



TSAE 2019
THAILAND

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The 12th TSAE International Conference

**Message from the Head of Agricultural Engineering Department,
Faculty of Engineering,
King Mongkut's Institute of Technology Ladkrabang**



Advances in agricultural technology in recent years help to increase worldwide productivity and to serve the expansion of the global population. Turning of technologies from labor-intensive farming into mechanized agriculture with automation and AI leads to the beginning of a new era for modern farming. Management and social sciences play significant roles to drive future farming toward sustainable agriculture. Thailand, the growth of technology adoption might be slightly lower than that of the developed countries. However, there have been several attempts and involvements from the government, universities, private sectors, and farmers themselves to apply and to adopt the technology for farming. Engineering science is a key success to integrate all requirements to improve and to develop agro-productivity.

It was our honor to serve as the organizer of the TSAE 2019 Conference in collaboration with the Thai Society of Agricultural Engineering (TSAE). Participants from researchers and graduate students in Thailand and worldwide have joined this conference to share the progress of involvement and knowledge for the advance in agricultural technologies.

I would like to thank authors, presenters, scientific committees, reviewers, sponsors and working staffs for their contribution to deliver the key contents in the conference. Finally, I wish everyone has gained knowledge, joined network and shaped smart Thailand agriculture to be smarter.

Sincerely yours,

Vasu Udompetaikul

TSAE 2019 General Chairman

Head of Agricultural Engineering Department, KMITL