

Editorial

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Biographical notes: Charles Ragusa is an Associate Professor at Tarrant County College. He received his BS and MS in Industrial Engineering and Agricultural and Environmental Engineering from the Tarrant County College and Sorbonne University in 2006 and 2009, respectively. He received his PhD in Environmental Engineering from the New Jersey Institute of Technology in 2014, and postdoctoral researcher in Green Energy and Optimisation – University of San Francisco. His research interests include environmental and ecological impacts of agriculture, ecological economics and heterodox approaches to complex problems, technology management and sustainable development, and environmental innovations: advances in economy and technology. He has made over 400 scholarly contributions, including nearly 200 peer-reviewed research papers (more than 2000 citation). Currently, he works as the Supervisor of the PhD and Master thesis for the global environmental and economic management issues.

I. Ting Tsai is a candidate of Industrial Engineering, Assistant Professor of the Department of Innovation Management, Pittsburg State University. His qualification is engineering in the specialty industrial engineering and technology development. His dissertation work was devoted to the topic ‘Improving the efficiency of industrial systems by evolutionary and optimisation algorithms’. He has certificates of organisations in the field of environmental and green industry. The work experience at the university is 19 years. He has more than 70 papers published in well-known, peer-reviewed international journals, books and conferences. His research interests include issues related to industrial management, innovation, green technology, etc.

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In recent years, the application of the internet of things (IoT), as innovative technology and techniques, has grown in various aspects particularly in terms of modern agriculture to boost productivity and minimise the barriers in the agriculture field. The world of agriculture is undergoing a profound transformation by intelligent systems to improve efficiency, productivity, global market and to reduce time and cost by considering the ecological and environmental concerns.

Due to the changing global climate and changing economic conditions, agriculture must be safeguarded through smart approaches. Smart farming is a modern system of doing agriculture and improving ecological issues in a sustainable development procedure. The smart IoT devices are connected together with innovative technologies to enhance agriculture. This special issue is dedicated to publishing articles that tackle the use and development of IoT in agriculture. It provides a means to a radical increase in productivity to feed the ever-growing world population and to deal with challenges such as climate change, resource efficiency, waste reduction, food safety, and healthier products, with emphasis on relevant topics associated to agricultural issues in the area of environmental protection and monitoring to empower it by the adoption of IoT.