



## Christopher W. Callahan

**Christopher W. Callahan, PE**, is the 2021 PEI Professional Engineer of the Year due to his outstanding contributions to the agricultural and biological professional engineering exam and for excellence in extension service education and applications of engineering.

Callahan is an extension associate professor in the College of Agriculture, Life Sciences and Extension at the University of Vermont, based in Bennington. There he focuses on the application of engineering practice in food systems. He works with food producers, processors, and distributors to improve efficiency, quality, safety, and profitability through integration of technology, systems, and process controls. He conducts research in protected culture, postharvest practices and storage, energy use in food systems, and development of specialized harvest and postharvest equipment.

Callahan also works as an engineering consultant, specializing in sustainable bioenergy projects including biomass combustion and farm-based biodiesel production, building energy modeling, fuel cell system design and development, and energy auditing for commercial and industrial clients.

A very effective extension educator, Callahan has led or supported 133 formal extension education events. Callahan has authored or coauthored 88 extension publications on topics within his expertise and holds six US patents. Throughout his career, this work has also had significant impact in the area of small-scale, farm-based biodiesel production and thermal biomass energy systems. Callahan has also supported grower adoption and improved practice in the use of high tunnels, greenhouses, and indoor growing with an emphasis on

environmental control and energy efficiency.

Callahan is also a strong and frequent contributor to regional and national programs on the implementation of the Food Safety Modernization Act's Produce Safety Rule. He leads one of four regional centers funded by the FDA and USDA to integrate efforts among academia, government, and industry during the implementation of these new rules. He developed educational programming and associated materials related to hygienic design for produce farms, postharvest cleaning and sanitation, and equipment selection and modification for small and medium sized farms.

Throughout his 15-year membership at ASABE, Callahan has made a number of contributions as a leader and member of Energy Systems Technical Community committees, Education, Outreach, and Professional Development Energy Licensure committee. In the Engineering Licensure committee, Callahan worked as the lead for the Common System Applications section, the Committee Bylaw Revision Lead, and on the Exam Development Committee.