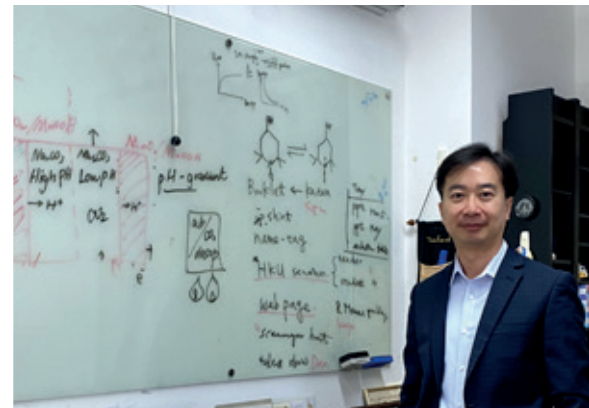


# Annual Review 2020

Incorporating the annual report and accounts  
of the Institution of Chemical Engineers



Led by members,  
supporting members  
and serving society

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# Achievements

In 2020, members and employees together accomplished so much to support the membership in both their professional development and applying their expertise to make an influential contribution to solving major challenges. Here are some highlights.



Established the COVID-19 Response Team supporting solutions for identifying and scaling up vaccines and equipment during the pandemic

330

member volunteers began new membership and qualifications roles



New contact relationship management (CRM) system introduced to enable better communications and connectivity with IChemE's

33,000 members

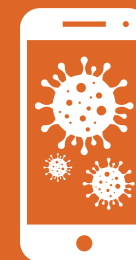
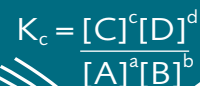
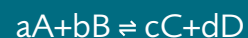


18,980

people attended webinars given by members groups and special interest groups worldwide



New Knowledge Hub launched with 10,000 technical resources in a centralised area for members



Launched the Coronavirus Hub for central access to member support and resources

3

New stage membership process developed



Climate change position statement launched

Over 3,000 member volunteers GDPR trained

# Strength and progress through uncertain times

I never would have predicted that the majority of my time as President of the Institution would be dominated by a global pandemic. Confronted with the biggest health crisis of our time, I am proud of IChemE's response and ability to continue to deliver on ambitious targets under *Strategy 2024* through an incredibly uncertain year.

It is a credit to our members that a team of volunteers reacted immediately to form a COVID-19 Response Team, utilising the specialist experience and skills held by chemical, biochemical and process engineers to make a vital contribution to the response to the pandemic. From supporting the scale-up of the manufacturing processes necessary to meet the urgent vaccine targets, to researching methods to decontaminate and reuse personal protective equipment (PPE), the team's contribution highlights how chemical engineering touches every part of society.

IChemE, both the members and the staff, worked hard to continue delivering member services during the pandemic, enabled in most part due to the substantial increase in our virtual activities. From assessing university degree accreditations virtually and semi-virtually for the first time, to delivering a significant growth in technical webinars to support professional development and sharing of good, safe practices, I would like to thank everyone involved in making this all happen so smoothly.

As I mentioned in my Presidential Address, it's important we consider the big picture in everything that we do as chemical engineers. The overwhelming support provided to ensure continuity of services and the implementation of the various change activities has been exemplary. Although I haven't been able to meet many of you personally over the last year, it has been wonderful to see so many of you virtually, and I have much appreciated the benefit that this has brought of being able to connect with members across the world. I have also very much enjoyed communicating with you through our new video series.

Understanding that the pandemic has caused hardship for some of our members, I am grateful that the Chemical Engineers Benevolent Fund has increased the support that it provides to chemical engineers in need, wherever they are based.

Despite the complexities of the last year, IChemE has continued to make significant strides in a number of priority areas, most notably in respect of climate change, culminating with the publication of our position statement in November. This was developed through a highly consultative process and facilitated by a member-led working group. The Institution's position includes a series of commitments for members, IChemE operations and ultimately the industries in which members work. I am looking forward to the seeing the programme of action plans developed that will influence improvement in this area and that will demonstrate how chemical engineers can positively contribute to the delivery of the United Nations' Sustainable Development Goals.

There has been much to celebrate and recognise in 2020. Twenty-six chemical engineers were awarded medals and prizes for their outstanding contributions to the profession in industry and academia. The Institution held its first-ever virtual awards ceremony to announce the winners of the IChemE Malaysia Awards and showcased outstanding projects and achievements in a programme of webinars to celebrate the finalists in the IChemE Global Awards.

The progress made in 2020 would not have been possible without the support of our many volunteers. Your work is very much appreciated and enables IChemE to achieve its aim of being member led, supporting members and serving society.

As the end of my presidency approaches, I would like to thank all IChemE members for your support throughout my term in office. It has been an honour to be your President and I wish my successor all the best in her role leading the Institution as we head into our centenary year.



“Confronted with the biggest health crisis of our time, I am proud of IChemE's response and delivery.”



Stephen Richardson

Stephen Richardson  
CBE FREng FIChemE  
President 2019–2021



# Accelerating new ways of working

As 2020 began, little did we know how the year would develop. Given the challenges presented by the pandemic, I am delighted that IChemE, following a seamless transition to virtual operations, was able to continue supporting members.

We were able to achieve this in rapid timescales due to our previous investment in business systems including the move to cloud-based services. Additionally, a number of projects were accelerated during the course of the year to support the enhancement of our virtual capability. Microsoft Teams, an online meeting application, was introduced to enable video communication for staff and members, and SharePoint was implemented for document sharing and management.

As with most other organisations, as the scale of the pandemic became fully understood, it was necessary for us to revisit our plans for 2020. Due to the initial uncertainty, we took a tight control of costs, meaning that we were able to continue delivering member services and launch new resources, including our Knowledge Hub, without needing to draw upon our reserves.

