The Institution of

Agricultural Engineers

Founded 1938 – Incorporated 1960

**Award for Contribution to the Landbased Sector 2018**

## Peter Kettlewell

CEng FIAgrE

Peter Kettlewell is unusual for an agricultural engineer, his first degree from Manchester was in Physiology, in 1977, but he quickly saw the light and followed up with a BSc Hons in agricultural engineering from National College of Agricultural Engineering (Silsoe College) just 4 years later in 1981.

He moved “over-the-road” to Silsoe Research Institute, and, within the Bio-Engineering Division, became very involved in leading research projects related to engineering applied to the improvement of animal welfare. He has worked closely with UK and European livestock transport companies in furtherance of research programmes, addressing the transport of farm animals in hot climates and the long-distance transport of breeding farm animals. His research has also studied the export of breeding stock including journeys involving air and road transport. He has made consultancy visits to, among others, South Africa and Canada.

In 1984 Pete started collaborating closely with Prof Malcolm Mitchell, a human and animal physiologist based in Scotland, and their partnership has created a unique and valuable

body of knowledge. A key contribution from them has been to examine heat stress during transport. This work used a unique combination of theoretical modelling, wind tunnel testing, full scale on road testing and practical measurements during commercial transport under a wide range of conditions in the UK, Europe, North America and elsewhere. It also required developments in sensor technology to make possible the monitoring of the physiological condition of the animals in real transport environments and has had a remarkable, and unique, impact on understanding how the stressors impact on animal welfare. This understanding has been followed, extremely unusually, by applying engineering expertise again to determine how to modify the environment and mitigate the stress on the livestock.

Pete was at SRI for 24 years before continuing to pursue his expertise with ADAS, then as a consultant and currently as a member of SRUC.

Last year he, and Malcolm, won the prestigious Humane Slaughter Association which recognises those that have made major scientific advances in the welfare of livestock as recognition for the developments they have made in improving the welfare of food animals during transportation.

It is extremely fitting that Peter should receive this IAgrE Award for his major impact in an area where only an agricultural engineer, especially if first trained as a physiologist, could have such a major impact throughout Europe and beyond.