

## NOTICE OF MEETING

Notice is hereby given that the **Seventy-fourth Annual General Meeting** of the Institution will be held via Zoom on **Tuesday 27 April at 11.00am**.

### Agenda

1. To receive and consider the minutes of the seventy-third AGM held on 2<sup>nd</sup> May 2019.
2. To propose as an Ordinary Resolution:  
***“That the Annual General Meeting authorises the Trustees of the Institution to review members’ subscriptions and to make such adjustment, if any, as may be required with effect from 1 January 2021”.***
3. To receive and consider the Annual Report for the year ending 31 December 2019.
4. To receive and consider the Accounts for the ending 31 December 2019.
5. To report on the Council elections for the 2020/21 Session.
6. To re-appoint Landers Accountants Ltd, registered auditors, as reporting accountants and to authorise the Executive to fix their remuneration.

NB This AGM is much later than it should be, and the delay has been caused by the Coronavirus pandemic

Notice is also given that the AGM will be followed by the **Seventy-fifth Annual General Meeting** of the Institution via Zoom on the same date at approx. **11.15am**

### Agenda

1. The minutes of the seventy-fourth AGM will be received in 2022
2. To propose as an Ordinary Resolution:  
***“That the Annual General Meeting authorises the Trustees of the Institution to review members’ subscriptions and to make such adjustment, if any, as may be required with effect from 1 January 2022”.***
3. To receive and consider the Annual Report for the year ending 31 December 2020.
4. To receive and consider the Accounts for the ending 31 December 2020.
5. To announce nominations for election to Council for the 2021/22 Session.
6. To re-appoint Landers Accountants Ltd, registered auditors, as reporting accountants and to authorise the Executive to fix their remuneration

By Order of the Trustees



**Charles Nicklin, Chief Executive and Secretary**  
**10<sup>th</sup> February 2021**

## Annual General Meeting 2019 Minutes

Minutes of the seventy-third Annual General Meeting of the IAgrE held at the National Fluid Power Centre, Workshop on Thursday 2<sup>nd</sup> May 2019, at 11.15am

**Present:** R J Rickson, (RJR) President P F Hemingway, (PFH) President Elect  
Alastair Taylor (AJT) Chief Executive Edward Hansom Incoming CEO  
50 IAgrE Members, 9 Guests & 3 from the Secretariat.

John Savage, Director of the NFPC, welcomed everyone and explained the order of the day and emergency procedures. The IAgrE President Jane Rickson then welcomed everyone and opened the meeting.

### 1. Minutes

The Minutes of the seventy-second Annual General Meeting were confirmed.

**Proposed: A Newbold      Seconded: C S Parkin**

### 2. Ordinary Resolution

The resolution: "That the Annual General Meeting authorises the Trustees of the Institution to review members' subscriptions and to make such adjustment, if any, as may be required with effect from 1 January 2020"

**Proposed: R Robinson      Seconded: T Chamen**

### 3. Annual Report of Council

The Annual Report summarises the activities and finances of IAgrE for 2018, and has been approved by the Trustees.

AJT gave an overview of the strategy and challenges faced by the Institution in 2018 and reported on the successful celebrations of IAgrE's 80<sup>th</sup> Anniversary. The strategy meeting had been very useful and had helped to inform future activities. He reported that relations with RAEng are excellent and this has opened opportunities to be involved with their Policy Centre.

IAgrE have been involved with the recently assessed apprenticeship standards but the LTA remains challenging. The editors of Biosystems Engineering, the Institution's learned journal, are facing a large increase in submissions, which has led to a review of editorial procedures. However the income remains strong from BSE and the Institution is in a good financial position with increasing Commercial & Academic Membership, which is encouraging.

Finally, AJT took this opportunity to thank the many volunteers the Institution is blessed with and wanted to publicly thank them for their support and effort, he noted that it is very much appreciated.

The President asked the Members to adopt the Annual Report of the Executive for 2019

**Proposed: P L Leech      Seconded: R Simmons**

### 4. Accounts

The President commented that the financial position was healthy and AJT confirmed that the Institution is in a strong position despite the difficult economic and political situation.

The President asked the members to adopt the 2018 Accounts.

**Proposed: R Simmons      Seconded: G Higginson**

## 5. Nominations to Council

The President introduced the nominations to Advisory Council for the session 2019/20 as follows:

President	R J Rickson *	Fellow CEnv	Cranfield University
President-Elect	P F Hemingway *	Fellow CEng	
Immediate Past-President	R J Merrall *	Member	Merralls Consulting
One Other Past-President	M J Kibblewhite *	FIAgrE CEnv	MK Soil Science
Vice Presidents (3)	M Moore *	Fellow	AGCO Ltd
	S C Constable *	Associate Member	Spaldings Ltd
	G P Higginson *	Fellow IEng	Harper Adams University
	A C Newbold *	FIAgrE CEng	Newmac Safety
	M S Carr-West *	Fellow CEng	Consultant
Honorary Treasurer	C M Johnson	Member EngTech	
Chair, Membership Committee	L A Terry	Fellow	Cranfield University
	J S Martin	Fellow CEng	Jaguar Landrover
	B Grieve	Fellow	University of Manchester
	H G Crabtree*	Fellow	Farmex
Chair, Prof Development Cttee	Ian Sumpter *	Member EngTech	Toro
	S W Moulding	Member EngTech	Cambs Farms Growers Ltd
	R W Simmons	Member	Cranfield University
	M Whiting	Member	Newmac Safety
Fellows (4)	S Murphy	Associate Member	Oxford Lasers Ltd
	D A Clare	Associate Member	Harper Adams University
	A Cooke	Associate Member CEnv	Severn Trent Water
	Kit Franklin *	Associate Member	Harper Adams University
Members (4/5)	H Thorpe	Technician EngTech	Harper Adams University
	C P Sigley	Affiliate	Barclays Bank plc
Associate Members (3/4)	W G Flittner	Student	Harper Adams University
	S J Scales	Student EngTech	Harper Adams University
	A J T Ansell	Student	Cranfield University
	A Boothby	Student	Harper Adams University
Affiliates/Technicians (2)	D B Tinker	Fellow CEng CEnv	Consultant
	P C H Miller **	Hon Fellow FRAEng CEnv	DBT
	P S Chima	MIAgrE	Harper Adams University
	R Bailey	Member	AEA – Ex Officio
	C Butler Ellis **	Fellow	Volunteering & CPD
Student/Pre-professional (2)	J A McMorran	Member CEng	Forestry Civil Engineering
Co-opted members			
Special rep for Scotland			

\* = Trustees, serving on the Executive Committee \*\* = co-opted members of Executive (not Trustees)

The new Members of Advisory Council were elected. **Proposed: R J Robinson** **Seconded: T Chamen**

## 6. Reporting Accountants

The President, R J Rickson, asked that Lander & Co, registered auditors, should be appointed as Reporting Accountants and that Executive is authorised to fix their remuneration.

**Proposed: P F Hemingway** **Seconded: R J Robinson**

The President then thanked the Secretariat team, she also thanked the CEO appointment team and EH for attending and introducing himself and finally thanked AJT for his work and support during his time as CEO. The meeting closed at 11.40 am

# IAgrE Annual Report & Summary Accounts

For the year ended  
31 December 2019

## The Institution of Agricultural Engineers

Company limited by guarantee Reg No: 648041  
Registered Office: Cranfield, Bedford  
Registered Charity No: 257303

[iagre.org](http://iagre.org)

Agriculture ■ Forestry ■ Horticulture ■ Environment ■ Amenity



## Aims and Objectives

The remit of the Institution of Agricultural Engineers (IAgrE) was reviewed and the associated Memorandum and Articles of Association were updated in 2017. Established in 1938 (as the Institution of British Agricultural Engineers), the overall aims of IAgrE was then, as it is now, to:

- Promote agricultural engineering as a profession.
- Direct and apply the sources of energy in Nature for the sustainable use and convenience of man in the adaptation and application of materials and mechanical methods for the best development of land use for agriculture, forestry and other purposes and
- Promote good practice in all applications of technology across the land based sector.

Prime objectives are all for the public benefit and, as ever, to continue with the drive to increase and broaden the membership base and raise the profile of IAgrE. Further information on the aims of the Institution are detailed in the Memorandum and Articles of Association which are published at [www.iagre.org](http://www.iagre.org)

## Structure, Governance and Management

### Structure

IAgrE is overseen by an Executive Committee whose members act as Trustees. These are also directors of the charity for the purposes of the Companies Act, and through this report, submit their annual report and the financial statements for the year ended 31 December 2019. The trustees have adopted the provisions of the Statement of Recommended Practice (SORP) (FRS 102) "Accounting and Reporting by Charities" 2<sup>nd</sup> edition issued in 2019 in preparing the annual report and financial statements of the charity.