Our volunteers and staff adapted to virtual working practices unhesitatingly. Members groups' meetings were moved to online webinars, conferences were converted to virtual events and the vast majority of training was delivered online. In order to support staff through the pandemic, resilience training was rolled out, mental health first aiders were introduced, and the wellbeing section of our intranet was further developed.

As you'll see in the review, we've continued to develop our business architecture, improving our regional governance structures with changes that aim to deliver sustainable finances and consistent member services across the membership.

Work began to transition to a new contact relationship management system (CRM) utilising a Microsoft product. This was a major undertaking as changes were required

to be made while the existing system remained live. It was pleasing to note that the majority of the transition ran smoothly, but some members will have experienced minor issues with the changes as a part of the transition process. The new system will allow better integration with our other new applications.

Maintaining our reputation for upholding standards remains a priority. Significant progress was made on Programme SMART in 2020 with a new three-stage process for membership applications being trialled successfully ahead of the full launch in 2021. This will help to simplify the qualification process without affecting standards and will offer members greater flexibility with the routes to professional qualification.

The quality and quantity of work undertaken by our volunteers within our qualifications and learned society activities across the world has once again been incredibly impressive. Member participation and leadership is fundamental to the delivery of the Institution's charitable objects as an educational charity and strengthens the support that is provided throughout the member lifecycle. I am grateful to everyone who plays a part in this.

Financial sustainability is critical to enabling our progress against *Strategy 2024*. After an uncertain period, we finished the year with a moderate operating surplus which puts us in a strong position to achieve our goals for 2021. I was particularly delighted that our commercial activities, many of which were swiftly modified in light of the restrictions in place, still delivered a modest contribution which we were able to invest into improving and increasing our member services.

The plans for the Institution's centenary in 2022 are now picking up pace and I look forward to celebrating how the contribution of chemical engineering has benefited and will continue to benefit society as we look ahead.

Thank you for your continued support.

“Due to previous investment in our systems, additional projects were accelerated to support our virtual capability.”



Jon Prichard  
Chief Executive





# Respected for professionalism and technical competence



# Flexible pathways to professionalism



IChemE continued to set and uphold standards, while offering flexible routes to professional qualification.

Significant progress was made on Programme SMART (Sustainable Membership Achieved via Robust Transactions) in 2020. A new [three-stage process to apply for membership](#) was developed and trialled successfully. Stage 1 is the assessment of an applicant's educational base for membership, with the new Individual Case Procedure (ICP) route giving recognition to those who have not completed accredited programmes of study but have the relevant knowledge. Stage 2 assesses an applicant's Initial Professional Development (IPD) – their experience and development of competencies. Stage 3 is Professional Review, to confirm demonstration of an applicant's competence and commitment. Stage 3 also includes the new procedure to process Chartered Member applications within three months.

Volunteers and employees have undertaken a huge project to build these processes into a new membership application review system, which will be fully realised in 2021.

Plans to embed ICP into the new system have progressed well. Forty-three people took part in three pilots between

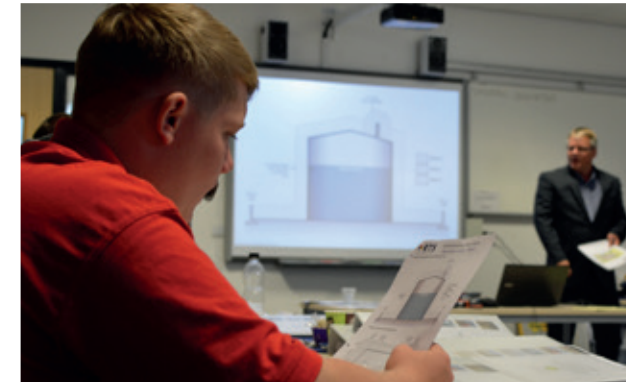
January 2018 and May 2020. From May to December 2020, 55 people were invited to participate in the new process in small tranches to fully test the system.

More than 330 volunteers have been recruited, and began training, for the new Professional Reviewer, ICP Reviewer and IPD Assessor roles, as well as comparable roles for Professional Process Safety Engineer applications, so that Programme SMART can be fully implemented.

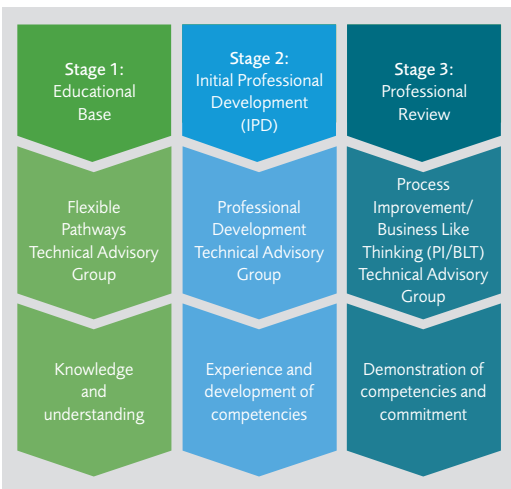
IChemE continued to support academia and industry with chemical engineering skills development and successfully adapted its processes to assist members and partners throughout the COVID-19 pandemic and subsequent restrictions.

IChemE sought a one-year blanket extension from the Engineering Council for its accredited degree programmes to allow university departments to focus on coping with a unique and rapidly changing landscape for their teaching. In its role to maintain high professional standards, IChemE developed a COVID-19 Impact Report Form to closely collaborate with accredited universities to record changes implemented to programmes enabling students to still meet the required learning outcomes.

