

# **Explanatory Note on the Proposed 2021 Amendments to the IChemE Royal Charter and By-laws**

#### 1. Introduction

1.1 The Institution's governance arrangements are described in a hierarchical set of documents, with each level taking precedence over the level below. As you progress down the levels, then further particulars and details are provided. The document levels are as shown in Table 1 below. Following good governance practice, the Royal Charter should set out the objects, the powers and the duties of the Institution, establishing the high-level principles. Information on the award of Royal Charters is contained on the Privy Council website which can be found at the following <a href="here">here</a>. It should be noted that the Privy Council website states:

"Charters are normally reserved for bodies that work in the public interest (such as professional institutions and charities) and which can demonstrate pre-eminence, stability and permanence in their particular field."

Such requirements have broadly been in place since IChemE was granted its Charter. The holding of the Charter means that the Institution cannot act in self-interest.

1.2 The Institution has status as a legal entity through its incorporation by Royal Charter, a copy of which can be found <a href="here">here</a>. Together with the By-Laws, these key documents act as the Articles of Association. Amendments to the Royal Charter and the By-laws, require the support of the members, which may be provided via an electronic poll, alongside the support of the Engineering Council and interested UK Government Departments, before they are presented to the Privy Council Office for final approval.

Level	Document	Approved by	Supported by
1	The Royal Charter	HM the Queen (acting in Council)	2/3 majority of the member votes cast in a poll.
2	The By-laws	The Privy Council	2/3 majority of the member votes cast in a poll.
3	Regulations	The Board of Trustees	Simple majority trustee vote
4.	Guidance	IChemE principal Committees	Simple majority committee vote

Table 1. IChemE Governance Document Hierarchy.

- 1.3 Below the Royal Charter and By-laws the Institution has four separate sets of regulations as follows:
  - Academic and Education Regulations
  - Governance Regulations
  - Training and Experience Regulations
  - Disciplinary Regulations

The main Regulations can be found <u>here</u> and the Disciplinary Regulations can be found <u>here</u>. The Regulations contain the necessary detail that enable IChemE to operate processes to consistent standards.

- 1.4 IChemE is committed to continuous improvement and in 2020 established a member-led Governance Panel with responsibility for keeping the key documents under review, to ensure that they reflect current good practice and continue to meet the needs of the organisation and its members. Each of the principal committees that report to the Board of Trustees (e.g Qualifications Committee and Learned Society Committee) is asked annually to identify changes that should be proposed to the key documents so that they remain relevant to the way in which their activities are conducted. This can result in incremental changes on an annual basis, but also periodically more fundamental change (such as the creation of the Congress in 2018).
- 1.5 As with any organisational governance that adjusts incrementally, there is a risk of inconsistency arising from piecemeal change. It is recognised by the Trustees that a holistic review for the IChemE's key documents is required to consider this, and they have asked the Governance Panel to look at this as part of its programme of future work. Such an exercise will take time, and so in the interim, a number of lesser amendments have been drafted to address the needs arising from the Institutions current work programmes.

### 2. Proposed 2021 Amendments

2.1 A summary of the proposed amendments to both the Royal Charter and By-laws is attached in tabular format at **Annex A**. The table has four columns as follows: Column 1 sets out the current text; Column 2 sets out the amendment to the current text using 'track changes'; Column 3 sets out the final text as it will appear once approved; and Column 4 provides a short justification for the amendment. The text is drafted in language that will be accepted by the Privy Council, rather than being presented as a communications piece for the wider membership. It is therefore noted that this legalistic approach can result in long and complex sentences. A more detailed explanation for each respective change is shown below:

### 2.1.1 **Royal Charter, Article 2 – The Objects.** The proposal has two parts:

- a. **Inclusion of the word 'art'**. IChemE has broadened its portfolio of activity since its Royal Charter was first granted in 1957, particularly in areas such as process safety. Such activity includes both the art and science of chemical engineering. Further background information that has informed this proposal is provided at **Annex B**. An amendment to the Institution's object to include the term 'art' would therefore ensure that current activity is appropriately covered by the Objects.
- b. Clarification of the need to consider sustainable action. For a number of years, the Sustainability Special Interest Group (SSIG) has sought clarification on the importance of sustainability to IChemE. The SSIG felt that the most appropriate way to provide such recognition was for greater emphasis on sustainability to be recognised in the Objects. The creation of the Learned Society Committee (LSC) in July 2019 provided a pathway for the SSIG to promote its proposal. In November 2020, after an extensive member consultation, IChemE published a Climate Change Policy Position Statement which can be found <a href="here">here</a>. Concurrently, the LSC considered the SSIG proposal to amend the Objects and, after further consultation provided the text as now proposed, which supports the position adopted by the Climate Change Policy Position Statement. A report summarising the LSC proposal can be found at **Annex C**.