IAgrE is a charitable company (charity number 257303) limited by guarantee (company number 00648041) and is governed by a Memorandum and Articles of Association. The principal address and registered office of the charity is The Bullock Building, University Way, Cranfield, Bedford MK43 0GH.

IAgrE is regulated by both the Charities Commission and by Company Law. An Advisory Council assists in setting the overall direction and policy of the Institution. Council is elected by the corporate (voting) members of IAgrE. Operationally, IAgrE is run by its Chief Executive supported by the Executive Committee which is appointed annually at the Annual General Meeting (AGM) and is responsible for executive action on all including Finance and General Purposes.

### Advisory Council

Advisory Council meetings take place twice a year and are used to discuss matters of strategic importance to IAgrE. These meetings are usually associated with a visit to key organisations within IAgrE's wider community. During 2019 these included a visit to the National Fluid Power Centre in Worksop and Pershore College in Warwickshire. Matters for discussion included producing a follow-up to the Beddington report, creating a route to membership for farmers and better informing the general public on agricultural engineering. Advisory Council meetings are used to record the ongoing activities of IAgrE branches.

## Health and Safety

IAgrE provides a Health and Safety Policy document. This is updated regularly. All staff are routinely reminded of its existence.

### Staff

**Alastair Taylor** was employed for four days per week in the role of CEO and Secretary. He retired from his appointment on 2<sup>nd</sup> September 2019.

**Ed Hansom** is employed (full-time) in the role of CEO and Secretary having started in this appointment on 2<sup>nd</sup> September 2019.

**Alison Chapman**, continues as Membership Secretary and is closely involved in supporting the Membership Committee.

**Sarah McLeod** continues as the Membership and Events Support/Office Administrator. She organises events and the Annual Conference and supports the members, branches and groups. She also manages the CPD audit as well as supporting Council & Executive.

**Marion King**, IAgrE's Communications Officer, continues to raise the profile of IAgrE through social networking on Facebook and Twitter, press releases and member-related copy for Landwards.

**Jo Martindale** started in August 2019 for two days per week as the IAgrE bookkeeper.

**Sabrina Sumpter** left the IAgrE in January 2019.

### Risk Management

The Trustees are responsible for the management of risks faced by the Institution and seek early identification, evaluation and effective management and mitigation of key risks. Potential risks, impact and mitigation are identified by the IAgrE CEO and are considered by Trustees at all Executive Committee meetings. The principal risks identified are:

- Business interruption as a consequence of loss of key staff, office and records, and/or premises lease amendment.
- Loss of membership and/or loss of income from substantial decrease in membership renewals.
- Information and Communication Technology (ICT) related issues such as a website crash and/or database failure.
- Loss of income streams such as Biosystems Engineering and return on investments.

### Statement of disclosure to Independent Examiner

The trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities. In so far as the trustees are aware:

- there is no relevant information of which the charitable company's independent examiner is unaware; and
- The trustees have taken all steps that they ought to have taken to make themselves aware of any relevant information and to establish that the examiner is aware of that information.

The trustees also confirm that they have taken due regard to Charity Commission guidance on public benefit.

## Trustees

The Trustees of IAgrE on the date of approval of the financial statements were:

Prof R J Rickson, President	Mr A C Newbold, Hon Treasurer
Dr R J Merrall	Mr P Hemingway
Prof M G Kibblewhite	Mr. G Higginson
Mr S C Constable	Mr K Franklin
Dr M Moore	Mr. H Crabtree
Mr M StJ Carr-West	

Dr M C Butler Ellis and Professor PCH Miller are co-opted members of the Executive Committee.

## Review of Activities

### Overview

IAgrE continues to place emphasis on the five-year development plan and has made progress in delivering the business objectives which, whilst maintaining the need to operate within Charities rules and best practice have been set against the following business development themes:

- Promoting the value and benefits of IAgrE membership.
- Ensuring that the Engineering Council and Society for the Environment licences are maintained.
- Continuing to develop new business activities and income streams.
- Increasing the IAgrE profile with other institutions and stakeholders so that IAgrE is viewed as being influential, with good quality intelligence and intellectual capital.

### Strategic Developments

In the spring of 2018, a group of trustees, members and invited stakeholders spent some time together looking at the future of the institution and formulating thoughts on its future strategy and direction. This identified a range of priorities which formed the strategic development plan for the next few years. These include:

- Ensuring that the membership, other stakeholders and more general audiences have an improved understanding.
- Develop simpler, clearer messaging will enable easier engagement with target audiences.
- Better demonstrate the value of IAgrE to retain existing members, attract new ones and gain employers' backing.
- Converting from student to another class of membership.
- Investment of funds and resources to both promote IAgrE further and to retain membership.
- Use technology to communicate with members, engage them with IAgrE activities and promoting the Institution more widely.
- Continue to promote professionalism and high standards.
- Broader engagement with wider industry stakeholders with the aspiration that there could be mutual endorsement where appropriate.
- More events; both generic and specialist, and a revival of special interest groups with live streaming of branch meetings to increase the breadth of engagement.
- Use the IAgrE website better to give members access to research and information as well as an improved jobs page.

The Secretariat continued to progress these developments during 2019.

In 2019 the sampling of IAgrE members Continuing Professional Development (CPD) records continued in accordance with the Regulations. Those members who failed to engage with the CPD requirements were contacted to encourage their full cooperation. If they still failed to engage with the sampling process they were added to the following year's cohort of members to be sampled. Successful use has been made of the Engineering Council "MyCareerPath" platform for recording and sampling members CPD. Those members chosen for the CPD sampling exercise have benefited from good quality feedback which has been well received. IAgrE engages with a CPD forum to share best practice with other organisations and also contributes to an Engineering Council working group for this activity.

The Membership Committee continued to work effectively with good feedback from the Engineering Council Liaison Officer. Membership related procedures are reviewed annually with minor adjustments being made to reflect emerging requirements required for IAgrE to maintain its Engineering Council and Society for the Environment licences. IAgrE is actively involved with committee work for both licencing bodies including a review of the UK-SPEC standards for professional engineer registration.

A full membership survey was conducted in the Summer. In total 56 members completed and returned their survey to the Institution. The respondents were generally content that the Institution represented them and was the 'natural professional home' of those operating in the land-based sector. The IAgrE is understood to be 'not-elitist', approachable, friendly, and trustworthy and the HQ staff are considered very helpful by the survey respondents. The recommendations from the survey will be implemented in 2020.

The annual conference took place on 30<sup>th</sup> October and was held in the Peterborough Suite of the East of England Conference Centre in Peterborough. The subject of the conference was 'Big Data' and whether it would lead to smarter farming. Speakers were drawn from a diverse range of industry, academia and governmental organisations. Attendance was strong with thought provoking discussions throughout and much feedback following the event.

IAgrE continues to develop a productive working relationship with the Royal Academy of Engineering (RAEng) and is actively involved with a number of Academy initiatives. One of these was a workshop held at the Institution of Mechanical Engineers to consult on the proposed National Food Strategy.

IAgrE is actively engaged in the RAEng Policy Centre which was set up in 2018. This has been effective in raising the profile of engineering for sustainable food production and global food security with policy influencers. Policy work on subjects such as energy, data, communications, autonomous vehicles and drones are all benefiting from IAgrE input.

Partnership working continues to be an important part of the IAgrE remit. The Institution engaged with universities, FE colleges and companies covering topics as diverse as apprenticeships, engineering for food production, the Engineering Professors Council and work with the Science and Technology Facilities Council (STFC) Sustainable Food Network (SFN). The IAgrE also successfully accredited a number of programmes including a Degree Apprenticeship at Harper Adams University.

## Services to Engineers

IAgrE continues to promote professionalism through the marketing of professional qualifications at all levels from Engineering Technicians through to Chartered registration. We continue to place strong emphasis on supporting Engineering UK and the Engineering Council (EngC). IAgrE sits on the Operational Group of the Engineering 4 Education (E4E) panel which is hosted by the Royal Academy of Engineering and works to inform education policy and practice by:

- initiating and contributing to policy debates
- providing decision-makers with high quality information and analysis
- ensuring that all learners are enabled to make connections across areas of learning that support an education for engineering
- highlighting the needs of future engineers and routes into engineering that are open to all

IAgrE receives many requests for contributions to a range of consultations led by the Royal Academy of Engineering and other national bodies. Where possible and relevant, IAgrE will commit resources to support these initiatives on behalf of the wider membership.

The Institution's interests continue to be represented at the Engineering Council at numerous Committees and Working Groups including:

- the Engineering Accreditation Board (EAB)
- the Engineering Apprenticeship and Technician Qualifications (EATQ) Forum
- the EngTech Value Proposition Working Group
- the Heads of Membership Committee
- the PEIs Group B & C Panels, and
- the Professional Engineering Committee.