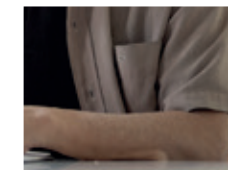
**1,483** new Associate Members elected



**318** Chartered Chemical Engineers elected



**71** Fellows elected





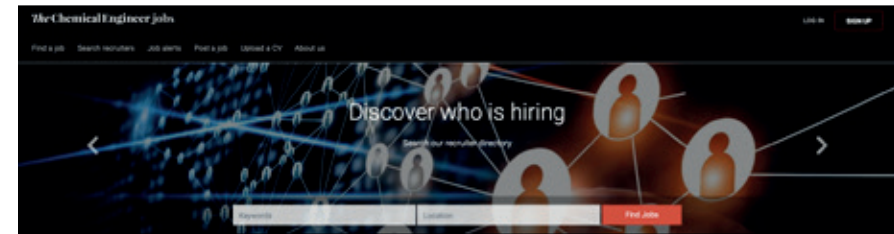
Twelve university accreditation visits took place physically, virtually or semi-virtually. Heriot-Watt University was the first institution to have its Malaysia campus [semi-virtually accredited](#). Its programme accreditation in Dubai was the first for IChemE in the Middle East. IChemE shared its learnings of good professional practice from the semi-virtual accreditations with other engineering institutions.

High hazards training provider Reynolds Training Services became the first to have its [level 3 diploma qualification](#) of its apprenticeship scheme approved by IChemE.

Senior leaders at IChemE and Arup gathered online to present the engineering, design and consultancy firm with their Gold Corporate Partner Award recognising their commitment in supporting undergraduates and graduates.

Members and employees in the UK, Australia, Malaysia and New Zealand supported members in their continuing professional development (CPD) with in-company, online and on-demand courses. Live training was primarily delivered virtually to adapt to COVID-19 restrictions, except in New Zealand where training was safely conducted face-to-face. IChemE continued to create bespoke courses for industry employers, including a newly developed online HAZOP course, which 50 delegates from Rio Tinto in Australia attended. Fifty-seven live online courses were conducted in 2020, plus on-demand training courses were purchased by individuals in 33 countries.

## New jobs board and Contractors and Consultants Directory launched by *The Chemical Engineer*



*The Chemical Engineer* magazine launched an improved [jobs board](#) and an online [Contractors and Consultants Directory](#) to boost access to employment and support connections between industry suppliers.

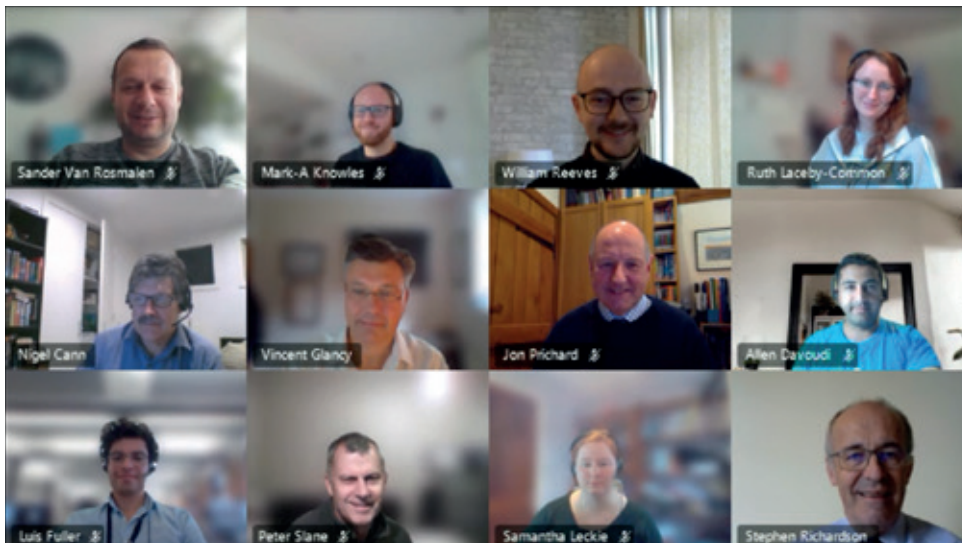
Following their appointment to the Malaysian Sustainable Palm Oil (MSPO) standards working group in 2019, Palm Oil Processing Special Interest Group members Qua Kiat Seng and Chong Mei Fong contributed to the review of the Supply Chain Certification Standard. This set of national standards addresses the sustainability and traceability requirements of the palm oil industry in Malaysia.

At the end of 2020, IChemE's headline membership figure exceeded 33,000, with 37% professionally qualified.

## First level 3 apprenticeship qualification approved



Standards being set for sustainable palm oil



More **330** member volunteers trained



# Recognised as a vibrant learned society that materially impacts on the *Global Grand Challenges*



# Sharing knowledge to advance chemical engineering

To perform as a leading learned society in chemical engineering making a positive impact on global challenges, the Learned Society Committee identified and began delivering on three technical priorities for IChemE to focus on through to 2024: responsible production, major hazard management, and digitalisation.

IChemE aims to deliver tangible outputs on various aspects of responsible production, including climate change, ethics, systems engineering and life cycle analysis.

2020 saw IChemE develop and launch its [climate change position statement](#) containing commitments to support and enable members, through education, research and sustainable engineering practices, to contribute to the transition to a net zero carbon world by 2050. It also commits IChemE to develop plans to achieve net zero carbon emissions in its own direct operations globally by 2025 and report progress annually. The member-led project group engaged with IChemE's members groups, special interest groups and committees, and invited input from the Institution's 33,000 members across the world.

IChemE also published a [collection of articles](#) to showcase the range of research papers in its journals on climate change.

