

Showcasing the cutting edge of new agri-food technology

November 13 2015, by Elizabeth Allen



Robotic harvesting of vegetables, automated weeding techniques and the use of sensitive disease detection software were among the innovative technologies showcased at the UK's National Centre for Food Manufacturing as part of a new agri-tech initiative.

Launched in line with the Government's quest for the UK to become a world leader in agricultural technology, innovation and sustainability, the first Agri-Tech Week, led by Agri-Tech East, aims to create a better understanding of the issues facing farmers and growers, while showcasing some of the most interesting emerging technologies.

As part of this project, the University of Lincoln's National Centre for Food Manufacturing (NCFM) at Holbeach, Lincolnshire, welcomed

business representatives, leading academics, industry funders and students to a unique event exhibiting cutting-edge science and technology in the agri-food sector.

Showcasing Developments in Agri-Food Technology, supported by Garford Farm Machinery Ltd., featured presentations and demonstrations from the teams behind a number of pioneering projects, many of which are part of the new Lincoln Institute for Agri-food Technology (LIAT). The research institute has been established by the University of Lincoln to support and enhance productivity in the agri-food sectors.

Professor Tom Duckett, Professor of Computer Science at the University of Lincoln, presented a new research project developing 3D camera technology which could result in a fully automatic robotic harvesting system for broccoli. Funded by the Biotechnology and Biological Sciences Research Council and Innovate UK as part of the Agri-Tech Catalyst fund, the project will test whether 3D camera technology can be used to identify and select when the vegetables are ready for harvesting. This will be a key step towards the development of a fully automatic system which could significantly reduce production costs, and it has been praised as 'world leading' by UK Farming Minister George Eustice.

Also presenting was Dr Bukola Daramola from NCFM, who is currently exploring the use of specialist technology for the early detection and bio-control of prevalent diseases in produce; Dr Matthew Goddard, who leads research into DNA sequencing in agriculture; and Dr Lisa Collins, an expert in developing risk maps outlining the spread of insect vector-borne disease. Dr Goddard and Dr Collins are both members of the University of Lincoln's School of Life Sciences.

Dr Simon Pearson from NCFM explored the use of LED lighting

systems in agriculture and horticulture, and delegates also heard from Philip Garford, Managing Director of Garford Farm Machinery Ltd., and Dean Cook, Lead Technologist at Innovate UK.

Showcasing Developments in Agri-Food Technology also included robotics demonstrations led by academics from the University of Lincoln's School of Engineering and Computer Science.

Professor Val Braybrooks, Dean of Holbeach and NCFM, said: "We were delighted to welcome so many colleagues and industry representatives to our first Agri-Tech Week event. It provided a wonderful opportunity to showcase some of the world-leading work taking place right here in the region. Lincolnshire is central to the development and implementation of new agri-food technologies which could transform the sector, boosting productivity, efficiency and sustainability, and reducing waste throughout the food pipeline.

"We launched the Lincoln Institute for Agri-Food [technology](#) to support these very objectives, by capitalising on the University's growing research and educational activities in [food manufacturing](#), agri-robotics, agronomy and animal science. It was fantastic to share this work with industry partners and to look ahead to opportunities for growth in the future."

Provided by University of Lincoln

Citation: Showcasing the cutting edge of new agri-food technology (2015, November 13) retrieved 26 April 2024 from

<https://phys.org/news/2015-11-showcasing-edge-agri-food-technology.html>

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