All of these ensure that the IAgrE maintains a high profile at the Engineering Council and is kept up-to-date with Engineering Council policy and standards. The Institution is due to have its 5-year licence reviewed in 2020.

Malcolm Carr-West is the IAgrE's nominated EngC volunteer and sits on the Quality Assurance Committee and also acts as alternate to the IAgrE Chief Executive on the important Engineering Apprenticeship and Technician Qualifications. The Engineering Council has been reviewing its own documentation over the last few years, ostensibly UK SPEC and related documents. Both the outgoing CEO (Alastair Taylor) and the new CEO (Ed Hansom, in his previous role with the IMechE) have been involved in these reviews.

## Landbased Engineering Training and Education Committee

IAgrE continues to work closely with AEA and BAGMA through the Landbased Engineering Training and Education Committee (LE-TEC) to support apprenticeship development, careers promotion and the Landbased Technician Accreditation (LTA) scheme. LE-TEC is a limited company with IAgrE as an equal partner on the board along with AEA and BAGMA.

The LTA scheme is owned by LE-TEC and has a new emphasis on training. IAgrE continues to support and encourage LTA although it is proving difficult to maintain IAgrE membership and Engineering Technician registration for LTA registered technicians since the compulsory requirement for IAgrE membership and Engineering Technician registration was removed in 2018.

The Parloursafe scheme for milking equipment is now well established with the only qualification in the sector being provided by Reaseheath College and Hartpury College who, in conjunction with Milking Equipment Association members, offer courses covering the current three Categories of Parloursafe.

IAgrE passed the administration of the registration aspects of this scheme over to the AEA at the end of 2019 to streamline the administration of the entire Parloursafe initiative. However, the IAgrE still contributes to its technical committee on matters relating to CPD and ensuring rigour and transparency of process of technician registration and matters relating to IAgrE membership and registration with both the Engineering Council and the Society for the Environment.

## Education

IAgrE continues to establish relationships with FE colleges and universities and provides talks and seminars as required. IAgrE membership (funded through the Douglas Bomford Trust) is afforded to students and pre-professionals following UK recognised qualifications in agricultural engineering and associated subjects.

Working with industry through LE-TEC, IAgrE has supported the development of new apprenticeship programmes in Landbased Service Engineering at foundation and advanced levels now expanded to meet the requirements of the construction and plant sector. These were launched in 2018 and the first round of end-point assessments are expected in 2020.

## Society for the Environment

The Society for the Environment (SocEnv) carried out its five-year review of the licence operated by the Institution on 10<sup>th</sup> December. The IAgrE was assessed against seven criteria: Governance, Administration, Registration, Environmental Policy and Practice, Continuing Professional Development, Promotion of Registration and Continuous Improvement. The IAgrE gained a 'Satisfactory' (the highest possible assessment) in all seven criteria. Thus, the recommendation from the SocEnv reviewing team was that the IAgrE licence be renewed for a further 5 years.

IAgrE continues to maintain a productive working relationship with SocEnv. The former IAgrE CEO (Alastair Taylor) and Professor Mark Kibblewhite represent IAgrE on the SocEnv Board of Directors. Alastair Taylor also sits on the Registration Authority of SocEnv.

## Publications

The Publications Management Committee meets regularly to facilitate and monitor the development of all IAgrE publication activities.

Biosystems Engineering, IAgrE's scientific journal, continues to thrive with a further increase in electronic downloads. The Editorial team works hard to maintain the high quality of published papers. The number of papers submitted to Biosystems Engineering has grown significantly again during 2019 and now exceeds 1200 necessitating the need to review editorial resources.

The Biosystems Engineering editorial team comprises:

- Prof Bill Day (Editor-in-Chief)
- Dr Steve Parkin (Managing Editor)
- Dr Dvoralai Wulfsohn (Associate Editor)
- Dr John Gowing (Associate Editor)
- Dr Stavros Vougioukas (Associate Editor)

Biosystems Engineering forms an important component of IAgrE's portfolio. Income from the publishing contract with Elsevier was again in excess of the guaranteed sum. A substantially reduced on-line subscription to Biosystems Engineering is available to IAgrE members – a significant benefit to members. Limited free downloads are also available to members. During 2019 a number of special editions were produced. Income remains stable.

Chris Biddle retired as editor of the IAgrE member magazine *Landwards* in December. The magazine circulation and the respect it garnered under Chris' editorship increased consistently and was always well received. The four editions in 2019 looked forward to the future, to IAgrE's 100<sup>th</sup> Anniversary in 2038 and explored what the following areas might look like: Agriculture, Food, Mechanisation and the Environment. It will be interesting to look back in 2038 and see which predictions proved correct. Regular pre-production meetings are held at the IAgrE Office with the Secretariat team in attendance. Andy Newbold was selected to take over as editor of *Landwards* in 2020.

## Branches

Regional branches are active around the country although some of these do have difficulties maintaining a viable programme. These branches offer a useful range of events and meetings which are well received by members. A few areas continue to run without an effective Branch but every effort is made to accommodate members in these areas, by both including such members in adjacent groupings of by "special" events at or close to their geographical location.

## Volunteers

Volunteers form the backbone of the IAgrE and are closely involved with the Executive Committee, Council, Branches, Specialist Groups, Membership, Training and Education, Publications Management and Awards Committees. These work well with Secretariat staff who work hard to secure more involvement from a wider group of membership volunteers.

## Awards

The 2019 Awards were held following the AGM at the National Fluid Power Centre in Worksop on 2<sup>nd</sup> May 2019

### IAgrE Award of Merit

Richard Barrowman CEng FIAgrE

David Tinker CEng CEnv FIAgrE

### IAgrE Award for Contribution to Landbased Industries

Clare Butler Ellis CEnv FIAgrE

James Wallace AIAgrE

### The President's Award, formerly Michael Dwyer Memorial Prize

Richard Brindle CEng MIAgrE - JCB

### Branch Meritorious Service Award

Lawrence Knox IEng MIAgrE (Northern Ireland Branch)

### IAgrE CNH Industrial Award

Iain Dummett – Cranfield University Post Graduate

*"Evaluating Strip Tillage Practices for sustainable UK arable agriculture"*

William Hitchcock – Harper Adams University Undergraduate

*"Quantifying the effects of a pre-cleaning chaser system on Sugar Beet recovery"*

### IAgrE Student Project Award

Alwyn Morgan, *"Disc Brake Wear Sensor"* – Coleg Sir Gar

### IAgrE Student Project Safety Award

Kevin Shuttleworth, *"An investigation regarding the effects of acceleration produced by cabin suspension systems fitted to agricultural tractors upon the operator and operator health"* – University of Central Lancashire (Myerscough College)

### Douglas Bomford Paper Award

Paul Jackson, *"An innovative concept building design incorporating passive technology to improve resource efficiency and welfare of finishing pigs"* in Biosystems Engineering, Vol 174

### Ivel Award

Agri Industry Solutions for their innovative Nutriflow Slurry System

### IAgrE Team Achievement Award

Thatcher's Cider

**The IAgrE British Guild of Agricultural Journalist Award**, awarded for the best article/broadcast on the application of engineering within the landbased sector from a member of the Guild. The 2019 winner was James Andrews for his feature published in Farmers Weekly on How to secure longer-lasting point and tine metal.

## Technical Groups

It is clear that the most successful events are those that are issue driven. The success of Technical Groups tends to ebb and flow as the technical problems facing our sector also change. What is also clear is that with the combined threats of an ever rising population and climate change, issues affecting our sector will be increasingly in the public eye. The Forestry Engineering Group (FEG) held a very successful Symposium on 26<sup>th</sup> September in Cumbria. Topics included current and future trends in the timber industry, the latest developments in traction assist systems, timber bridges and a case study on helicopter extraction.

## Events

IAgrE consistently puts on relevant events to a high standard. The Institution would not exist without these events and thanks are due to the largely volunteer organisers and planners. This year we attended several national events. IAgrE activities of note during the year included:

- LAMMA – Birmingham NEC – January 2019
- AGM & Awards Event – NFPC, Worksop – May 2019
- Cereals – June 2019
- Tillage Live – Deenethorpe Airfield, Corby – September
- Game Changing Technologies for Agriculture 2019 conference – Westminster, London – October 2019
- IAgrE Landwards Conference – 'Big Data and whether it will lead to smarter farming' held at the East of England Conference Centre in Peterborough – October 2019
- AgriTechnica in Hannover, Germany – November 2019
- Midlands Machinery Show in Newark – November 2019



## Membership and Registration Numbers

IAgrE exists as an organisation in order to offer professional qualifications, not only because it has licences from the EngC and SocEnv to do so, but also as a professional organisation in its own right offering professional status via a suite of membership grades. To maintain this status, IAgrE has to be seen to have fair, rigorous and transparent procedures. These procedures are used by the IAgrE Membership Committee and audited by the IAgrE Internal Audit Panel. The efficient operation of these two groups is essential to the smooth running of IAgrE.