All IChemE journals saw a rise in their Impact Factor, which is a quantitative measurement of a journal in relation to its competitors. [Sustainable Production and Consumption](#) received its first Impact Factor. A record 8,712 manuscripts were submitted across all journals in 2020 – up 43% from 2019.

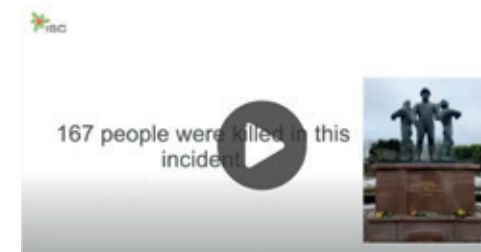
Providing technical leadership and expert opinion to decision-makers continued through contributions to [policy](#) responses, such as the nuclear decommissioning strategy and the 2020 UK Spending Review, where IChemE helped set out how engineering can drive sustainable growth.

Producing and providing access to technical resources continued in 2020. This included publishing a compilation of 20 articles on opportunities and challenges in the [hydrogen economy](#) collated by the Clean Energy Special Interest Group and *The Chemical Engineer*, and IChemE gaining members access to Knovel books through an app.

The Major Hazards Committee was formed to incorporate all process safety activities into a unified approach, enabling IChemE to improve the way it promotes safety-related knowledge, shares good practice and learns from others to support improvements across industry.

The IChemE Safety Centre (ISC) boosted its range of digital resources to encourage knowledge transfer. The ISC delivered seven times more webinars than in 2019, with almost 3,000 attendees across the world and a further 7,200 viewings of the recordings on YouTube.

The ISC also launched a social media campaign ([#minutetolearn](#)) sharing one-minute videos of incidents and their learnings on their anniversaries. Fifty-five videos gained over 2,600 YouTube views and tens of thousands of hits on additional social media channels. Plus, ISC Director Trish Kerin's new [podcast](#) collaboration with *Chemical Processing* magazine saw 3,815 downloads of 14 podcasts in 2020.



A record  
**8,712**  
journal manuscripts  
received



3,815  
downloads of process  
safety podcasts



First Impact Factor for  
*Sustainable Production  
and Consumption*  
journal





To promote technical standards, the ISC published a collection of papers sharing good practices and pitfalls to help organisations manage risk during COVID-19, and presented these at the Organisation for Economic Co-operation and Development Working Group on Chemical Accidents' virtual conference.

Knowledge-sharing and supporting CPD continued through physical-turned-virtual conferences. Piper Alpha survivor Steve Rae shared his model for developing and sustaining robust safety in the Trevor Kletz Lecture at [Hazards 30](#). To boost learning, the 31 hours of technical presentations from the two-day conference were available to delegates for 30 days. Delegates made full use of this opportunity, spending a combined 640 hours on the platform after the event.

More than 330 delegates attended the four-week webinar series [Bite-sized Chemeca](#). Innovations, lessons and best practices were shared by speakers under the theme "renew, sustain, disrupt and advance".

A [three-year digitalisation initiative](#), led by the new Digitalisation Technical Advisory Group, was launched in 2020. It will provide thought-leadership on how digital technologies – such as big data, artificial intelligence and virtual reality – and skill areas, enabled by ethical and organisational leadership, education and life-long learning, affect chemical engineering professionals, as well as prepare them for the future.

To support the global response to the coronavirus pandemic, 80 members from 11 countries with expertise in vaccine development, diagnostics manufacturing, therapeutics and medicine supplies, formed the IChemE COVID-19 Response Team. Collaborating with the International Society of Pharmaceutical Engineering UK Affiliate, the National Engineering Policy Centre, the Royal Society and IChemE's Energy Centre, the team developed numerous workstreams to address challenges, identifying where chemical engineers could provide support and solutions. Offering expert support to the UK government and the NHS, the team contributed to various policy reports with solutions to [decontaminate and reuse personal protective equipment](#), scale up [vaccine manufacture](#) and rollout, and provide recommendations for a [recovery from COVID-19](#) to put the UK on track to achieve net zero targets.

To support members during the pandemic, IChemE developed the [Coronavirus Information Hub](#), a web area centralising resources and information on IChemE's response to the pandemic and signposting members to the Chemical Engineers Benevolent Fund if they were experiencing hardship. Members shared their [stories](#) in *The Chemical Engineer* on how they have helped during the crisis, advised policymakers and described the impact on education, operations and safety.



Three-year digitalisation initiative launched

COVID-19 Response Team established







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



# Enhancing understanding, engagement and recognition

IChemE continued its efforts to strengthen member engagement, improve understanding of the profession and support the member lifecycle.

103 members across the world joined IChemE's first fully-virtual Annual General Meeting. Of this, 95 were voting members – the most since 2002 and seventh highest on record. A new Deputy President and 11 Congress members were elected and participated in strategic activities to shape the direction of the Institution. Some of these members featured in two new video series, [IChemE Insight, and In Conversation](#), launched to enhance understanding of progress with key IChemE initiatives and introduce the members leading them.

In February, at the Frank Morton Sports Day Careers Fair in Birmingham, UK, IChemE launched its [career profiles in the bioeconomy](#) booklet to support early career opportunities. There, IChemE's National Young Members Committee Chair, Heather Williams, and IChemE employees helped develop students' understanding of

professionalism by answering questions on careers and how to become Chartered.

A new Student Summit was hugely successful in July. Run by student members for undergraduates in Australia, Malaysia and New Zealand, the event saw more than 630 online participants learn from key speakers on the emerging opportunities and challenges affecting the next generation of chemical engineers. Popular workstreams included sustainable design solutions and alternative energies.

