



**J. Alex Thomasson, PE**, professor, biological and agricultural engineering department, and chair of Cotton Engineering, Ginning, and Mechanization, Texas A&M University, is being honored for his leadership in the development of automated agriculture, including precision agriculture technologies, sensor development, and machinery automation.

Thomasson has been a key innovator in early precision agriculture sensing technologies, having researched yield monitoring, weed mapping, nutrient sensing, and cotton fiber quality sensing. He was co-inventor on the patent of an optical-reflectance-based mass-flow sensor, which has demonstrated to be highly effective for yield monitoring in cotton and peanuts. He has also been a key innovator in remote sensing with unmanned aerial vehicles, having focused on producing repeatable data through calibration of reflectance, plant height, and canopy temperature with multi-functional ground control points. He initiated and developed university courses in precision agriculture, optoelectronic sensor design, and problem solving with Python programming, which together have educated hundreds of undergraduate and graduate students in these subjects.

A 31-year member of ASABE, Thomasson has served on several different ASABE committees as both a member and leader. He is a past member of the ASABE nominating committee and is a past leader of the ASABE Issues Management and Social Action executive committee. Thomasson also maintains membership with the Society for Optics and Photonics (SPIE), the International Society for Precision Agriculture, and the American Society for Engineering Education. Thomasson was the organizing chair of the conference on identifying obstacles to applying big data in agriculture, the SPIE conference on autonomous air and ground sensing systems for agricultural optimization and phenotyping, and the workshop on high throughput plant phenotyping and unmanned aerial vehicles in agriculture.

Thomasson has authored or coauthored more than 150 peer-reviewed articles, conference proceeding papers, and book chapters. Throughout his career, Thomasson has received many awards, including being named the 2017 Agricultural Engineer of the Year for the ASABE Texas Section and the 2002 Researcher of the Year for the Mississippi State University Division of Agriculture. In 2019, Thomasson gave the ASABE Distinguished Lecture on “Autonomous Technology in Agricultural Equipment: A Review of the State of the Art”. He also received an ASABE Superior paper award in 2009.