- 2.1.2 **Royal Charter, Article 18 The Descriptor.** The proposal clarifies which members are entitled to use the descriptor 'Chartered Chemical Engineer'; namely only those that have satisfied the requirements of the Chartered Chemical Engineer Professional Review and not other Voting Members (such as Professional Process Safety Engineers, Chartered Scientists or Chartered Environmentalists).
- 2.1.3 **By-law 20 The election of Fellows.** The Qualifications Committee established an expert panel to review the Fellow election processes as a part of Programme SMART. The panel has recommended a number of minor changes that bring IChemE in line with other engineering Institutions, and in particular allow senior members to receive due recognition when their career may have moved them beyond either technical or purely discipline related roles. If this amendment is approved, a Fellow no longer needs to be actively engaged in a position of responsibility in chemical engineering, but they must qualify for chartered membership, so that they must at some stage in their career have practised as a chemical engineer (even if they no longer normally do so). This reflects the reality that arises where eminently suitable candidates have moved out of chemical engineering practice, but have nonetheless made considerable contribution to the profession and are in very influential positions. It should be noted that:
- Recommended Regulations governing the election of Fellows have been drafted by the panel and approved by Qualifications Committee. They provide guidance on the requirements such as the period over which contributions and senior responsibility should have been exercised.
- Guidance (for both applicants and election panels) will provide examples to candidates to give greater understanding of the nature of the contribution that is expected, the nature of senior responsibility etc.
- 2.1.4 **By-law 22 The election of Associate Members.** The Qualifications Committee has reviewed all membership pathways as a part of Programme SMART. The review highlighted the need to amend the By-laws for Associate Member grade in two areas:
- In response to the introduction of the Engineering Council's UK-SPEC in 2003, IChemE moved away from examinations to learning outcomes as the means of expressing the standard required by a membership candidate with respect to their underpinning knowledge and understanding.
- A large number of membership candidates may not be afforded the opportunity to join an employer sponsored approved training scheme. This proposed amendment recognises this fact and provides a pathway for other candidates so long as they are hold a position that allows them to learn and gain appropriate experience.
- 2.1.5 **By-law 43 Clarification on the provision of an independent report for ballot results.** As per By-law 81, the introduction of electronic voting and the use of an independent third party provider has effectively removed the need, on those occasions when such services are contracted, for scrutineers. The use of the term 'independent report' clarifies that the requirement is for independent scrutiny rather than member scrutiny.
- 2.1.6 **By-law 74 Clarification of retiring Trustees.** Requests were received from potential trustees at the last election for clarification as the wording relating to trustee retirements. The proposed text attempts to provide greater clarity.