Engagement activities to support university students in Malaysia expanded with five new Student Chapters and the Palm Oil Processing Special Interest Group transferring its University Roadshow online. Meanwhile, IChemE brought together leading industry speakers to support Malaysian universities at the virtual *Regional Chemical Engineering Undergraduates Conference*, enabling over 200 students to learn about sustainable technologies and Industry 4.0.



First fully-virtual AGM held



New bio-sector careers profiles launched



**630** students joined a new Student Summit



A 60-strong member volunteer group was formed to plan how IChemE can showcase 100 years of chemical engineering achievements to celebrate the Institution's centenary in 2022. Members worldwide contributed stories that mark past and present initiatives that have delivered societal benefit and that will support the attainment of the UN Sustainable Development Goals, as well as innovations being developed for the future.

Virtual activities were ramped up worldwide in 2020 to encourage wider access to knowledge and professional development. More than 18,980 people attended 267 webinars by members groups and special interest groups. 130 early career members were matched with a mentor. 102 Get Chartered and 61 On Campus presentations were delivered. Also, IChemE launched a new workshop to support individuals with their competence and commitment report for Chartered Member application.

To improve societal understanding of chemical engineering, IChemE Fellows Dame Judith Hackitt, Fiona Macleod and Geoffrey Maitland featured as experts in [Disasters Engineered](#), a new UK Discovery Channel television series. They gave technical accounts of incidents and explained what professionals working in hazardous industries have learned from them. Furthermore, Sky News interviewed Trustee Keith Plumb for his expert opinion on wide-scale testing for COVID-19.

To promote a diverse profession, [Trustee Macsene Isles-Ahite](#) and an [anonymous autistic engineer](#) shared in *The Chemical Engineer*, their stories on what the profession and IChemE could do to improve diversity

and be more supportive to members' needs. As part of the Institution's commitment to improve and encourage equality, diversity and inclusion, a member working group was established to develop a programme of work in this area.

For International Women in Engineering Day, IChemE created a [video campaign](#) of member volunteers explaining how women chemical engineers help #ShapeTheWorld. The video gained more than 1,200 views on YouTube, with strong engagement on other IChemE social media channels, including with engineers, engineering institutions, and a UK MP.

Work on the programme to enable and recognise volunteers grew. General Data Protection Regulations (GDPR) training was rolled out to over 3,000 member volunteers, and a new centralised web area for members to find volunteering opportunities was introduced.

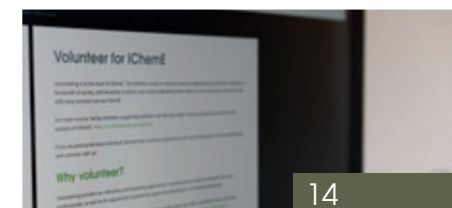
Recognition for members and chemical engineers continued throughout the year with online award ceremonies and medal presentations.



61 On Campus presentations delivered worldwide



102 Get Chartered presentations delivered globally



Three Fellows featured in a TV documentary





# Peer-recognised excellence

IChemE Awards celebrate excellence in chemical, biochemical and process engineering and are a mark of peer recognition across the world within industry and academia. More than 170 entries made it to the finals of the Global Awards and the Malaysia Awards.

## IChemE Global Awards 2020

Achievements were showcased across 20 categories in a three-week webinar series in November, where finalists presented their projects and took questions from the online audience, culminating in the winners' announcement. Three new categories were added to the rostrum: *Best Consultancy*, *Process Automation and Digitalisation*, and *Public Engagement*.

UK-based Plastic Energy's world-first process to sustainably recycle contaminated plastic waste that cannot be mechanically recycled won the *Innovative Product Award* and *Sustainability Award*, before going on to be crowned the overall winner with the coveted *Outstanding Achievement Award*.

[www.icheme.org/globalawards2020](http://www.icheme.org/globalawards2020)



## IChemE Global Awards 2020 Winners





## IChemE Malaysia Awards 2020

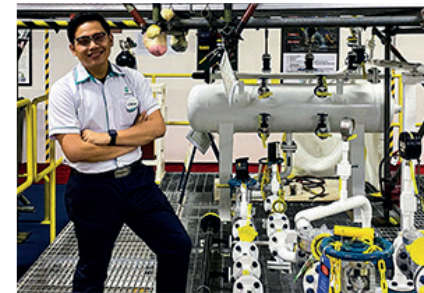
October saw the first-ever virtual IChemE Malaysia Awards. An encouraging message from Her Royal Highness Queen of Perak Darul Ridzuan, Tuanku Zara Salim was read to finalists before the winners were announced. Oil and gas firm PETRONAS won trophies in four of the eight categories and scooped four highly-commended entries.

Sustainability was a key theme throughout the award-winners' projects. This included *Young Industrialist Award* winner Muhammad Faiz Bin Omar from the Malaysian Refining Company for optimising energy and crude oil production in a sustainable and economical way. Xiamen University Malaysia's Chew Kit Wayne won the *Young Researcher Award*, and the equivalent category in the Global Awards, for his leading research in bioprocess engineering design and renewable energy.

[www.icheme.org/malaysiaawards2020](http://www.icheme.org/malaysiaawards2020)



## IChemE Malaysia Awards 2020 Winners



## National honours

In the UK's New Year Honours list, Lynn Gladden, Shell Professor of Chemical Engineering at the University of Cambridge, UK was awarded a Damehood for services to academic and industrial research in chemical engineering. Adisa Azapagic, Professor of Sustainable Chemical Engineering at the University of Manchester, UK and Mark Apsey, Director at Ameresco, UK were both awarded a Member of the Order of the British Empire (MBE).

In the Australia Day Honours list, Geoffrey Stevens and Peter Hood were both awarded an Officer (AO) in the General Division of the Order of Australia. Stevens, Laureate Professor of the Department of Chemical and Biomolecular Engineering at the University of Melbourne, was recognised for his distinguished service to education, chemical engineering and environmental remediation, and as a mentor. Hood, Chairman of Matrix Composites and Engineering, was recognised for distinguished service to business and commerce at the state, national and international level, and to the resources sector.

