



Wednesday 6th November 2024 Rothamsted Conference Centre, Harpenden

What we need from Agricultural Engineers

Conference Officers

IAgrE President Conference Convenor Conference Secretary Chief Executive Press & Communications Officer Membership Secretary Chair of Panel Discussion Mark Moore Mark Moore Sarah McLeod Charlie Nicklin Marion King Alison Chapman Kit Franklin

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Contact details: IAgrE The Bullock Building (53) University Way Cranfield MK43 0GH Tel: 01234 750876 secretary@iagre.org

Details of the Wi-Fi address will be on the tables and around the venue



WHAT WE NEED FROM AGRICULTURAL ENGINEERS – 6th NOVEMBER 2024

The Programme

| 09.30 am | Arrival – registration – refreshments - networking | | |
|-------------------|---|--|--|
| 10.00 am | Introduction Mark Moore – President IAgrE | | |
| 10.10 am | Setting the scene | | |
| | Kate Halliwell, Chief Scientific Officer, Food & Drink Federation | | |
| | Highlight the challenges | | |
| 10.40 am | Political View | | |
| | Jelte Wiersma – Secretary General, CEMA | | |
| | What do policy makers want from Agricultural Engineering? | | |
| 11.10 am | Food Retailer View | | |
| | Jake Pickering – Senior Agricultural Manager, Waitrose & Partners | | |
| | What do food retailers want from Agricultural Engineering? | | |
| 11.40 -12.00 noon | Break for refreshment & networking | | |
| 12.00 pm | Agronomist View | | |
| | Kieran Walsh – Agronomist, Grounded Agvice | | |
| | What do agronomic service providers want from Agricultural Engineering? | | |
| 12.30 pm | Livestock Sector View | | |
| | Claire Morgan-Davies, Livestock Scientist, SRUC | | |
| | What does the livestock sector want from agricultural engineering? | | |
| 1.00 - 2.00 pm | Lunch & networking | | |
| 2.00 pm | Farmers View | | |
| | James Price – Perdiswell Farm, Oxfordshire | | |
| | What do farmers want? | | |
| 2.30 pm | Panel Discussion | | |
| | President Elect Kit Franklin CEng MIAgrE will chair the discussion | | |
| | An opportunity to quiz our speakers | | |
| 3.20 pm | Round up and thank you Mark Moore – President IAgrE | | |
| 3.30 pm | Conference Ends | | |

The Institution of Agricultural Engineers' Landwards Conference 2024



What we want from Agricultural Engineers



What should we focus on for the future?

IAgrE President 2024-26 Dr Mark Moore FIAgrE

Dr Mark Moore is the Director of Government Affairs at AGCO. His aim is the increase awareness amongst policy makers on the opportunities to increase food production whilst mitigating climate change. Mark joined Massey Ferguson in 1990 and in 1991 started a part-time PhD in the accuracy of yield maps and their use in crop management, completed in 1997. For the last 30 years' he has been involved in developing the application of technology in agriculture across numerous countries worldwide.

The aim of the 2024 Landwards conference is to enable an open discussion around the need to develop and deliver food production systems rather individual products, and to get you thinking about the challenges and opportunities this presents.

It is imperative that we understand the requirements of organisations within the food chain that rely on engineers to design and develop the tools that will deliver future sustainable food security, while ensuring farming remains financially viable. Therefore, representatives from different parts of the food chain will present their thoughts on the future of agriculture, and how the engineering community can contribute. In short – "what we want from agricultural engineers".

As a machinery and technology sector, we are great innovators resulting in products such as precision farming. However, there adoption rate is relatively low which is partly due to the lack of systems thinking. To an extent, farmers have become the systems integrators where they "join-up" individual products and services into a usable system, which can be deployed on the farm and used to create additional value.

As a sector, we have been good at talking amongst ourselves through groups like the Agricultural Electrons Foundation (AEF). This has resulted in industry collaboration on standards such as ISOBUS and ISOXML. Vertical integration for innovation within our sector is therefore good; however, the delivery of useable technology on the farm now requires horizontal integration. Many organisations that are also an essential part of the food chain are relying on the engineering community to think laterally so innovation and technology becomes more joined up, particularly at user level.

Horizontal integration presents many opportunities to the engineering community, but it requires a different way of thinking and a need to work outside of silos. Therefore, the aim of the 2024 Landwards conference is your chance to understand how organisations within the food chain view the future of agriculture, and for you to get involved in the discussion and influence the direction of food production systems

I hope you enjoy the conference and that you find it informative and even inspiring!