- 2.1.7 **By-law 76 Clarification of the process for advertising Trustee vacancies.** Requests were received following the last election for clarification as the wording relating to the advertisement of vacancies. The proposed text attempts to provide greater clarity. The amendment introduces the term 'call for nominations' as a more appropriate title for the calling notice (formerly simply referred to as the list of vacancies).
- 2.1.8 **By-law 77 Clarification of the nominations process.** The proposal has two parts:
- a. **Procedural.** Amendment was required as a result of changes being proposed to Bylaw 76 and the introduction of the term 'call for nominations. The proposal also stipulates that the calling notice will set out the manner in which nominations may be submitted to make clear that electronic submission is admissible.
- b. **Staff Participation**. On occasion the staff, who are also Voting Members, may be approached by election candidates requesting that they support their nomination. This may lead to a conflict of interest either by appearing to show favour to a candidate or by placing the staff member in a difficult position. The proposed text removes this possibility.
- 2.1.9 **By-law 80 Clarification of the ballot process.** Requests were received following the last election for clarification as the wording relating to the ability for ballots to be conducted electronically, and to ensure that the website provided for this purpose is valid. The proposed text attempts to provide greater clarity.
- 2.1.10 **By-law 81 Clarification on the provision of independent scrutiny for ballots.** The introduction of electronic voting and the use of an independent third party provider has effectively removed the need, on those occasions when such services are contracted, for scrutineers. However, scrutineers may still be required if a paper ballot were to be conducted. The use of the term 'independent report' allows for independent scrutiny.
- 2.1.11 **By-law 108 Remove reference to a third party.** The current By-law refers to guidance by the Institute of Chartered Secretaries and Administrators (ICSA) to provide a definition of when electronic communication is deemed to be served. It is not good practice to refer to a non-statutory third party in a higher-level governance document. By way of example, as can be seen <a href="here">here</a>, ICSA changed its name in 2019 to the Chartered Governance Institute. Once this amendment is adopted, then IChemE should amend its own Regulations to provide an appropriate definition.

# Annex A: Proposed 2021 Amendments to the IChemE Royal Charter and By-laws

Ref	Original	Original with changes highlighted	Proposed final text	Explanatory remarks
RC 2	2. The objects and purposes for	2. The objects and purposes for	2. The objects and purposes for	Broaden the objects to include
	which the Institution is hereby	which the Institution is hereby constituted	which the Institution is hereby constituted	art.
	constituted are:	are:	are:	
	To promote, foster and develop the general advancement of the science of chemical engineering in all its branches as an end in itself and as a means of furthering the scientific and economic development and application of processes in which chemical and physical changes of materials are involved and to promote, assist, finance and support such research, investigation and experimental work in chemical	To promote, foster and develop the general advancement of the art and science of chemical engineering in all its branches as an end in itself and as a means of furthering, in a responsible manner, both the scientific and economic development and the application of sustainable processes in which chemical and physical changes of materials matter and energy are involved and to promote, assist, finance and support such research, investigation and experimental	To promote, foster and develop the general advancement of the art and science of chemical engineering in all its branches as an end in itself and as a means of furthering, in a responsible manner, both scientific and economic development and the application of sustainable processes in which chemical and physical changes of matter and energy are involved and to promote, assist, finance and support such research, investigation and experimental	<ul> <li>2. Ensure the objects reflect the role of chemical engineers in addressing global challenges in particular sustainability, including:</li> <li>Promote responsible action</li> <li>Promote sustainable action</li> <li>Highlight that it is collective action</li> <li>Highlight that it is enduring</li> </ul>
	engineering as the Institution may consider likely to conduce to those ends and to the benefits of the community at large.	work in chemical engineering as the Institution may consider likely to conduce help bring about or contribute to those ends and to the benefits of the global community at large now and in the future.	work in chemical engineering as the Institution may consider likely to help bring about or contribute to those ends and to the benefits of the global community now and in the future.	
RC 18	18. Persons being at any time Voting members of the Institution may so long as they shall remain Voting members take and use the style or title of Chartered Chemical Engineer in such manner and upon such conditions as the By-laws for the time being of the Institution shall direct.	18. Persons being at any time Voting members of the Institution may, so long as they shall remain Voting members and so long as they have satisfied the requirements of the Chartered Chemical Engineer Professional Review as the By-Laws shall direct, take and use the style or title of Chartered Chemical Engineer in such manner and upon such conditions as the By-laws for the time being of the Institution shall direct.	18. Persons being at any time Voting members of the Institution may, so long as they shall remain Voting members and so long as they have satisfied the requirements of the Chartered Chemical Engineer Professional Review as the By-Laws shall direct, take and use the style or title of Chartered Chemical Engineer in such manner and upon such conditions as the By-laws for the time being of the Institution shall direct.	Inconsistency with BL which ensures Chartered members who are not engineers are not afforded a descriptor that may mislead the public.
BL 20	20. Fellows  All candidates for election or transfer to the class of Fellow shall	20. Fellows  All candidates for election or transfer to the class of Fellow shall, as	20. Fellows  All candidates for election or transfer to the class of Fellow shall, as	Addition of a reference to the Regulations to ensure the document relationship hierarchy is reinforced.
	satisfy the Board by personal interview	specified in the Regulations,	specified in the Regulations,	