Trustee Jane Atkinson, Executive Director, Engineering and Automation at Bilfinger, UK was honoured with a Commander of the Order of the British Empire (CBE) for services to chemical engineering in the Queen's Birthday Honours in October. While Nilay Shah, Professor of Process Systems Engineering and Head of the Department of Chemical Engineering at Imperial College London, UK was awarded an Officer of the Order of the British Empire (OBE) for services to the decarbonisation of the UK economy.



Professor Geoffrey Stevens



Peter Hood



Professor Lynn Gladden



Mark Apsey



Professor Adisa Azapagic



Professor Nilay Shah



Jane Atkinson



# Medal winners

The 2020 medal winners are listed below. For the full details, visit [www.icheme.org/medals](http://www.icheme.org/medals)

## Ambassador Prize

Dr Andy Brown, Progressive Energy, UK

## Clean Energy Medal

Dr Rodney Allam, 8 Rivers, US

## Davidson Medal

Professor Grant Campbell, University of Huddersfield, UK

## Donald Medal

Dr Angela Osborne, eXmoor Pharma, UK

## Greene Medal

Fenella Norquist, KBR, UK

## Hanson Medal

Raphaël Faure, Matthieu Flin, Pascal Del Gallo and Marc Wagner, Air Liquide, France

## Hutchison Medal

Professor Peter Fryer, Estefania Lopez-Quiroga and Alberto Almendra Ruiz, University of Birmingham, UK  
Dr Serafim Bakalis, University of Nottingham, UK

## Junior Moulton Medal

Oliver Peck, University of Bath, UK

## Lees Medal

Mike Lynch, LMC Safety, UK

## Macnab-Lacey Prize

Mattis Francois, Kristianto Gozali, Kyrie Hobson, Elizabeth Roberts, Lefteris Tsiakkis, Georgina Vickers and Brenda Wiputeri, University of Manchester, UK

## Nicklin Medal

Dr Antonio Del Rio Chanona, Imperial College London, UK

## Sargent Medal

Professor Efstratios Pistikopoulos, Texas A&M University, US

## Senior Moulton Medal

Neda Bagheri, Benjamin Bucior, N Scott Bobbitt, Omar Farha, Arun Gopalan, Subhadip Goswami, Timur Islamoglu, and Randall Snurr, Northwestern University, US  
Taner Yildirim, NIST Center for Neutron Research, US

## SIESO Medal

Kalokson Gurung, Laya Jayadeep, Janusz Siwek, Satyam Vora and David Zhou, University of Bradford, UK

## Trustees Medal

Professor Stefaan Simons, Brunel University, UK



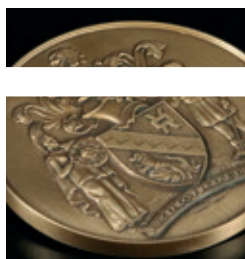
Raphaël Faure and Matthieu Flin



Fenella Nordquist



Pascal Del Gallo



Marc Wagner







# Known as a high performing organisation delivering significant value



# Driving forward capability and performance

2020 marked a considerable step forward in modernising IChemE's legacy systems, business processes and governance for more resilient operations that deliver value and enable better connectivity for members.

Further investment in digital systems saw the launch of the [Knowledge Hub](#), which provides centralised access and search functionality for 10,000 resources from IChemE's publications, including the *Loss Prevention Bulletin*, pre-1997 journals, conference proceedings, incident reports and policy consultations.

The transition to IChemE's new contact relationship management (CRM) system began in September. This new home for the membership database is the vital tool which will help improve direct communications with members and IChemE's customers. It is also the engine that enables the integration of other IChemE systems and will lead to better functionality for interaction with IChemE through its website. With this came progress on upgrading the Institution's finance and membership application systems to integrate with the CRM. The new CRM system shows much promise, but did suffer a number of teething problems at launch. The Trustees accept that user

experience of the system for some members was initially poor, but once these issues have been resolved they expect it to be in line with expectations.

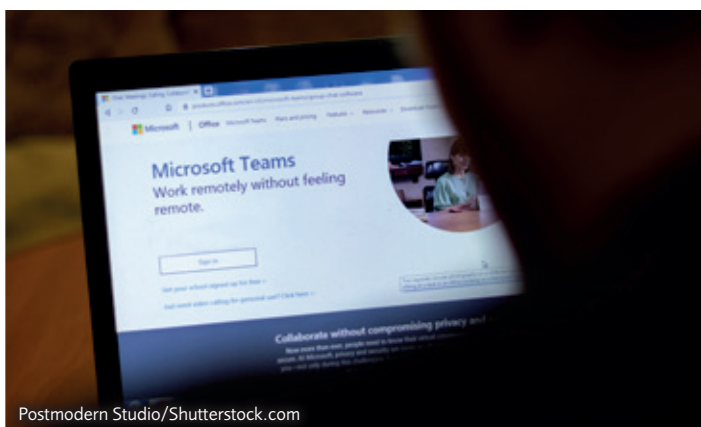
Moreover, IChemE extended its cloud-based platforms, SharePoint and Teams, enabling staff and members to share documents in a secure GDPR-compliant area and improve virtual engagement.

To deliver a coherent business architecture and governance structure, new member-led panels and committees were created to oversee IChemE's regional engagement activity, finances, and governance.

