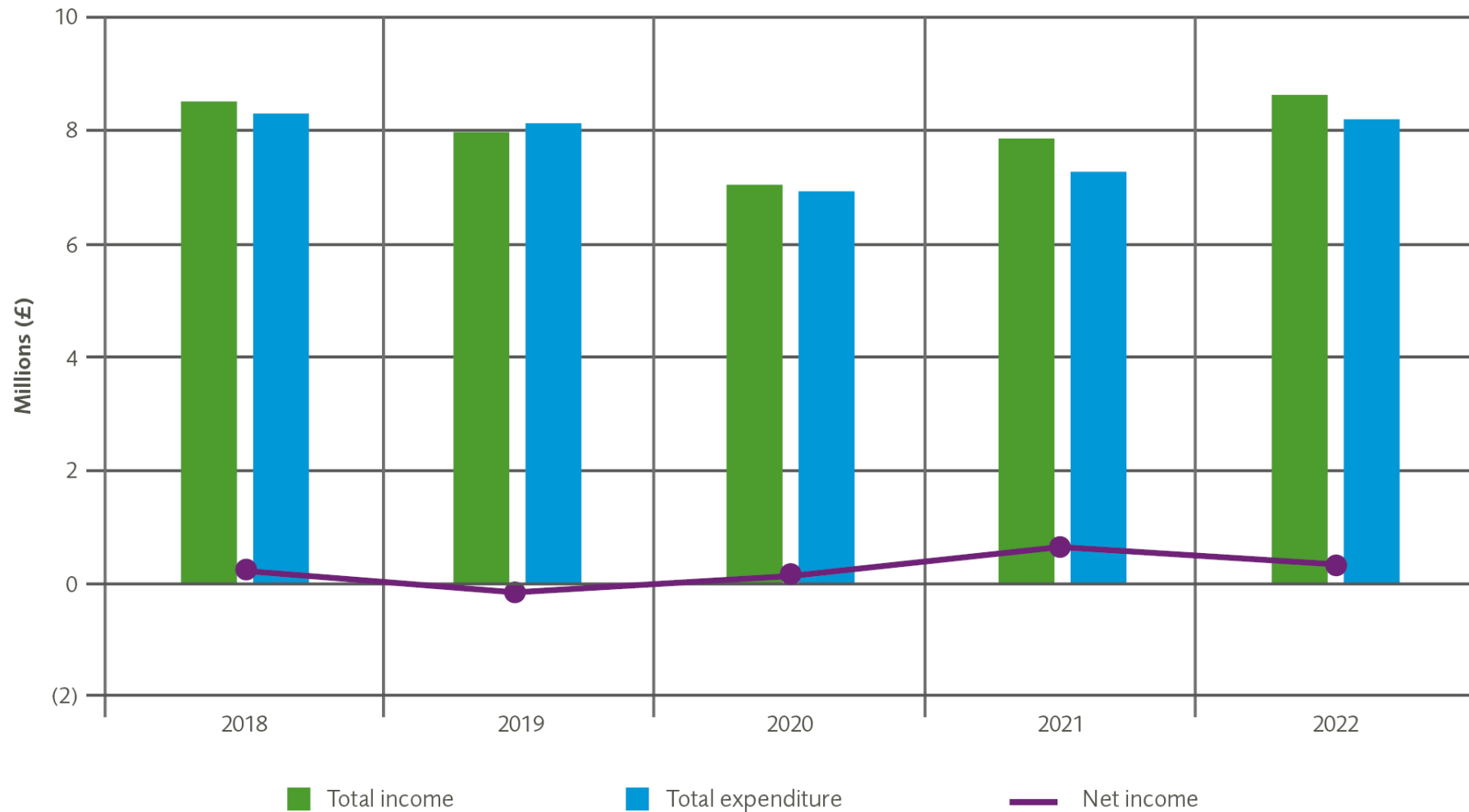
The full audited accounts for the Institution are available [here](#).