Ref	Original	Original with changes highlighted	Proposed final text	Explanatory remarks
	or otherwise either:  (a) that they, being already Chartered Members, have been engaged to an appropriate extent in a position of senior responsibility in chemical engineering; or  (b) that they, possessing the qualifications for Chartered Membership, have been engaged to an appropriate extent in a position of senior responsibility in chemical engineering.	demonstrate to the satisfaction of satisfy the Board, by personal interview or otherwise either; a significant contribution to and influence in chemical engineering and either:  (a) that they, being already Chartered Members, have been engaged to an appropriate extent in a position of senior responsibility in chemical engineering; or  (b) that they, possessing the qualifications for Chartered Membership, are have been engaged to an appropriate extent in a position of senior responsibility in chemical engineering.	demonstrate to the satisfaction of the Board, by personal interview or otherwise, a significant contribution to and influence in chemical engineering and either:  (a) that they, being already Chartered Members, have been engaged to an appropriate extent in a position of senior responsibility; or  (b) that they, possessing the qualifications for Chartered Membership, are engaged to an appropriate extent in a position of senior responsibility.	Bring in line with other PEIs to require Fellows to make a significant contribution to the profession.     Clarify that positions of senior responsibility may be beyond mainstream chemical engineering roles, whilst maintaining a requirement that they are suitably qualified for Chartered membership.
BL 22	All candidates for election or transfer to the class of Associate Member shall satisfy the Board by personal interview or otherwise:  (a) that they have passed such examination or other assessments as may from time to time be approved by the Board pursuant to the Regulations;  and  (b) that they have undergone training in chemical engineering or have held a position or positions deemed to provide such training.	All candidates for election or transfer to the class of Associate Member shall satisfy the Board by personal interview or otherwise:  (a) that they have or will have attained the educational outcomes passed such examination or other assessments as may from time to time be approved by the Board pursuant to the Regulations;  and  (b) that they have undergene training in chemical engineering or have held hold or intend to hold a position that enables development towards Professional Registration. or positions deemed to provide such training	All candidates for election or transfer to the class of Associate Member shall satisfy the Board by personal interview or otherwise:  (a) that they have or will have attained the educational outcomes as may from time to time be approved by the Board pursuant to the Regulations;  and  (b) that they hold or intend to hold a position that enables development towards Professional Registration.	Request from Qualifications     Committee to amend Associate     Member requirements clarifying the move away from exams to learning outcomes and that initial professional development is not solely satisfied through structured training.