As a part of the Business Architecture programme, IChemE also initiated changes to the regional engagement structure in Malaysia that will improve consistency and compliance. The new structure will establish Malaysia as an IChemE branch, transitioning from the current independent society in early 2021. Malaysian members invested time to engage in an online member forum in December 2020 to learn more from Chief Executive Jon Prichard and Law Chung Lim, Chair of IChemE's Malaysia Board, and share their thoughts.



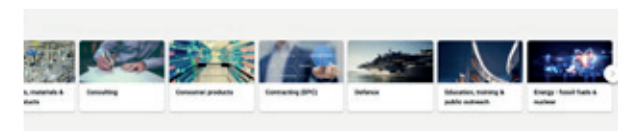
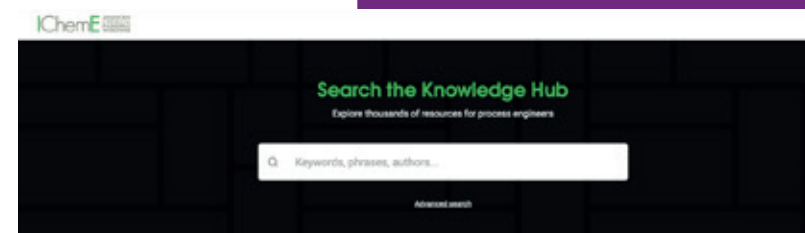
New Finance Committee, Governance Panel and Regions Committee established



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New contact relationship management system





In September, the [South African Institution of Chemical Engineers \(SAIChE\)](#) confirmed, as a part of the Business Architecture programme, that it preferred to retain its independence rather than become an IChemE Branch. This will require a new relationship to be established during the course of 2021.

As the Institution works towards ISO 9001 compliance, IChemE's Publications department became the first to achieve ISO 9001 certification, spearheading a wider push across the organisation. This framework has allowed the department to document and improve practices to better satisfy the needs and expectations of members, customers and interested parties.

IChemE employees responded swiftly and effectively to the COVID-19 lockdown. All offices moved to virtual working whilst seamlessly providing services due to the prior investment in online resources, the flexibility and resilience of staff, and support from members. Processes, policies and a staff COVID-19 survey were developed and implemented to ensure staff had effective resources and equipment as well as regular communication to support working at home and their mental health.

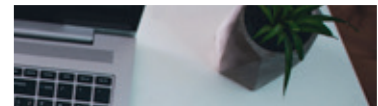
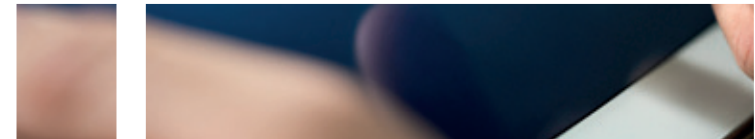
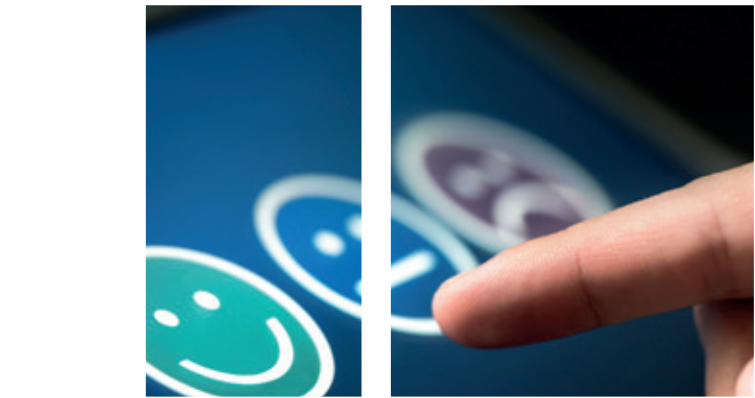
Staff engagement initiatives and training – including mental health first-aiders, resilience and wellbeing, and equal opportunities – were rolled out in 2020 to help broaden the internal skills base. New COVID-19 update and wellbeing sections on the intranet gained more than 2,500 views. A staff survey was re-established, with the results from this and focus groups formulating a staff engagement plan for 2021.



Employee skills broadened through training and engagement initiatives

2,500

views of COVID-19 and wellbeing support intranet areas



# Financial results

Despite a challenging year because of the COVID-19 pandemic, the Institution ended the year with a net operating income of £54,000. Net gains on investment funds of £367,000 took the total net income to £421,000.

By the end of March, the pandemic's impact was being felt across the globe. The majority of membership income had been secured, but commercial income that relied upon a physical presence was conservatively forecast to decline. Tight cost control measures were promptly implemented, and the use of national government employment support mechanisms were applied for. Significant effort was expended in converting charitable and commercial activity to online delivery.

Therefore, the fall in income was less severe than originally anticipated, and IChemE ended the year with an income of just over £7m compared to £8m in 2019. Due to cost controls and lower cost of running meetings, training and events digitally, expenditure also fell by £1.1m to £7m.

After the defined benefit pension scheme actuarial losses of £1.3m and exchange rate gains from the retranslation of the international branches of £136,000, this resulted in an overall net reduction in funds of £759,000, with fund balances of £2.2m carried forward.

The 2.2m fund balance consists of General Funds of £6.1m, Designated Funds of £0.8m, the defined benefit pension scheme deficit of £5.9m, and Restricted Funds of £1.2m.





