IEM

The Institution of Engineers, Malaysia

WEBINAR TALK ON

ENVISIONING A SUSTAINABLE FUTURE WITH SMART AGRICULTURE

BEM APPROVED CPD : APPLYING REF NO : APPLYING

ORGANISED BY : AGRICULTURAL AND FOOD ENGINEERING TECHNICAL DIVISION

6 APRIL 2021 (TUESDAY)
3.00PM - 5.00PM

SPEAKER :

DR. AHMAD SAFUAN BUJANG

Registration Fee (effective from 1st August 2020)

IEM Students : FOC
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Non IEM Members : RM70

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SYNOPSIS

Agriculture or more specifically the existing food systems are plagued by inefficiency, inequalities, insecurities, variabilities and most of all, an increasingly alarming fight for limited resources of land, water and inputs. Although technology in agriculture has improved leaps and bounds, its impacts are still perceived to be inadequate and scattered. In addition to the disruptions caused by the pandemic, this sector is primed for a revamp and a reorientation of its boundaries. This can be achieved through integration of technologies that allows better understanding of variabilities across the production chain, efficient utilization of resources, facilitation of integral decision making process through data analytics as well as a vast array of cyber-physical instruments to provide a more sustainable, consistent and effective labor backbone to support the industry. In other words, these are key features of a new age agriculture complex empowered by Industrial Revolution 4.0 (IR4.0). At the apex of this agricultural revolution, this data-fueled ecosystem will enable agriculture systems to be robust, efficient and inclusive. Food can be grown and produced safely and responsibly according to the needs of the markets, cultivated with the most efficient of process that fully address all related variabilities complexities, as well as using the right amount of resources to ensure sustainability is its highest virtue. From a Malaysian perspective, this revolution offers a solution to a seemingly dysfunctional food production chain that is characterized by its reliance on foreign labor, questionable practices, ageing farming demography, and an easily disrupted supply chain heavily influenced by middlemen. The success of this endeavor relies not only understanding the nuances within our agricultural sector, but also in identifying gaps and avenues for improvements that can be revitalized with the integration smart and precision farming technologies.

SPEAKER'S DETAILS

Dr. Ahmad Safuan Bujang graduated with BSc Engineering (Chemical) Process and Environmental Engineering from Universiti Putra Malaysia in 2003. He obtained his MSc Agricultural Engineering - Biomass Bio Renewable in 2011 and his PhD majoring in Agricultural and Biosystems Engineering at Iowa State University in 2014.

He joined MARDI in 2004 and has been involved in various research and development initiatives including food and post harvest mechanization, green technology, and smart farming. He is currently the Deputy Director at MARDI's Engineering Research Center, where he leads its Smart and Precision Farming Program. The program focuses on integrating and developing smart agricultural techniques into the national agro-food production chain.