

The Institution of Agricultural Engineers

Founded 1938 – Incorporated 1960

Award for Contribution to the Landbased Sector 2016

Dr Nick Tillett

MIAgrE

Dr Nick Tillett's outstanding contribution to the land-based sector commenced in 1984 when he joined the then Silsoe Research Institute as a research engineer. He had gained an honours degree in Mechanical Engineering from Imperial College, London and a PhD from the University of Bath and spent time in production and design engineering within the manufacturing industry prior to joining Silsoe Research Institute.

During his 20 years with Silsoe Research Institute, Nick worked on a range of projects including aspects of robotic milking, the handling of nursery plants and the harvesting of cauliflowers. However, it was his work on plant scale husbandry and particularly the use of computer vision to guide and control field machinery that firmly established the foundation for the major contributions that he was to make to the sector. Initial work with John Marchant and Tony Hague and joint BBSRC/Douglas Bomford Trust funding used a small tool-frame tractor fitted with a number of sensors to follow rows of transplanted vegetables. This system was publicly demonstrated in the summer of 1996 and led to the development of a guided hoe system for inter-row cultivations in a wide range of crop conditions including vegetables,

sugar beet and cereals grown in wider than conventionally spaced rows. The guided hoe technology was taken up commercially by Garford Farm Machinery Ltd and started an association between Nick and the Garford company that has continued to flourish.

When, in 2005, the closure of Silsoe Research Institute was announced, Nick set up Tillett and Hague Technology Ltd continuing his work with Tony Hague and the association (but not exclusively) with Garford Farm Machinery Ltd. Developments since 2005 have included further refinements to the inter-row cultivations system, intra-row cultivation systems for transplanted crops, spot spraying machines for treating individual weeds, selective thinning arrangements and machines for dosing individual plants in a row. Many of these developments have been taken to the market in conjunction with Garford Farm Machinery Ltd that have attracted prestigious awards including two from The Institution and, in 2010, Garford Farm Machinery Ltd won the Queens Award for innovation in Export. Nick himself is no stranger to awards having received the Engineering applied to Agriculture award from the Institution of Mechanical Engineers in 2000, the Engineering Council Environment award in 2001 and the RASE technology award in 2005.

In summary, Dr Nick Tillett has made an outstanding contribution to the land-based sector that fully deserves to be recognised with an award from The Institution of Agricultural Engineers.