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Our Speakers:

Setting the Scene Kate Halliwell, CSO, Food & Drink Federation



Kate Halliwell is the Food and Drink Federation's Chief Scientific Officer. Kate is accountable for the FDF's food safety, food law and labelling, and diet and health policy briefs.

The role involves extensive liaison with food and drink manufacturing companies to develop cross-industry policy positions and responding to scientific consultations. Previously Kate led the FDF's diet and health policy work, and before that worked for the Department of Health and the Food Standards Agency on a range of nutrition and legislation policies. Kate Chairs the IFST's Special Interest Group for Food Science and Nutrition and is a registered nutritionist.

Political View Jelte Wiersma, Secretary General, CEMA



Jelte Wiersma is the Secretary General of CEMA – the European Association representing the Agricultural Machinery manufacturers in Europe. CEMA's members are 11 National Associations and the biggest seven tractor manufacturers in Europe.

Jelte, a Dutch national, from 2014 he worked as EU-correspondent for the leading Dutch weekly, covering European affairs, including agriculture, and agri-food-related issues. He took on his current role in 2022. He is one of the founding members of the Holland House in Brussels.



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Our Speakers:

Food Retailer View Jake Pickering, Senior Agricultural Manager, Waitrose & Partners



Jake is currently the Senior Manager for Agriculture at Waitrose where he leads the team that is responsible for setting and implementing the Waitrose agriculture strategy. His responsibility stretches across the livestock, dairy, fresh produce and horticulture supply chains producing Waitrose products.

Agronomist View Kieran Walsh, Agronomist, Grounded Agvice



Kieran, has a practical background in farming, working on farms from a young age, then moving into farm management before a career move into agronomy in 2015. Starting as a distribution agronomist for 6 years, before going independent in 2019, as a regional agronomist for a large farming company.

Kieran is now co-founder and director of Grounded Agvice, and provides tailored independent agronomic advice addressing customer issues by seeking system-based approaches outside the normal parameters of crop agronomy. Their innovative approach supports farms and land owners across the south of the UK.



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Our Speakers:

Livestock Sector View Claire Morgan-Davies, Livestock Scientist, SRUC



Claire is a Livestock Systems Scientist, who, originally from Burgundy, who graduated from France as an 'Ingénieur en Agriculture' from UniLaSalle Beauvais in 1995. She joined the Hill and Mountain Research Centre at SRUC in 1999, looking at evaluating the introduction of a native woodland on a hillside, whilst keeping sheep production.

Claire then focussed on livestock systems comparison and multidisciplinary research. He PhD studies focused on the change in the EU Common Agricultural Policy of decoupling support for livestock, and on how it affected husbandry practices and land use in the Scottish hills.

She developed an interest in smart farming for sheep systems, and in

how technology could help hill farmers to be more efficient. Her research focused on sheep systems and Precision Livestock Farming, as well as on-farm labour.

Farmers View James Price, Perdiswell Farm, Oxfordshire



James is an arable farmer from the edge of the Cotswolds who is pursuing his goal to both improve the quality of his soils and be more precise in every input. He farms 3600ac in a family partnership with a mixture of owned, tenanted and contract farmed land and he worked alongside Clive Blacker and Yara with their N sensor for 5 years covering all aspects of precision farming with an emphasis on nutrient management.

He is in a unique position of being able to practise what he preaches and has proved many times over the benefits of precision farming. His attention to detail in all aspects of arable farming has led to a steady

increase in yields despite the limitations of drought prone Cotswold Brash Soils. At the same time he is ranked in the top 5% of farmers for low growing costs and uses nearly half the average amount of diesel per ha despite having ploughing in the rotation. Recent investment has seen a switch to 12m controlled traffic and the use of a camera guided hoe is being investigated. His passion for improving his soils has led to the re-introduction of livestock onto the farm with both sheep and cattle during the winter. These, combined with cover crops and organic manures, have led to him being at the forefront of regenerative farming.



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What we want from Agricultural Engineers

Panel Discussion chaired by

IAgrE President Elect Kit Franklin CEng MIAgrE

Kit Franklin is a Chartered Agricultural Engineer, part time Senior Engagement Fellow in the Engineering Department at Harper Adams University and current President Elect of the Institution of Agricultural Engineers (IAgrE).