Ref	Original	Original with changes highlighted	Proposed final text	Explanatory remarks
BL 43	43. The Institution shall hold in each year an Annual General Meeting in addition to any other meetings in that year and shall specify the Meeting as such in the notices calling it and not more than fifteen months shall elapse between the date of one Annual General Meeting of the Institution and the next. The business of the Annual General Meeting shall be to receive and consider the Report of the Board and the Accounts of the Institution for the past year; to receive the report of the scrutineers of the result of the immediately preceding ballot conducted for the election of Honorary Officers of the Institution and other members of the Board and to receive any report of the persons deemed to have been elected to such Offices; to appoint Auditors and fix their remuneration; and to transact any business brought before the meeting by the Report of the Board. All other business transacted at an Annual General Meeting and all business transacted at an Extraordinary General Meeting shall be deemed special.	43. The Institution shall hold in each year an Annual General Meeting in addition to any other meetings in that year and shall specify the Meeting as such in the notices calling it and not more than fifteen months shall elapse between the date of one Annual General Meeting of the Institution and the next. The business of the Annual General Meeting shall be to receive and consider the Report of the Board and the Accounts of the Institution for the past year; to receive the independent report of the scrutineers of the result of the immediately preceding ballot conducted for the election of Honorary Officers of the Institution and other members of the Board and to receive any report of the persons deemed to have been elected to such Offices; to appoint Auditors and fix their remuneration; and to transact any business brought before the meeting by the Report of the Board. All other business transacted at an Annual General Meeting and all business transacted at an Extraordinary General Meeting shall be deemed special.	43. The Institution shall hold in each year an Annual General Meeting in addition to any other meetings in that year and shall specify the Meeting as such in the notices calling it and not more than fifteen months shall elapse between the date of one Annual General Meeting of the Institution and the next. The business of the Annual General Meeting shall be to receive and consider the Report of the Board and the Accounts of the Institution for the past year; to receive the independent report of the result of the immediately preceding ballot conducted for the election of Honorary Officers of the Institution and other members of the Board and to receive any report of the persons deemed to have been elected to such Offices; to appoint Auditors and fix their remuneration; and to transact any business brought before the meeting by the Report of the Board. All other business transacted at an Annual General Meeting and all business transacted at an Extraordinary General Meeting shall be deemed special.	Clarify the requirement for independent report rather than member scrutiny.
BL 74	74. Members of the Board appointed under these By-laws shall serve for such period as defined in these By-laws as shall be determined by the Nominations Committee, having regard to the need to create a pattern of rolling retirements in the interests of continuity of the Board. Retiring members of the Board shall be deemed to continue to hold Office until the conclusion of the meeting at which they retire and shall be eligible for reelection subject to any maximum term of service provided in these By-laws.	74. Members of the Board appointed under these By-laws shall serve for such period as defined in these By-laws as shall be determined by the Nominations Committee, having regard to the need to create a pattern of rolling retirements in the interests of continuity of the Board. Retiring members of the Board shall be deemed to continue to hold Office until the conclusion of the meeting at which they retire and, shall be eligible to stand for re-election to any vacancy for which they are qualified subject to any maximum term of office service provided in these By-laws.	74. Members of the Board appointed under these By-laws shall serve for such period as defined in these By-laws as shall be determined by the Nominations Committee, having regard to the need to create a pattern of rolling retirements in the interests of continuity of the Board. Retiring members of the Board shall be deemed to continue to hold Office until the conclusion of the meeting at which they retire and, shall be eligible to stand for election to any vacancy for which they are qualified subject to any maximum term of office provided in these By-laws.	Clarify the use of the term 'retiring member'

Ref	Original	Original with changes highlighted	Proposed final text	Explanatory remarks
BL 76	76. Not later than eleven weeks before each Annual General Meeting the Board shall send to each Voting member entitled to vote a list which may be in electronic form of the retiring members of the Board.	76. Not later than eleven weeks before each Annual General Meeting the Board shall send to each Voting member entitled to vote a list call for nominations which may be in electronic form which shall include a list of the retiring members of vacancies on the Board that will be available for election at the Annual General Meeting.	76. Not later than eleven weeks before each Annual General Meeting the Board shall send to each Voting member entitled to vote a call for nominations which may be in electronic form which shall include a list of the vacancies on the Board that will be available for election at the Annual General Meeting.	Clarify the advertisement of Board vacancies.
BL 77	77. Any five Voting members may nominate any duly qualified person as a candidate for any such vacancy of the Board by delivering either physically or electronically to the Chief Executive within three weeks after the date of dispatch of the list mentioned in the immediately preceding By-law hereof a nomination in writing duly signed by the nominators together with the written consent to act if elected of the person nominated but each such nominator shall be debarred from nominating any other person for the same election. No person shall be eligible to fill any vacancy by election at the Annual General Meeting pursuant to these Bylaws unless nominated for the same in compliance with this By-law.	77. Any five Voting members may nominate any duly qualified person as a candidate for any such vacancy of the Board by delivering either physically or electronically to the Chief Executive in accordance with the process set out in the call for nominations within three weeks after the date of dispatch of the list call for nominations mentioned in the immediately preceding By-law hereof a nomination in writing duly signed physically or electronically by the nominators together with the written consent to act if elected of the person nominated but each such nominator shall be debarred from nominating any other person for the same election. No person shall be eligible to fill any vacancy by election at the Annual General Meeting pursuant to these By-laws unless nominated for the same in compliance with this By-law. A member of staff who shall also be a Voting Member shall not be eligible to nominate a candidate.	77. Any five Voting members may nominate any duly qualified person as a candidate for any such vacancy of the Board by delivering either physically or electronically to the Chief Executive in accordance with the process set out in the call for nominations within three weeks after the date of dispatch of the list call for nominations mentioned in the immediately preceding By-law hereof a nomination duly signed physically or electronically by the nominators together with the written consent to act if elected of the person nominated but each such nominator shall be debarred from nominating any other person for the same election. No person shall be eligible to fill any vacancy by election at the Annual General Meeting pursuant to these By-laws unless nominated for the same in compliance with this By-law. A member of staff who shall also be a Voting Member shall not be eligible to nominate a candidate.	Clarify the ability to determine the process by which nominations may be sent to the Chief Executive.      Clarify staff (who are also members) role in nominations.