The Internal Audit Panel reporting procedures ensure that Council and Executive are informed of outcomes.

Membership numbers in 2019 dropped once again. This steady decline is mainly due to an ageing membership and a gradual reduction in students studying and pre-professionals operating within agricultural engineering. All PEIs are experiencing a similar reduction in membership. The IAgrE is working with the Engineering Council and other PEIs to reverse this decline. At the year-end, the breakdown of membership was as follows:

	2019	2018	Change
Hon Fellow*	16	16	0
Fellow*	129	131	-2
Member*	595	598	-3
Associate Member*	189	207	-18
Technician	18	11	+7
Affiliate	150	163	-13
Pre-professional	561	794	-233
Student (DBT)	492	615	-123
Commercial & Academic	<u>55</u>	<u>52</u>	<u>+3</u>
<b>Totals</b>	<b><u>2205</u></b>	<b><u>2587</u></b>	<b><u>-382</u></b>

\* Corporate Members.

The Institution has been actively engaging with businesses through its Jobs Search and other initiatives and Commercial and Academic membership is rising steadily.

There are a significant percentage of Corporate Members (Associate Member, Member, Fellow, Hon Fellow) registered through the EC. The breakdown of registrants is shown below:

	2019	2018	Change
Chartered Engineer	173	172	+1
Incorporated Engineer	137	144	-7
Engineering Technician	<u>95</u>	<u>112</u>	<u>-17</u>
<b>Totals</b>	<b><u>405</u></b>	<b><u>428</u></b>	<b><u>-23</u></b>

	2019	2018	Change
Chartered Environmentalist	121	123	-2

## Financial Review

### Results

The Statement of Financial Activities (SOFA) for the year is set out on page 10 of the financial statements. The surplus for the year, including losses on investments is £170,287 which represents a substantial increase when compared to the 2018 figure of £47,506 due to the gains on investments in the year. Charitable income has increased from £417,441 in 2018 to £429,584 in 2019 due to increased income from both subscriptions and publications.

The resources expended in 2019 were £315,674, a decrease of £29,155 compared with 2018. This decrease is mainly due to reduced costs associated with publications and project delivery expenses.

The results for the year to December 2019 show an operating surplus of £113,910 compared with a surplus of £72,612 in 2018. This increase is largely due to the increased income from publications relative to the associated costs and the reduction in project delivery expenses, as mentioned previously.

On 31 December 2019, total investments stood at £758,253. Realised gains on investment assets in 2019 are £10,069. Unrealised gains are £46,308 in 2019.

## Reserves and Investments Policy

The Trustees continue to monitor and review IAgrE's need for reserves, and associated investments, in line with the guidance issued by the Charities Commission.

The financial reserves have been set aside over the years to provide financial stability, business continuity, and the means for the development of IAgrE's principal activities as defined in the Memorandum and Articles of Association. Total reserves (£1,229,349) have historically been maintained at a level that is at least equivalent to one year's budgeted expenditure.

Part of the total reserve is held as Designated Funds. A Building Fund for the replacement of the Secretariat building stands at £420,000. The IAgrE lease with Cranfield University runs to 2056 and, whilst there is no plan to move from Cranfield in the foreseeable future, it is considered prudent to continue to allocate reserves, whilst circumstances allow, against possible future building purchases.

Going forward the institution is setting some of its reserves against growth, and so is likely to show a small annual deficit for the short term. Reserves are utilised for the benefit of the whole membership at Council's discretion.

Annual IAgrE budgets are set to break even, with exceptional expenditure authorised from reserves from time to time. Reserves are utilised for the benefit of the whole membership at Council's discretion.

## Summarised Financial Statements

Summarised financial statements are shown on pages 8 and 9 of the IAgrE Annual Report and Summary Accounts. These are extracted from pages 10 and 11 of the full statutory Trustees Report and Financial Statements of the Institution of Agricultural Engineers which were approved by the Executive Trustees on 21 April 2020. The full financial statements, on which Landers Accountants Ltd gave an unqualified independent examiners report on 20 May 2020 will be submitted to the Charity Commission and Companies House.

The reporting accountants have confirmed to the Trustees that, in their opinion, the financial statements are consistent with the financial records held by the IAgrE secretariat for the year ended 31 December 2019.

## Further Information

The IAgrE Trustees are responsible for the maintenance and integrity of the corporate and financial information included on the charitable company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

These summarised financial statements may not contain sufficient information to gain a complete understanding of the financial affairs of the charity. The full statutory Trustees Report and Financial Statements and reporting accountants report may be obtained from the IAgrE Secretariat:

*Institution of Agricultural Engineers*  
*The Bullock Building, University Way, Cranfield, Bedford*  
*MK43 0GH*

## Looking Forward

On 2<sup>nd</sup> September 2019 the former IAgrE Chief Executive and Secretary, Alastair Taylor, retired from the position to be replaced by Ed Hansom.

It is against this background that the Institution of Agricultural Engineers intends to meet its keys aims by:

- Allocating financial reserves for membership support and growth with a view to, at first, maintaining membership numbers, and in the future increasing this number.
- Implementing the strategic developments identified during the 2018 members and stakeholders consultation event.
- Reviewing and improving communications arrangements with members and stakeholders in order that they receive more timely and relevant information.

- Continuing to develop the relationship with the Royal Academy of Engineering and contribute to the wider development of the engineering discipline.
- Continuing to offer a diverse range of training and development opportunities for members including physical meetings and on-line access.
- Reviewing the arrangements for financial management at the Secretariat and implement further improvements to the IAgrE membership management system.
- Continuing to sample members CPD and provide feedback on its quality and impact linked to the ongoing promotion of mentoring and registration opportunities.
- Investigating the digitisation of the IAgrE archive in order that members and stakeholders can access this valuable resource.
- Developing and renew relationships with new and existing university and education partners and continue to promote Academic and Commercial membership.
- Continuing to work with industry partners and stakeholders to promote careers in the agricultural engineering industry.
- Developing new relationships with machinery dealerships in order that a greater number of technicians benefit from being professionally recognised.
- Continuing to establish relationships with the Agritech industry to act as a conduit for learning and knowledge as they relate to research and innovation.

J Rickson, President

A C Newbold, Hon Treasurer




## Consolidated Statement of Financial Activities incorporating Income and Expenditure Account for the year ended 31 December 2019

	Total Funds 2019 £	Total Funds 2018 £
<b>Incoming Resources</b>		
<b>Incoming resources from generated funds:</b>		
Voluntary Income:		
Donations	175	36
Activities for generating funds:		
Other income	583	1,564
Investment income	30,296	26,582
<b>Incoming resources from charitable activities:</b>		
Members' subscriptions and fees	134,107	130,819
Affiliated organisations	5,764	8,965
Income from publications	237,274	230,348
Technician Accreditation scheme	4,176	2,913
Other Income	14,013	17,368
Net conference income	3,196	(1,154)
<b>Total incoming resources</b>	<b>429,584</b>	<b>417,441</b>
<b>Resources expended</b>		
<b>Cost of generating funds:</b>		
Investment management costs	6,906	5,714
Cost of charitable activities	282,827	318,382
Governance Costs	25,941	20,733
<b>Total resources expended</b>	<b>315,674</b>	<b>344,829</b>
<b>Net incoming resources before other recognised gains</b>	<b>113,910</b>	<b>72,612</b>
<b>Other recognised gains</b>		
Realised gains on investment assets	10,069	33,872
<b>Net income for the year</b>	<b>123,979</b>	<b>106,484</b>
Unrealised gains on investment assets	46,308	(58,978)
<b>Net movement of funds</b>	<b>170,287</b>	<b>47,506</b>
<b>Reconciliation of funds</b>		
Total funds brought forward	1,059,062	1,011,556
<b>Total funds carried forward</b>	<b>1,229,349</b>	<b>1,059,062</b>

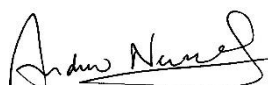
## Balance Sheet as at 31 December 2019

	2019	2018
<b>Fixed assets</b>		
Tangible assets	4,114	2,313
Investments	758,253	681,586
	<b>762,367</b>	<b>683,899</b>
<b>Current assets</b>		
Stock	3,760	2,475
Debtors	183,113	141,958
Short term deposits	158,077	157,492
Cash at bank and in hand	170,658	151,252
	<b>515,608</b>	<b>453,177</b>
<b>Creditors: Amounts falling within one year</b>	<b>(48,626)</b>	<b>(78,014)</b>
<b>Net current assets</b>	466,982	375,163
<b>Net assets</b>	<b>1,229,349</b>	<b>1,059,062</b>
Unrestricted funds		
Designated funds	420,000	404,498
Revaluation funds	250,839	201,368
General funds	558,510	453,196
<b>Total funds</b>	<b>1,229,349</b>	<b>1,059,062</b>

These financial statements were approved by the Executive and authorised for issue on 8<sup>th</sup> April 2020 and signed on their behalf by:

Professor Jane Rickson (President)

Mr Andrew Newbold (Honorary Treasurer)

### NOTICE OF MEETING

Notice is hereby given that due to the international COVID-19 virus pandemic the **Seventy-fourth Annual General Meeting** of the Institution was not able to be held as expected on 30 April 2020 but has been postponed and it is hoped it will be held at Amazone Ltd near Doncaster on Thursday 15 October 2020 at 11.15am

#### Agenda

1. To receive and confirm the minutes of the seventy-third AGM held on 2<sup>nd</sup> May 2019
2. To propose as an Ordinary Resolution: ***"That the Annual General Meeting authorises the Trustees of the Institution to review members' subscriptions and to make such adjustment, if any, as may be required with effect from 1 January 2021"***.
3. To consider and adopt the Annual Report for the year ending 31 December 2019.
4. To receive and adopt the Accounts for the ending 31 December 2019.
5. To announce nominations for election to Council for the 2020/2021 Session.
6. To re-appoint Landers Accountants Limited, registered auditors, as reporting accountants and to authorise Council to fix their remuneration.

