iagre.org





Institution of Agricultural Engineers

Landwards Conference 2022

Engineering Sustainability in Agriculture

Date: Tuesday 1st November 2022 – 9.30am-3.30pm

Location: Peterborough Suite, East of England Conference Centre,

Peterborough PE2 6XE



Background

Soil is key to agriculture. It is the foundation for the production of food and sustaining life. The loss of this key ingredient in food production will have disastrous consequences. Intensive agriculture, especially broad acre crop production is having an increasingly negative effect on the soil, resulting in processes such as erosion, compaction, organic matter loss to name a few. Over the past few decades we have seen significantly increased focus on soil, whether it is from changes in farming techniques, machinery design or the crops grown. We have now added into the mix carbon sequestration and the desire not to release carbon into the atmosphere through cultivation, coupled with the significant increase in input costs, such as fuel, fertiliser and chemicals.

Soil health is not new: the old saying "look after the land and the land will look after you" is still very true. So what can engineers do about it? The answer is of course, everything. It is engineers and technologists working in agriculture and environmental sciences that we rely on to solve these issues.

In our Landwards 2022 annual conference, "Engineering Sustainability in Agriculture" we will explore how soil management technologies will change the way we farm the land to produce food.

Our experienced presenters will take us through a selection of developments in the agricultural industry and how these can bring us closer to sustainable food production, supporting carbon net zero and other environmental opportunities and challenges faced by farmers and growers.

Our conference will interest people working within agriculture and its associated industries, plus equipment manufacturers, dealers and service providers, and education, research and agri-tech organisations. It will give a taste of the technologies and practices being explored and what we can expect in the future.



The Programme

0930	Arrival, Registration & Networking
1000	Introductory Remarks - Steve Constable, IAgrE President
1010	Drilling without Tilling - Developments in Seed Drills
	George Sly – Horizon Agriculture Ltd
	George's presentation will provide and insight into his company's vision and the concepts being applied to their seed drill development. Their no-till approach is driving a number of innovative features and technology employed on their products. This importantly provides a host of efficiency benefits for the customer, whilst working towards a sustainable future.
1100	Coffee Refreshment Break
1120	Managing the Soil - the Science of Soil
	Paula Misiewicz – HAU
	Paula's presentation will provide an in depth look at the various research projects centred around soil mechanics and management, with a focus on ground compaction reduction methods, alternative tillage systems and precision agriculture methods. Paula will explain how science is providing the answers to sustainable land use and food production.
1210	Sustainable Mechanisation - a New Mechanisation on the Land
	TBC
	This presentation will explore a new kind of mechanisation on the land, not only driverless operation, but also powered by sunlight. Offering a light footprint and zero emissions to providing chemical free weeding surely has great sustainability credentials. Robots will certainly play a part in providing a sustainable future for agriculture.
1.00-2pm	Break for Lunch
2pm	Regenerative Farming
	Ben Taylor-Davies – RegenBen
	Ben's presentation offers a fascinating journey in his farming career, specifically how to farm sustainably in harmony with the environment. The audience will be taken through Ben's regenerative agriculture approach and how it is being practically applied in a commercial farming enterprise and what the future holds.
2.50pm	Q&A and Speaker Panel Discussion hosted by Andy Newbold, FarmSmart & Charlie Nicklin, IAgrE CEO
3.30pm	Close and thanks Charles Nicklin CEO IAgrE



Cost: £100 + vat for IAgrE Members, £70 + vat for Retired Members, £40 + vat for Student Members. Non-Members £150 + vat

Booking: https://iagre.org/events/IAgrEConf2022

Venue: The East of England Showground,

Peterborough PE2 6XE For SAT NAV:

Please use PE2 6HE