Ref	Original	Original with changes highlighted	Proposed final text	Explanatory remarks
BL 80	80. The ballot papers shall contain a requirement that they are to be returned so as to reach the principal office of the Institution not later than fourteen working days before the Annual General Meeting. Votes on any ballot papers not so returned shall not be counted. The Board may make provision for voting to be in electronic form in addition to, or in place of, a postal ballot subject to its being satisfied as to the security of the method of electronic voting.	80. The ballot papers shall contain a requirement that they are to be returned so as to reach the principal office of the Institution not later than fourteen working days before the Annual General Meeting. Votes on any ballot papers not so returned shall not be counted. The Board may make provision for voting to be in electronic form in addition to, or in place of, a postal ballot subject to its being satisfied as to the security of the method of electronic voting. The ballot papers shall contain a requirement that they are to be returned so as to reach the principal office of the Institution, or the nominations site established for the purpose if voting is taking place in electronic form, not later than fourteen working days before the Annual General Meeting. Votes on any ballot papers not so returned shall not be counted	80. The Board may make provision for voting to be in electronic form in addition to, or in place of, a postal ballot subject to its being satisfied as to the security of the method of electronic voting. The ballot papers shall contain a requirement that they are to be returned so as to reach the principal office of the Institution, or the nominations site established for the purpose if voting is taking place in electronic form, not later than fourteen working days before the Annual General Meeting. Votes on any ballot papers not so returned shall not be counted	Clarify the ability for ballots to be cast electronically.     Clarify the deadline for physical and electronic votes to be cast.
BL 81	81. The Board shall appoint scrutineers from amongst the Voting members of the Institution other than the candidates and they shall not be more than six in number of whom not more than two shall be members of the Board; and any three or more of them shall together constitute a quorum and shall be entitled to do for the purposes of this By-law all things required of scrutineers. The scrutineers together shall open the ballot papers at any time after the final date for their return and count the votes and complete and sign a report of the result for the President of the Institution for presentation to the immediately following Annual General Meeting.	81. The Board shall appoint scrutineers from amongst the Voting members of the Institution other than the candidates and they shall not be more than six in number of whom not more than two shall be members of the Board; and any three or more of them shall together constitute a quorum and shall be entitled to do for the purposes of this By-law all things required of scrutineers. The scrutineers together shall open the ballot papers at any time votes shall be counted after the final date for their return of ballot papers and count the votes and complete and sign an independent report of the result shall be made available for the President of the Institution for presentation to the immediately following Annual General Meeting.	81. The votes shall be counted after the final date for the return of ballot papers and an independent report of the result shall be made available for the President of the Institution for presentation to the immediately following Annual General Meeting.	Clarify the requirement for independent scrutiny, allowing for the use of other means such as electoral service providers.