By Order of the Trustees

Edward J Hansom, Chief Executive & Secretary  
31 March 2020

NB ALL PAPERS ARE AVAILABLE ON THE IAGRE WEBSITE

# IAgrE Annual Report & Summary Accounts

For the year ended  
31 December 2020

## The Institution of Agricultural Engineers

Company limited by guarantee Reg No: 648041  
Registered Office: Cranfield, Bedford  
Registered Charity No: 257303

[iagre.org](http://iagre.org)

Agriculture ■ Forestry ■ Horticulture ■ Environment ■ Amenity



## Aims and Objectives

The remit of the Institution of Agricultural Engineers (IAgrE) was reviewed and the associated Memorandum and Articles of Association were updated in 2017. Established in 1938 (as the Institution of British Agricultural Engineers), the overall aims of IAgrE were then, as they are now, to:

- Promote agricultural engineering as a profession.
- Direct and apply the sources of energy in Nature for the sustainable use and convenience of man in the adaptation and application of materials and mechanical methods for the best development of land use for agriculture, forestry and other purposes and
- Promote good practice in all applications of technology across the land based sector.

Prime objectives are all for the public benefit and, as ever, to continue with the drive to increase and broaden the membership base and raise the profile of IAgrE. Further information on the aims of the Institution are detailed in the Memorandum and Articles of Association which are published at [www.iagre.org](http://www.iagre.org)

## Structure, Governance and Management

### Structure

IAgrE is overseen by an Executive Committee whose members act as Trustees. These are also directors of the charity for the purposes of the Companies Act, and through this report, submit their annual report and the financial statements for the year ended 31 December 2020. The trustees have adopted the provisions of the Statement of Recommended Practice (SORP) (FRS 102) "Accounting and Reporting by Charities" 2<sup>nd</sup> edition issued in 2019 in preparing the annual report and financial statements of the charity.

IAgrE is a charitable company (charity number 257303) limited by guarantee (company number 00648041) and is governed by a Memorandum and Articles of Association. The principal address and registered office of the charity is The Bullock Building, University Way, Cranfield, Bedford MK43 0GH.

IAgrE is regulated by both the Charities Commission and by Company Law. An Advisory Council assists in setting the overall direction and policy of the Institution. Council is elected by the corporate (voting) members of IAgrE. Operationally, the IAgrE is run by its Chief Executive Officer (CEO) supported by the Executive Committee which is appointed annually at the Annual General Meeting (AGM) and is responsible for executive action on all including Finance and General Purposes.

### Advisory Council

Advisory Council meetings take place twice a year and are used to discuss matters of strategic importance to IAgrE. These meetings are usually associated with a visit to key organisations within IAgrE's wider community. 2020 has of course been an extraordinary year due to the Covid-19 pandemic. The first meeting of 2020 was held at Cranfield University on the 18<sup>th</sup> Feb. Due to travel restrictions the second was held on-line on the 15<sup>th</sup> October. Advisory Council meetings are used to update and record the ongoing activities of IAgrE branches.

Matters for discussion included increasing awareness of IAgrE and interaction with younger people including farmers and students via

a number of routes such as colleges, press, industry and technical days. A significant discussion was held on CPD, mentoring, registration and qualifications. The recruitment of new editors for BioSystems was discussed due to increased work load and personnel changes. The new IAgrE CEO was formally introduced and gave a short career resume, followed by introductions from the Advisory Council members present. A Summary of the Executive meetings were presented and discussed, including conference, strategy, audits and projects.

### Health and Safety

IAgrE provides a Health and Safety Policy document. This is updated regularly. All staff are routinely reminded of its existence.

### Staff

**Edward Hansom** was employed (full time) in the role of CEO and Secretary. He resigned from his appointment on 31<sup>st</sup> May 2020.

**Charles Nicklin** is employed (full time) in the role of CEO and Secretary having started this appointment on 1<sup>st</sup> October 2020.

**Alison Chapman** is employed (full time) as Membership Secretary and is closely involved in supporting the Membership Committee.

**Sarah McLeod** is employed (9 days/fortnight) as the Membership and Events Support/Office Administrator. She organises events and the Annual Conference and supports the members, branches and groups. She also manages the CPD audit as well as supporting Council & Executive.

**Marion King** is contracted as Communications Officer two days per week. She completes press releases, marketing material and continues to raise the profile of IAgrE through social media via Facebook, LinkedIn and Twitter.

**Jo Martindale** is contracted as Bookkeeper for two days per week working closely with the Secretariat and accountants.

### Risk Management

The Trustees are responsible for the management of risks faced by the Institution and seek early identification, evaluation and effective management and mitigation of key risks. Potential risks, impact and mitigation are identified by the IAgrE CEO and are considered by Trustees at all Executive Committee meetings. The principal risks identified are:

- Business interruption as a consequence of loss of key staff, office and records, and/or premises lease amendment.
- Loss of membership and/or loss of income from substantial decrease in membership renewals.
- Information and Communication Technology related issues such as a website crash and/or database failure.
- Loss of income streams such as BioSystems Engineering and return on investments.

### Statement of disclosure to Independent Examiner

The trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities. In so far as the trustees are aware:

- There is no relevant information of which the charitable company's independent examiner is unaware; and
- The trustees have taken all steps that they ought to have taken to make themselves aware of any relevant information and to establish that the examiner is aware of that information.

The trustees also confirm that they have taken due regard to Charity Commission guidance on public benefit.

## Trustees

The Trustees of IAgrE on the date of approval of the financial statements were:

Mr P Hemingway, President	Mr A C Newbold, Hon Treasurer
Prof R J Rickson	Mr G Higginson
Dr R J Merrall	Mr K Franklin
Prof M G Kibblewhite	Mr H Crabtree
Mr S C Constable	Mr M StJ Carr-West
Dr M Moore	

Dr M C Butler Ellis and Professor P C H Miller are co-opted members of the Executive Committee.

## Review of Activities

### Overview

IAgrE continues to place emphasis on the five-year development plan and has made progress in delivering the business objectives which, whilst maintaining the need to operate within Charities rules and best practice have been set against the following business development themes:

- Promoting the value and benefits of IAgrE membership.
- Ensuring that the Engineering Council and Society for the Environment licences are maintained.
- Continuing to develop new business activities and income streams.
- Increasing the IAgrE profile with other institutions and stakeholders so that IAgrE is viewed as being influential, with good quality intelligence and intellectual capital.

### Strategic Developments

2020 was a challenging year for the IAgrE and its membership. The Covid-19 pandemic impacted the Institution's operation in many ways, but despite the continuity of the business was maintained.

The strategy laid out in the previous year continued, albeit at a reduced pace, but with additional items.

The priorities forming the strategic development plan remain and include:

- Ensuring that the membership, other stakeholders and more general audiences have an improved understanding.
- Develop simpler, clearer messaging will enable easier engagement with target audiences.
- Better demonstrate the value of IAgrE to retain existing members, attract new ones and gain employers' backing.
- Converting from student to another class of membership.

- Investment of funds and resources to both promote IAgrE further and to retain membership.
- Use technology to communicate with members, engage them with IAgrE activities and promoting the Institution more widely.
- Continue to promote professionalism and high standards.
- Broader engagement with wider industry stakeholders with the aspiration that there could be mutual endorsement where appropriate.
- More events; both generic and specialist, and a revival of special interest groups with live streaming of branch meetings to increase the breadth of engagement.
- Use the IAgrE website better to give members access to research and information as well as an improved jobs page.

The Secretariat continued to progress these developments during 2020.