## Consolidated statement of financial activities for the year ended 31 December 2020

	Unrestricted funds £000	Restricted funds £000	Total 2020 £000	Unrestricted funds £000	Restricted funds £000	Total 2019 £000
<b>Income</b>						
Donations and legacies	230	-	230	-	29	29
<b>Charitable activities</b>						
Qualifying chemical engineers	3,939	-	3,939	3,907	-	3,907
Operating a learned society for chemical engineers	2,483	20	2,503	3,822	25	3,847
Exceptional government funding	186	-	186	-	-	-
<b>Other trading activities</b>						
Trading operations	155	-	155	148	-	148
<b>Investments</b>						
	54	-	54	77	-	77
<b>Total income</b>	<b>7,047</b>	<b>20</b>	<b>7,067</b>	<b>7,954</b>	<b>54</b>	<b>8,008</b>
<b>Expenditure on</b>						
<b>Raising funds</b>						
Trading operations	(73)	-	(73)	(89)	-	(89)
Investment management costs	(55)	-	(55)	(54)	-	(54)
<b>Charitable activities</b>						
Qualifying chemical engineers	(2,848)	-	(2,848)	(3,020)	-	(3,020)
Operating a learned society for chemical engineers	(3,980)	(57)	(4,037)	(4,903)	(37)	(4,940)
<b>Total expenditure</b>	<b>(6,956)</b>	<b>(57)</b>	<b>(7,013)</b>	<b>(8,066)</b>	<b>(37)</b>	<b>(8,103)</b>
Net gains/(losses) on investments	367	-	367	491	-	491
<b>Net income/(expenditure)</b>	<b>458</b>	<b>(37)</b>	<b>421</b>	<b>379</b>	<b>17</b>	<b>396</b>
Transfer between funds	29	(29)	-	30	(30)	-
<b>Other recognised gains/(losses)</b>						
Actuarial (losses)/gains on defined benefit pension scheme	(1,316)	-	(1,316)	(1,256)	-	(1,256)
Exchange gains/(losses) arising from retranslation of foreign branches and subsidiaries	136	-	136	(76)	-	(76)
<b>Net movement in funds</b>	<b>(693)</b>	<b>(66)</b>	<b>(759)</b>	<b>(923)</b>	<b>(13)</b>	<b>(936)</b>
Fund balances brought forward at 1 January	1,679	1,305	2,984	2,602	1,318	3,920
<b>Fund balances carried forward at 31 December</b>	<b>986</b>	<b>1,239</b>	<b>2,225</b>	<b>1,679</b>	<b>1,305</b>	<b>2,984</b>

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.

## Balance sheets as of 31 December 2020

	Group		Charity	
	2020 £000	2019 £000	2020 £000	2019 £000
<b>Fixed assets</b>				
Tangible assets	798	885	798	884
Investments	6,090	5,724	6,090	5,724
	<b>6,888</b>	<b>6,609</b>	<b>6,888</b>	<b>6,608</b>
<b>Current assets</b>				
Debtors	666	794	739	918
Cash at bank and in hand	2,819	3,027	2,521	2,628
	<b>3,485</b>	<b>3,821</b>	<b>3,260</b>	<b>3,546</b>
<b>Creditors – amounts falling due within one year</b>	<b>(2,229)</b>	<b>(2,661)</b>	<b>(2,221)</b>	<b>(2,562)</b>
<b>Net current assets</b>	<b>1,256</b>	<b>1,160</b>	<b>1,039</b>	<b>984</b>
Provisions for liabilities	-	-	-	-
	<b>8,144</b>	<b>7,769</b>	<b>7,927</b>	<b>7,592</b>
Pension scheme funding deficit	(5,919)	(4,785)	(5,919)	(4,785)
<b>Total net assets after pension deficit</b>	<b>2,225</b>	<b>2,984</b>	<b>2,008</b>	<b>2,807</b>
<b>Income funds</b>				
<b>Unrestricted funds</b>				
General funds	6,070	5,808	5,853	5,631
Designated funds	835	656	835	656
Pension reserves	(5,919)	(4,785)	(5,919)	(4,785)
	<b>986</b>	<b>1,679</b>	<b>769</b>	<b>1,502</b>
<b>Restricted funds</b>	<b>1,239</b>	<b>1,305</b>	<b>1,239</b>	<b>1,305</b>
<b>Total funds</b>	<b>2,225</b>	<b>2,984</b>	<b>2,008</b>	<b>2,807</b>

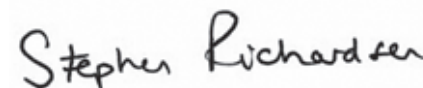
These financial statements were approved by the Board of Trustees and authorised for issue on 22 April 2021.

### The Board of Trustees' statement on the summarised financial statements

These summarised financial statements are based on information extracted from the statutory Trustees' report and consolidated financial statements. They may not contain sufficient information to allow for a full understanding of the Institution's financial affairs. The full consolidated financial statements, the auditor's report on those consolidated financial statements, and the Trustees' report should be consulted.

This can be viewed online at [www.icheme.org/financial-statements](http://www.icheme.org/financial-statements)

On behalf of the Trustees:



Stephen Richardson  
President  
2019–2021



Iain Martin  
Honorary Treasurer  
2019–2020



# Governance and leadership

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Director (People & Infrastructure) Faculty of ECMS, University of Adelaide, Australia

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Chair, IChemE's UK Board

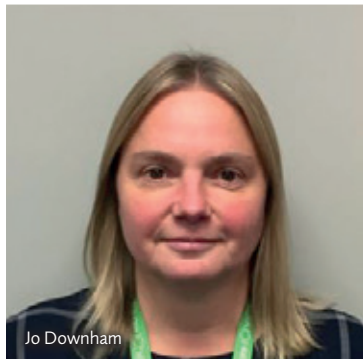
Engineering and Automation Executive Director, Bilfinger, UK



# Governance and leadership

## IChemE Senior Management Team

Jon Prichard	Chief Executive
Jo Downham	Director, Finance and Business
Claudia Flavell-White	Director, Learned Society
Trish Kerin	Director, IChemE Safety Centre
David Lloyd-Roach	Director, Qualifications
Peter Slane	Director, Regions





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