Ref	Original	Original with changes highlighted	Proposed final text	Explanatory remarks
BL	108. Any notice or communication	108. Any notice or communication	108. Any notice or communication	Remove reference to ICSA (note)
108	served or sent by pre-paid post shall be	served or sent by pre-paid post shall be	served or sent by pre-paid post shall be	requirement for definition of proof of
	deemed to have been served or	deemed to have been served or	deemed to have been served or	delivery to be articulated in the
	delivered at the expiration of fourteen	delivered at the expiration of fourteen	delivered at the expiration of fourteen	Regulations).
	days after the date it was dispatched	days after the date it was dispatched and	days after the date it was dispatched and	
	and in proving such service it shall be	in proving certifying such service it shall	in certifying such service it shall be	
	sufficient to prove that the notice or	be sufficient to prove that the notice or	sufficient to prove that the notice or	
	packet containing it was properly	packet containing it was properly	packet containing it was properly	
	addressed, pre-paid and delivered to	addressed, pre-paid and delivered to the	addressed, pre-paid and delivered to the	
	the carrier. Any notice or	carrier. Any notice or communication	carrier. Any notice or communication	
	communication served using electronic	served using electronic communications	served using electronic communications	
	communications shall be deemed to	shall be deemed to have been served at	shall be deemed to have been served at	
	have been served at the expiration of	the expiration of 48 hours after the time it	the expiration of 48 hours after the time it	
	48 hours after the time it was sent and	was sent and proof that a notice	was sent and proof that a notice	
	proof that a notice contained in an	contained in an electronic	contained in an electronic	
	electronic communication was sent in	communication was sent in accordance	communication was sent shall be	
	accordance with guidance issued by	with guidance issued by the Institute of	conclusive evidence that the notice was	
	the Institute of Chartered Secretaries	Chartered Secretaries and	given.	
	and Administrators shall be conclusive	Administrators shall be conclusive		
	evidence that the notice was given.	evidence that the notice was given.		

## **Annex B: The Art and Science of Chemical Engineering**

- 1. **Introduction**. This short note provides the background that was used by the Governance Panel when considering whether IChemE's purpose is to advance the science of chemical engineering, or whether the Institution additionally has a role in advancing the art of chemical engineering.
- 2. **Definition:** Art. The Concise OED (1993) includes within its definition of 'Art' a range of definitions that run from the simple creative to those with greater emphasis on expression. The following definitions are relevant in the context of the term 'Art' being used to describe practice or management:
  - **1 a** human creative skill or its application.
  - **1 b** work exhibiting this.
  - 4 human skill or workmanship as opposed to the work of nature (art and nature had combined to make a great beauty).
- 3. **Original use of the term 'Art' in an engineering context.** The ICE, founded in 1818, was the first Engineering Institution in the world (although John Smeaton had previously established a society of civil engineers in 1776). The ICE received its Royal Charter from HM King George IV in 1828. In the preamble to the Charter, drafted by Thomas Tredgold, it sets out the Institution's purpose as follows:

WHEREAS under or by virtue of a certain Charter or Letters Patent bearing date at Westminster the third day of June in the ninth year of the reign of His Majesty King George the Fourth, after reciting (inter alia) that Thomas Telford, of Abingdon Street, in the City of Westminster, Esquire, a fellow of the Royal Societies of London and Edinburgh, and others, had formed themselves into a Society for the general advancement of Mechanical Science, and more particularly for promoting the acquisition of that species of knowledge which constitutes the profession of a Civil Engineer, being the art of directing the great sources of power in Nature for the use and convenience of man, as the means of production and of traffic in states both for external and internal trade, as applied in the construction of roads, bridges, aqueducts, canals, river navigation and docks, for internal intercourse and exchange, and in the construction of ports, harbours, moles, breakwaters and lighthouses, and in the art of navigation by artificial power for the purposes of commerce, and in the construction and adaptation of machinery, and in the drainage of cities and towns: the Institution of Civil Engineers was incorporated as one body politic and corporate by the said Charter or Letters Patent with perpetual succession and a Common Seal and with the said Thomas Telford as its first President:

The current objects of the ICE are very much summarised in Article 3 of their current Charter to:

3. The object for which the Institution is constituted is to foster and promote the art and science of Civil Engineering.

Thereby maintaining the Tredgold emphasis on the separation between the art of directing and the scientific (mechanical) knowledge required for the discipline. A number of other professional engineering bodies have also included similar terminology (e.g. the Royal Academy of Engineering)

4. IChemE has broadened its portfolio of activity since its Royal Charter was first granted, particularly in areas such as process safety. An amendment to the Institution's object to include the term 'art' would therefore ensure that such activity is appropriately covered.

# Annex C: Proposal to recognise Sustainability in IChemE's Royal Charter

#### Introduction

1. The aim of this document is to set out how the proposed text, with regards to amending the IChemE's object to better recognise the importance of sustainability, has been developed by the Learned Society Committee (LSC). It was initially put forward by the Sustainability SIG (SSIG) in December 2017 and then further developed by the LSC.