In 2020 the sampling of IAgrE members Continuing Professional Development (CPD) records continued in accordance with the Regulations. Those members who failed to engage with the CPD requirements were contacted to encourage their full cooperation. If they still failed to engage with the sampling process they were added to the following year's cohort of members to be sampled. Successful use has been made of the Engineering Council "MyCareerPath" platform for recording and sampling members CPD. Those members chosen for the CPD sampling exercise have benefited from good quality feedback which has been well received. IAgrE engages with a CPD forum to share best practice with other organisations and also contributes to an Engineering Council working group for this activity.

The Membership Committee continued to work effectively with good feedback from the Engineering Council Liaison Officer. Membership related procedures are reviewed annually with minor adjustments being made to reflect emerging requirements required for IAgrE to maintain its Engineering Council and Society for the Environment licences. IAgrE is actively involved with committee work for both licencing bodies including a review of the UK-SPEC standards for professional engineer registration.

The annual conference in 2020 followed a virtual format, where speakers pre-recorded their presentations for viewing beforehand. The subject of the 2020 conference was Lean Principles and Resilience in Agricultural Engineering; a subject quite timely given the pandemic being faced. Presenters were drawn from a diverse range of the sector including machinery manufacturers and dealers, fresh produce producers, consultants and researchers. The conference then culminated in a live Q&A session on the 4<sup>th</sup> October, attracting a strong audience. A benefit of using a virtual format is that all the presentations can be viewed in the future via the website.

IAgrE continues to develop a productive working relationship with the Royal Academy of Engineering (RAEng) and is actively involved with a number of Academy initiatives. IAgrE is actively engaged in the RAEng National Engineering Policy Centre (NEPC) which was set up in 2018. This has been effective in raising the profile of engineering for sustainable food production and global food security with policy influencers. Policy work on subjects such as energy, data, communications, autonomous vehicles and drones, as well as Covid-19, are all benefiting from IAgrE input.

Partnership and collaborations continue to be an important part of the IAgrE remit. The institution engaged with a number of organisations on a variety of topics:

- Westminster Food & Nutrition Forum, future agricultural land use
- Engineering & Physical Sciences Research Council, net zero agriculture
- Society for the Environment, soil and stones report
- Round table discussion with Lord Curry to discuss a new professional body for agriculture.

The Institution continues engagement with other PEIs, industry bodies, universities, colleges and companies covering a range of topics such from apprenticeships to engineering for food production. The IAgrE continues to look to accredit courses and programmes in the land-based education sector.

## Services to Engineers

IAgrE continues to promote professionalism through the marketing of professional qualifications at all levels from Engineering Technicians through to Chartered Engineer and Environmentalist registration. We continue to place strong emphasis on supporting Engineering UK and the Engineering Council. IAgrE sits on the Operational Group of the Engineering 4 Education (E4E) panel which is hosted by the RAEng and works to inform education policy and practice by:

- Initiating and contributing to policy debates
- Providing decision-makers with high quality information and analysis
- Ensuring that all learners are enabled to make connections across areas of learning that support an education for engineering
- Highlighting the needs of future engineers and routes into engineering that are open to all

IAgrE receives many requests for contributions to a range of consultations led by the RAEng and other national bodies. Where possible and relevant, IAgrE will commit resources to support these initiatives on behalf of the wider membership.

The Institution's interests continue to be represented at the Engineering Council at numerous Committees and Working Groups including:

- The Engineering Accreditation Board (EAB)
- The Engineering Apprenticeship and Technician Qualifications (EATQ) Forum
- The EngTech Value Proposition Working Group
- The Heads of Membership Committee
- The PEIs Group B & C Panels, and
- The Professional Engineering Committee.

All of these ensure that the IAgrE maintains a high profile within the Engineering Council and is kept up-to-date with policy and standards. During 2020 the Institution had its 5-year licence review, which was fully closed out in March 2021.

Malcolm Carr-West is the IAgrE's nominated Engineering Council volunteer and sits on the Quality Assurance Committee and also acts as alternate to the IAgrE CEO on the important Engineering Apprenticeship and Technician Qualifications. The Engineering Council has issued the new 4<sup>th</sup> Edition of UK SPEC mid 2020 which will be incorporated into the IAgrE procedures over the course of 2021.

## Land-based Engineering Training and Education Committee

IAgrE continues to work closely with AEA and BAGMA through the Land-based Engineering Training and Education Committee (LE-TEC) to support apprenticeship development, careers promotion and the Land-based Technician Accreditation (LTA) scheme. LE-TEC is a limited company with IAgrE as an equal partner along side AEA and BAGMA.

Since the compulsory LTA requirement for IAgrE membership and EngTech registration was removed in 2018, membership numbers have sharply declined. Irrespective of the LTA scheme, a renewed focus will be placed on EngTech registration going forward.

The Parlour Safe scheme for milking equipment is well established with the only qualification in the sector being provided by Reaseheath College and Hartpury College who, in conjunction with Milking Equipment Association members, offer courses covering the current three Categories of Parloursafe.

Administration of Parlour Safe is now administered by the AEA, however, the IAgrE still contributes to its technical committee on matters relating to CPD and ensuring rigour and transparency of process of technician registration and matters relating to IAgrE membership and registration with both the Engineering Council and the Society for the Environment.

## Education

IAgrE has a renewed focus on building relationships with colleges and universities, and provides talks and seminars as required. IAgrE membership, funded through the Douglas Bomford Trust (DBT) is afforded to students following UK recognised qualifications in agricultural engineering and associated subjects.

Working with industry through LE-TEC, IAgrE continues to support the development of apprenticeship programmes in Land-based Service Engineering at foundation and advanced levels now expanded to meet the requirements of the construction and plant sector. These were launched in 2018 and the first round of end-point assessments were completed in 2020.

## Society for the Environment

IAgrE continues to maintain a productive working relationship with Society for the Environment. Alastair Taylor (former IAgrE CEO) was elected Chief Licence Reviewer for the Society for the Environment at their AGM in the summer of 2020.

IAgrE has now been granted a licence to award the newly-created Registered Environmental Practitioner (REnvP) grade for the Society for the Environment and has been marketing the grade since January 2021, which we believe will lead to additional new members.

## Publications

The Publications Management Committee meets regularly to facilitate and monitor the development of all IAgrE publication activities.

BioSystems Engineering, IAgrE's scientific journal, continues to thrive with a further increase in electronic downloads. The Editorial team works hard to maintain the high quality of published papers. The number of papers submitted to BioSystems Engineering continues to grow and exceeds 1200 per annum, this coupled with



the impending retirement of Dr Bill Day has necessitated significant changes to the editorial team.

The BioSystems Engineering editorial team going forwards into 2021 comprises:

- Dr Steve Parkin (Editor-in-Chief)
- Dr Bill Day (Editor Emeritus)
- Prof Jacek Koziel (Senior Editor)
- Prof Nikolaos Katsoulas (Senior Editor)
- Dr Dvorlai Wulfsohn (Associate Editor)
- Mr John Gowing (Associate Editor)
- Prof Stavros Vougioukas (Associate Editor)
- Prof Fernando Auat Cheein (Associate Editor)
- Prof Konstantinos Ferentinos (Associate Editor)
- Dr Meir Teitel (Associate Editor)
- Prof Raphael Linker (Associate Editor)

Biosystems Engineering forms an important component of IAgrE's portfolio. Income from the publishing contract with Elsevier was again in excess of the guaranteed sum. A substantially reduced on-line subscription to Biosystems Engineering is available to IAgrE members – a significant benefit to members. Limited free downloads are also available to members. During 2020 a number of special editions were produced. Income remains stable, but due to the rise of submissions the editorial costs have increased.

Andy Newbold took over as editor of *Landwards* from January 2020. The editor's role is to present the Institution, its members, its views and activities in a positive light. In one member's words "to be my window into the world of agricultural engineering". New institutional activities and many meetings moving online have provided fertile ground for articles, with a ready supply of content for the new editor. The editor is very appreciative of the support from members, branches and the many and varied correspondents. Regular pre-production meetings are held with the IAgrE Secretariat team prior to its publication. Feedback received for the journal during 2020 has been very positive.

## Branches

Regional branches are active around the country although some of these do have difficulties maintaining a viable programme. These branches offer a useful range of events and meetings which are well received by members. A few areas continue to run without an effective branch but every effort is made to accommodate members in these areas, by both including such members in adjacent groupings of by "special" events at or close to their geographical location. The use of video conferencing platforms have been made good use of for many branches. These on-line platforms have removed geographical barriers for attendance for people outside the regions, leading to a significant increase in participation.

## Volunteers

Volunteers form the backbone of the IAgrE and are closely involved with the Executive Committee, Council, Branches, Specialist Groups, Membership, Professional Development, Publications Management and Awards Committees. These work well with Secretariat staff who work hard to secure more involvement from a wider group of membership volunteers.