His expertise covers a range of topics from mechanical design to precision farming and automation. Kit's "future farming systems" work led to the ground-breaking and headline-grabbing world first 'Hands Free Hectare' project, which established and harvested a cereal crop using autonomous machinery in 2017 and then grew to become the 35ha Hands Free Farm for which he was Principal Investigator. Kit has also led multiple other projects under the Hands Free name in collaboration with companies and funders both nationally (UK) and internationally. He is a Fellow of the Royal Agricultural Society of England and participates in their Farm of the Future initiative.

If you have a question that you feel will stimulate discussion please do make a note of it and hand it to Kit prior to the forum

The panel are as follows:

Kate Halliwell, Chief Scientific Officer, Food & Drink Federation Jelte Wiersma, Secretary General, CEMA Jake Pickering, Senior Agricultural Manager, Waitrose & Partners Kieran Walsh, Agronomist, Grounded Agvice Clare Morgan-Davies, Livestock Scientist, SRUC James Price, Farmer, Perdiswell Farm, Oxon Mark Moore, IAgrE President, Director, Government Affairs, AGCO



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Delegates & Speakers:

| First Name | Last Name | Organisation Name |
|-------------|---------------|------------------------------------|
| Cat | Askew | AGCO |
| Penny | Atkins | IFEAA |
| Luke | Bywaters | AGCO |
| Denis | Cartmel | |
| Alison | Chapman | IAgrE |
| Stephen | Constable | |
| Vickie | Cooper | Merralls Consulting |
| Andrew | Court | Court Farming Partnership |
| Hugh | Crabtree | Farmex Ltd |
| Uduak | Edet | University of Manitoba |
| William | Evans | Magrow Tec |
| Christopher | Faulkner | Kersten (UK) Ltd |
| Gareth | Ford | We are Landbased/ AEA |
| Kit | Franklin | Harper Adams University |
| Anthony | Furness | Magrow Tec |
| Tom | Gardener | Vegans Support the Farmers |
| Richard | Godwin | |
| Rhian | Griffith | AMRC Cymru |
| Kate | Halliwell | Food & Drink Federation |
| Graham | Higginson | Harper Adams University |
| Kayleigh | Holden | AEA |
| James | Huyton | Farmers Guardian |
| Jerv | Jordan | Jordans Seed Drills |
| Alex | Keen | |
| Ray | King | Flynt Technology |
| Marion | King | IAgrE |
| Brian | Mathew | Member of Parliament |
| Stuart | McClimont | Agricultural Engineers Association |
| Sarah | McLeod | IAgrE |
| Rob | Merrall | Merralls Consulting |
| Paul | Miller | SSAU |
| Paula | Misiewicz | Harper Adams University |
| Richard | Moody | Wolfenden Concrete Ltd |
| Mark | Moore | President IAgrE, AGCO |
| Claire | Morgan-Davies | SRUC |
| Charlie | Nicklin | CEO, IAgrE |
| | | |



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Delegates & Speakers:

| First Name | Last Name | Organisation Name |
|-------------|------------|--|
| Vimbai | Pachawo | |
| Sarah | Parsons | Harper Adams University |
| Steve | Parkin | Emeritus Editor Biosystems Engineering |
| Sven | Peets | Harper Adams University |
| Jake | Pickering | Waitrose & Partners |
| Barnabas | Pickford | Nottingham University |
| James | Price | Perdiswell Farm |
| Dominik | Przybysz | Martin Lishman Ltd |
| Martin | Rickatson | Freelance Journalist |
| Lauren | Roberts | Student, IAgrE Council Member |
| Richard | Robinson | Autoguide Ltd |
| Thomas | Robinson | Tom Robinson Sprayers Ltd |
| Peter | Rogers | |
| John | Stafford | |
| Mike | Stephenson | |
| David | Theamert | University of Hertfordshire |
| James | Thomas | Syngenta UK Ltd |
| Simon | Thomas | Merralls Consulting |
| David | Tinker | |
| Dave | Truelove | AGCO |
| Alastair | Tulloch | |
| Phil | Underwood | SocEnv |
| Kieran | Walsh | Grounded Agvice |
| Kerri | Waters | Vegans Support the Farmers |
| Chris | Watts | |
| Joanne | Weston | Martin Lishman Ltd |
| Jonathan | Wheeler | Freelance Journalist |
| Christopher | Whetnall | |
| David | White | Douglas Bomford Trust |
| Mike | Whiting | NewMac |
| Jelte | Wiersma | CEMA |
| Stephen | Williams | TBD UK Ltd |