### **IChemE Royal Charter wordings and feedback**

2. Three versions of the draft Objects are provided below to show the text was developed:

Version 1: As originally proposed by the SSIG in December 2017.

Version 2: As proposed by the LSC in early January 2020.

Version 3: As further proposed by the LSC with further text reduction in January 2020.

### 3. Version 1: As originally proposed by the Sustainability SIG in Dec 2017

To promote, foster and develop the general advancement of the science of chemical engineering in all its branches as an end in itself and as a means of furthering **sustainable** development **through the** application to processes in which chemical and physical changes of materials are involved and to promote, assist, finance and support such research, investigation and experimental work in chemical engineering as the Institution may consider likely to conduce to those ends and to the **well-being of current and future society and the environment.** 

The SSIG provided supporting references to this proposal. Firstly, they point to the Charity Commission decision in 2003 on the application for registration of the Environment Foundation as a charity where the commission had concluded that promoting sustainable development for the benefit of the public is a charitable activity<sup>1</sup>. Additionally, the Sustainability SIG points to the lead that organisations such as the AIChE are taking in this area. The AIChE have recently adopted aspirational statements which includes an aspiration that the AIChE become the 'Foremost Catalyst in applying our [AIChE community] expertise to sustainably meet societal needs'<sup>2</sup>.

#### 4. Version 2: As proposed by the LSC in January 2020:

To promote, foster and develop the general advancement of the science of chemical engineering in all its branches as an end in itself and as a means of furthering, in a responsible manner, both scientific and economic development and the application of **sustainable** processes in which chemical and physical changes of matter and energy are involved and to promote, assist, finance and support such research, investigation and experimental work in chemical engineering as the Institution may consider likely to help bring about or contribute to those ends and to the benefits of the **global** community now **and in the future**.

The LSC supports the aim of sustainability being more clearly attributed in the Royal Charter. The LSC thus proposed the above wording with the following reasoning:

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<sup>&</sup>lt;sup>1</sup>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/324243/environmentdecision.pdf

<sup>&</sup>lt;sup>2</sup> https://www.aiche.org/about/aspiration

- To be consistent with other topics, and the UN Sustainable Development Goals, that recognition of sustainability is a part of responsible behaviour. However so are many other things including climate change, hence the LSC have chosen to keep the 'responsible manner' in the top part of the text but move the sustainable element to an explanatory component which allows a lot of future scope for the inclusion of other principles.
- Two types of activity are therefore included: (1) development and (2) applications of processes, so that they might be carried out independent of each other.
- The LSC believe the existing wording and the proposed draft by the Sustainability SIG nneded to be clearer for the general readership.
- 'Chemical and physical changes of materials...' is changed to 'chemical and physical changes of matter and energy...'. The LSC felt the use of materials here was too specific and reworded this to 'matter and energy'.
- The LSC felt that the use of 'conduce' in the original text lacked clarity and changed this to 'help bring about or contribute'.
- 5. It should be noted that the SSIG's proposal had 'sustainable development' as the key objective and their feedback was that the retention of 'scientific and economic development' was potentially vague and in conflict with the sustainability goal. Additionally, retention of these words does not enable inclusion of the Institution's responsibility for safety and the environment. However, the LSC felt that the generic wording was appropriate.

# 6. Version 3: As further proposed by the LSC with further text reduction in late January 2020:

To promote, foster and develop the advancement of the science of chemical engineering in all its branches as a means of furthering, in a responsible manner, both scientific and economic development, and the application of **sustainable** processes in which chemical and physical changes of matter and energy are involved and to support such research, investigation and experimental work in chemical engineering to help realise and contribute to those ends to the benefit of the **global** community now **and in the future**.

- 6. This version of the wording is based on the LSC's wording in Version 2, with further text reduction in parts to improve readability, with the following rationale:
  - 'General advancement' switched to 'Advancement' and removed '...as an end in itself' as this proposal suggested these are surplus to existing content of the statement.
  - Switched '...promote, assist, finance...' to '...support' as this proposal suggested the use of multiple adjectives here is unnecessary and distracts from the overall message.
  - Switched '...to help bring about or contribute' to '...to help realise and contribute' and removed '...as the Institution may consider likely'.