## Awards

Unfortunately, as there was no AGM in 2020 the awards could not be presented in person. The IAgrE has since decided that the awards will be presented in April 2021 at an on-line evening event. The winners of the awards were as follows:

### IAgrE Award of Merit

Keith Hawken CEng FIAgrE  
Bob Evans CEnv MIAgrE

### IAgrE Award for Contribution to Landbased Industries

David Kirschner  
Chris Biddle FIAgrE

### The President's Award

No award in 2020

### Branch Meritorious Service Award

Mike Stephenson AIAgrE (South East Midlands Branch)

### IAgrE CNH Industrial Award

John Kinsella and Robert Langan for their projects "*Building and testing an automated gear selector for the 8 speed MBTrac tractor series*" (Level 7) and "*Automated gear selector to enable persons with disabilities easy use of H pattern self-propelled farm machines*" (Level 8) - Institute of Technology, Tralee

### IAgrE Student Project Award

Joshua Yelland – "*Casualty Animal Quad Bike Trailer*" - Bicton College

### IAgrE Student Project Safety Award

Dafydd Eynon – "*Tine Guard for Buckrake*" – Coleg Sirgar

### Douglas Bomford Paper Award

Theo Demmers (MIAgrE) - "*Real-time modelling of indoor particulate matter concentration in poultry houses using broiler activity and ventilation rate*". The paper was published in Biosystems Engineering Volume 187

### Ivel Award

J C Machinery for the Vredo Crop Drill System

### IAgrE Team Achievement Award

JCB Fastrac Speed Record Team

### The IAgrE British Guild of Agricultural Journalist Award, awarded

for the best article/broadcast on the application of engineering within the landbased sector from a member of the Guild.

The 2020 winner was Peter Hill for his feature in Future Farming entitled "*Intelligent sprayer targets individual weeds*".

The runner up was Jonathan Wheeler for his feature in the Farm Machinery Journal entitled "*Insight for spuds*".

## Technical / Special Interest Groups

The IAgrE continues to host and support a number of Special Interest Groups (SIGs) for not only its membership, but the wider community. Unfortunately, due to Covid-19, the Forestry Engineering Group symposium was delayed in 2020. The Engineering for Food & Drinks Group held a number of successful events with international presenters. The Health & Safety group has held and supported various events, in conjunction with the Farm Safety Partnership and NFU. Further expansion of SIGs to cover new technologies/subjects will be explored.

## Events

IAgrE participates in relevant events, supported by its membership. Due to the pandemic, attendance at key events was not possible and many took on a virtual approach. Activities of note during the year included:

- LAMMA – Birmingham NEC – January 2020

- AGM & Awards Event – Amazone, Doncaster – 30<sup>th</sup> April 2020 - postponed
- Agri-EPI Annual Conference – 6<sup>th</sup> October 2020
- SocEnv EGM – 8<sup>th</sup> October 2020
- IAgrE Landwards Conference – 4<sup>th</sup> November 2020

## Member Support

2020 was an unprecedented year, IAgrE provided a number of new initiatives and benefits for its membership. Covid-19 support information, including various links placed on the website, plus a dedicated home page with useful information. Several new features were developed:

- Lunchtime Lectures – monthly speakers on a variety of subjects broadcast on-line at 1pm. Events recorded for future use
- Podcasts – regular interviews with people within the industry, discussing careers, news, etc
- Member stories – discussing how the pandemic has affected them and how they've persevered

Many of the features are now embedded into IAgrE normal services and will continue going forward.

## Membership and Registration Numbers

IAgrE exists as an organisation in order to offer professional qualifications, not only because it has licences from the Engineering Council and Society for the Environment to do so, but also as a professional organisation in its own right offering professional status via a suite of membership grades. To maintain this status, IAgrE has to be seen to have fair, rigorous and transparent procedures. These procedures are used by the IAgrE Membership Committee and audited by the IAgrE Internal Audit Panel. The efficient operation of these two groups is essential to the smooth running of IAgrE.

The Internal Audit Panel reporting procedures ensure that Council and Executive are informed of outcomes.

IAgrE membership for paying members remains static, however it is fully recognised that growth is essential and remains a key item for our strategic development. The Institution continues to engage with business and education through its contacts and other initiatives to promote commercial and academic membership. The IAgrE continues to work with the Engineering Council and other organisations to reverse this decline.

At the year-end, the breakdown of membership was as follows:

	2020	2019	Change
Hon Fellow*	16	16	0
Fellow*	120	129	-9
Member*	581	595	-14
Associate Member*	198	189	+9
Technician	19	18	+1
Affiliate	166	150	+16
Commercial & Academic	56	55	+1
<b>Total</b>	<b><u>1156</u></b>	<b><u>1152</u></b>	<b><u>+4</u></b>

\* Corporate Members

There is a significant percentage of membership who are registered through the Engineering Council and the Society for the Environment. Registration figures have declined during 2020, it is a key strategic item to promote and consequently increase registration figures going forward. It should be noted that the

majority of these registration losses are due to retirement and sadly death.

The breakdown of registrants is shown below:

	2020	2019	Change
Chartered Engineer	169	173	-4
Incorporated Engineer	129	137	-8
Engineering Technician	94	95	-1
Chartered Environmentalist	117	121	-4
<b>Totals</b>	<b><u>509</u></b>	<b><u>526</u></b>	<b><u>-17</u></b>

## Financial Review

### Results

The Statement of Financial Activities (SOFA) for the year is set within the full financial statements. The overall shortfall for the year is £3,604, which represents a substantial reduction compared to the 2019 surplus of £170,287. The shortfall includes an unrealised loss on investments of £30,444, compared to an unrealised gain of £46,308. The reduction in value of investments reflects the uncertainty in financial markets caused by the COVID-19 pandemic. When excluding unrealised gains/losses on investments, the net result for 2020 is a gain of £26,840, compared to a gain of £123,979 in 2019. The Institution's performance in 2020 was impacted by both a reduction in income and an increase in costs, as discussed in more detail below.

Total income reduced from £449,058 in 2019 to £364,273 in 2020. Within this total, members' subscriptions and fees reduced from £159,345 to £138,467, predominantly due to an agreement to waive fees payable by academic and commercial members in 2020, in order to support them through the COVID-19 pandemic. Income from publications reduced from £237,274 to £194,433, however the 2019 amount includes an accounting adjustment of £40,000 relating to an increase in accrued income, the actual cash amounts received in relation to publications were relatively consistent across both years. There was no income from projects, technical accreditation schemes and conferences during 2020 due to the inability to deliver these services during the COVID-19 pandemic.

Expenditure relating to charitable activities increased to £365,708 in 2020 from £335,148 in 2019. The main factors behind this were as follows:

- An increase in editorial costs on the Biosystems Engineering and Landwards publications of over £15k;
- An increase in staff costs of around £20k, predominantly due to ex gratia payments made in February 2020;
- An annual donation of £5k paid to LE-TEC, with no such donation made in 2019.

The cost increases were partially offset by savings in project delivery, premises and travel expenses, as a result of the COVID-19 pandemic.

On 31 December 2020, total fixed asset investments stood at £738,294. Realised gains on these assets in 2020 are £28,275; unrealised losses upon the revaluation of such these assets are £30,444.

### Reserves and Investments Policy

The Trustees continue to monitor and review IAgrE's need for reserves, and associated investments, in line with the guidance issued by the Charities Commission.

The financial reserves have been set aside over the years to provide financial stability, business continuity, and the means for the development of IAgrE's principal activities as defined in the Memorandum and Articles of Association. Total reserves (£1,225,745) have historically been maintained at a level that is at least equivalent to one year's budgeted expenditure.

Part of the total reserve is held as Designated Funds. A Building Fund for the replacement of the Secretariat building stands at £440,000. The IAgrE lease with Cranfield University runs to 2056 and, whilst there is no plan to move from Cranfield in the foreseeable future, it is considered prudent to continue to allocate reserves, whilst circumstances allow, against possible future building purchases.

Going forward the institution is setting some of its reserves against growth, and so is likely to show a small annual deficit for the short term. Reserves are utilised for the benefit of the whole membership at Council's discretion.

Annual IAgrE budgets are set to break even, with exceptional expenditure authorised from reserves from time to time. Reserves are utilised for the benefit of the whole membership at Council's discretion.

### Summarised Financial Statements

Summarised financial statements are shown on pages 8 and 9 of the IAgrE Annual Report and Summary Accounts. These are extracted from the full statutory Trustees Report and Financial Statements of the Institution of Agricultural Engineers due to be approved by the Executive Trustees on 14<sup>th</sup> April 2021. The full financial statements, on which Landers Accountants Ltd will give an unqualified independent examiner's report on 16<sup>th</sup> April will be submitted to the Charity Commission and Companies House.