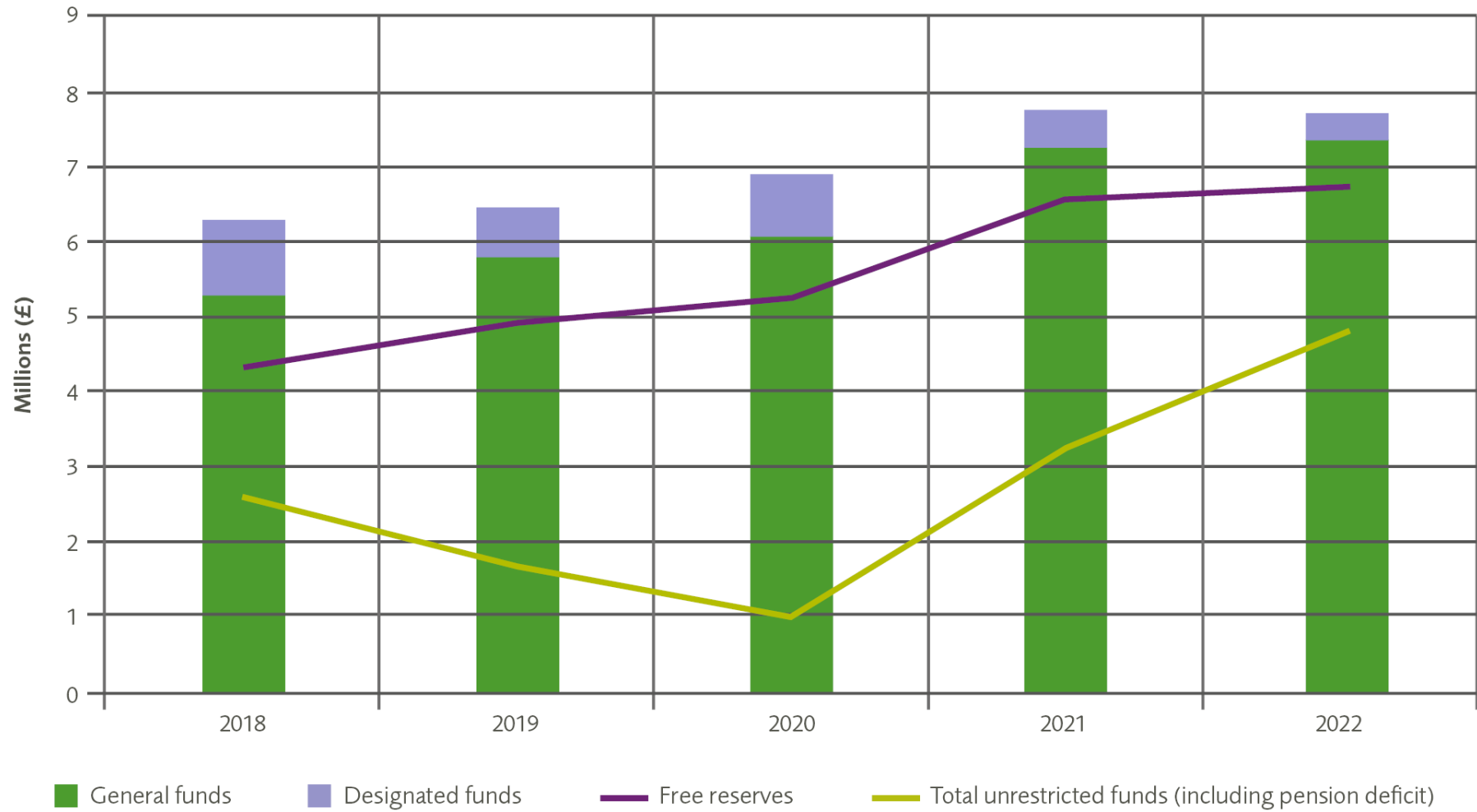
Total income (unrestricted funds)



Operating income and expenditure (unrestricted funds) – last 5 years



Reserve levels (unrestricted funds) – last 5 years



Contact us for further information

UK

☎ +44 (0)1788 578214

✉ membersupport@icheme.org

Australia

☎ +61 (0)3 9642 4494

✉ austmembers@icheme.org

Malaysia

✉ malaysianmembers@icheme.org

New Zealand

☎ +64 (0)4 473 4398

✉ nzmembers@icheme.org



www.icheme.org

Incorporated by Royal Charter 1957. The Institution of Chemical Engineers (trading as IChemE) is a registered charity in England and Wales (214379) and Scotland (SC039661). The Institution also has associated entities in Australia, Malaysia, New Zealand and Singapore.

Editorial by Lucy Cook. Design by Lyzanne Cox.