The reporting accountants have confirmed to the Trustees that, in their opinion, the financial statements are consistent with the financial records held by the IAgrE secretariat for the year ended 31 December 2020.

### Further Information

The IAgrE Trustees are responsible for the maintenance and integrity of the corporate and financial information included on the charitable company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

These summarised financial statements may not contain sufficient information to gain a complete understanding of the financial affairs of the charity. The full statutory Trustees Report and Financial Statements and reporting accountants report may be obtained from the IAgrE Secretariat:

*Institution of Agricultural Engineers  
The Bullock Building, University Way, Cranfield, Bedford  
MK43 0GH*

### Looking Forward

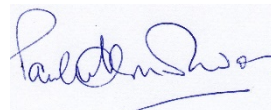
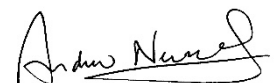
On 1<sup>st</sup> October 2020 Charles Nicklin was appointed as IAgrE Chief Executive Officer and Secretary, replacing Ed Hansom who resigned in May 2020. The new CEO has a commercial engineering background with many years working in senior leadership roles for a large global machinery manufacturer. Under his tenure, we expect the institution to make some significant steps forward.

There is no escaping the fact that 2020 has been a difficult year due to the pandemic that has placed the whole world in turmoil. With the new CEO firmly in place it is against this background that the Institution of Agricultural Engineers intends to move forward and meet its keys aims by:

- Allocating financial reserves for membership support and growth with a view to, at first, maintaining membership numbers, and in the future increasing this number.
- Building on the strategic developments identified during the 2018 members and stakeholder's consultation event and the implementation of new strategies.
- Reviewing and improving communications arrangements with members and stakeholders in order that they receive more timely and relevant information.
- Continuing to develop the relationship with the Royal Academy of Engineering and contribute to the wider development of the engineering discipline.
- Continuing to offer a diverse range of training and development opportunities for members including physical meetings and on-line access.
- Reviewing the arrangements for financial management at the Secretariat and implement further improvements to the IAgrE membership management system.
- Continuing to sample members CPD and provide feedback on its quality and impact linked to the ongoing promotion of mentoring and registration opportunities.
- Investigating the digitisation of the IAgrE archive in order that members and stakeholders can access this valuable resource.
- Developing and renewing relationships with new and existing university and education partners and continuing to promote Academic and Commercial membership.
- Continuing to work with industry partners and stakeholders to promote careers in the agricultural engineering industry.
- Developing new relationships with machinery dealerships in order that a greater number of technicians benefit from being professionally recognised.
- Continuing to establish relationships with the Agritech industry to act as a conduit for learning and knowledge as they relate to research and innovation.

P F Hemingway, President

A C Newbold, Hon Treasurer

## Consolidated Statement of Financial Activities incorporating Income and Expenditure Account for the year ended 31 December 2020

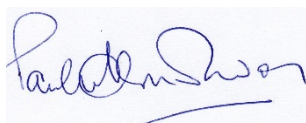
	Total Funds 2020 £	Total Funds 2019 £
<b>Incoming Resources</b>		
<b>Incoming resources from generated funds:</b>		
Voluntary Income:		
Donations	43	175
Activities for generating funds:		
Other income	8,512	583
Investment income	22,818	30,296
<b>Incoming resources from charitable activities:</b>		
Members' subscriptions and fees	138,467	159,345
Income from publications	194,433	237,274
Technician Accreditation scheme	-	4,176
Projects	-	14,013
Net conference income	-	3,196
<b>Total incoming resources</b>	<b>364,273</b>	<b>449,058</b>
<b>Resources expended</b>		
<b>Cost of generating funds:</b>		
Investment management costs	4,506	6,906
Cost of charitable activities	332,335	302,301
Governance Costs	28,867	25,941
<b>Total resources expended</b>	<b>365,708</b>	<b>335,148</b>
<b>Net incoming resources before other recognised gains</b>	<b>(1,345)</b>	<b>113,910</b>
<b>Other recognised gains</b>		
Realised gains on investment assets	28,275	10,069
<b>Net income for the year</b>	<b>26,840</b>	<b>123,979</b>
Unrealised gains on investment assets	(30,444)	46,308
<b>Net movement of funds</b>	<b>(3,604)</b>	<b>170,287</b>
<b>Reconciliation of funds</b>		
Total funds brought forward	1,229,349	1,059,062
<b>Total funds carried forward</b>	<b>1,225,745</b>	<b>1,229,349</b>

## Balance Sheet as at 31 December 2020

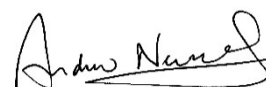
	2020	2019
<b>Fixed assets</b>		
Tangible assets	2,990	4,114
Investments	738,294	758,253
	<b>741,284</b>	<b>762,367</b>
<b>Current assets</b>		
Stock	3,760	3,760
Debtors	195,606	183,113
Short term deposits	140,039	158,077
Cash at bank and in hand	192,878	170,658
	<b>532,283</b>	<b>515,608</b>
<b>Creditors: Amounts falling within one year</b>	<b>(47,822)</b>	<b>(48,626)</b>
<b>Net current assets</b>	484,461	466,982
<b>Net assets</b>	<b>1,225,745</b>	<b>1,229,349</b>
Unrestricted funds		
Designated funds	440,000	420,000
Revaluation funds	139,147	250,839
General funds	646,598	558,510
<b>Total funds</b>	<b>1,225,745</b>	<b>1,229,349</b>

These financial statements were approved by the Executive and authorised for issue on 14<sup>th</sup> April 2021 and signed on their behalf by:

Mr Paul Hemingway (President)



Mr Andrew Newbold (Honorary Treasurer)



## NOMINATIONS FOR ELECTION TO ADVISORY COUNCIL 2021/2022 SESSION

The following members are nominated for election to the Advisory Council for the 2021/22 Session.

President	P F Hemingway *	CEng Fellow	
President-Elect	S C Constable *	Member	Spaldings Ltd
Immediate Past-President	R J Rickson *	CEnv Fellow	Cranfield University
One Other Past-President	R J Merrall *	Member	Merralls Consulting
Vice Presidents (3)	B Grieve * R W Simmons * G P Higginson *	Fellow MIAgrE IEng REnvP Fellow	Manchester University Cranfield University Harper Adams University
Honorary Treasurer	A C Newbold *	CEng FIAgrE	Farm Smart Events
Chair, Membership Committee	M S Carr-West *	CEng Fellow	Consultant
Chair, Prof Development Cttee	C M Johnson	EngTEch Member	
Fellows (4)	M S Goodchild J S Martin S Pearson H G Crabtree *	Fellow CEng Fellow Fellow Fellow	Delta-T Jaguar Landrover Lincoln University Farmex
Members (4/5)	W S Tuer S W Moulding G Farmer M Whiting *	IEng MIAgrE Eng Tech Member Member Member	W S T Rural Ltd Cambs Farms Growers Ltd Caterpillar UK Ltd Newmac Safety
Associate Members (3/4)	A Fryer D A Clare R King Kit Franklin *	Associate Member Associate Member Associate Member Associate Member	Farm Electronics Ltd Harper Adams University Small Robot C Harper Adams University
Affiliates/Technicians (2)	H Thorpe C P Sigley	Technician Associate	Harper Adams University Barclays Bank
Student/Pre-professional (2)	W G Flittner S J Scales A J T Ansell A L Boothby	Student Student Student Student	Harper Adams University Harper Adams University Cranfield University Harper Adams University
Co-opted members	K J Hawken P C H Miller ** P S Chima R Bailey C Butler Ellis **	CEng Fellow Hon Fellow FRAEng CEnv MIAgrE Member Fellow	EurAgEng Representative DBT Harper Adams University AEA – Ex Officio Volunteering & CPD

\* = Trustees, serving on the Executive Committee

\*\* = ex officio members of Executive Committee (not Trustees but with full delegated powers)

Subject to the articles, the Executive Committee are responsible for the management of the Institution's business, for which purpose they may exercise all the powers of the Institution.

Subject to the articles, the Executive Committee may delegate any of the powers which are conferred on them under the articles on such terms as they think fit but the exercise of such delegated powers shall be reported to the Trustees who shall remain liable for the actions taken.

Advisory Council is elected by the members in a general meeting comprising of President, President-Elect, Immediate Past President, Past President, Honorary Treasure, Three Vice-Presidents and Chair of Membership Committee, Chair of the Education and Training Committee, thirteen ordinary members, special representative for Scotland, Branch representatives, Douglas Bomford Trust representative and ex-officio member(s).

The purpose of the Advisory Council shall be to advise the Executive Committee on any matters that Executive Committee refers to it and any other matters that it wishes to refer to the Executive Committee.

**BY ORDER OF EXECUTIVE**

A handwritten signature in blue ink, appearing to read "Charles Nicklin".

Charles Nicklin  
Chief Executive & Secretary  
14 April 2021