

# CHULEEPAWN KUSONCUM



## CONTACT

Current Address: 55 Moo 12 Khwao RaiKosum, Phisai District, Maha Sarakham, 44140, Thailand  
Email: [chulku@kku.ac.th](mailto:chulku@kku.ac.th) Phone: 081-6613614

## PERSONAL INFORMATION

- Date of birth: September 2, 1986
- Gender: Female (Height: 173 cm, Weight: 63 kg.)

## EDUCATION

- Year 2014 - 2020** **Doctor of Engineering (Industrial Engineering), Faculty of Engineering, Khon Kaen University, Khon Kaen, Thailand**  
(Supported by the Thailand Research Fund (Public organization) through the Research and Researchers for Industries-RRi (Grant No. PhD58I0041) in collaboration with Rajburi Sugar Co., Ltd, Thailand)
- Year 2017** **Collaborative Academic Programs**  
(Aug 24 - Dec 23) Department of Business Administration, Faculty of Business, Economics and Statistics, University of Vienna, Vienna, Austria.  
(Supported by the Thailand Research Fund (Public organization) through the Research and Researchers for Industries-RRi in collaboration with Rajburi Sugar Co., Ltd, Thailand)
- Year 2010 - 2012** **Master of Engineering (Industrial Engineering), Faculty of Engineering, Khon Kaen University, Khon Kaen, Thailand, Cumulative GPA: 3.50/4.00**  
(Supported by Energy management and Conservation Office, Khon Kaen University, Thailand)
- Year 2005 - 2008** **Bachelor of Engineering (Electrical Engineering), Faculty of Engineering, Khon Kaen University, Khon Kaen, Thailand, Cumulative GPA: 3.00/4.00**  
(Supported by Provincial Electricity Authority, Khon Kaen, Thailand)

## WORK EXPERIENCE

- Year 2020 - Present** **Full-time Faculty, Faculty of Economics, Khon Kaen University**  
123 Moo 16 Mittraphap Road, Naimuang, Muang, Khon Kaen, 40002, Thailand.
- Year 2020 - Present** **Part-time Faculty, General Education Teaching Institute, Khon Kaen University**  
123 Moo 16 Mittraphap Road, Naimuang, Muang, Khon Kaen, 40002, Thailand.
- Year 2017 - 2020** **Project Engineer of Research Unit on System Modeling for Industry**  
**Year 2013 - 2017** **Researcher Assistant of Research Unit on System Modeling for Industry**  
Department of Industrial Engineering, Faculty of Engineering, Khon Kaen University  
123 Moo 16 Mittraphap Road, Naimuang, Muang, Khon Kaen, 40002, Thailand.
- Year 2010 - 2017** **Teacher Assistant**
  - Meta-Heuristics and Applications for Agro-Industry
  - Project Feasibility Study
- Year 2009 - 2010** **Production Engineer (Production Department), Kraft Foods (Thailand) Co.,Ltd.**  
116 Moo 10, Nam Phong, Nam Phong, Khon Kaen, 40140, Thailand.
- Year 2008** **Trainee (Maintenance Department), Swarovski gemstones (Thailand) Co.,Ltd.**  
(Mar 17 - Apr 30) 333 Moo 17, Bangphli Industrial Estate, Bangsaothong, Samutprakan, 10540, Thailand.

## ABILITY AND INTEREST

- My research interests include: Supply Chain and Logistics, Optimization, Simulation Model, Scheduling and Sequencing.
- Other Language: English
- Computer Skills: Optimization Program (Lingo/CPLEX), Simulation Program (ARENA), Statistic Program (SPSS),
- Good interpersonal skills, Punctual, Highly responsible, Hardworking, Honest, and Patient

## RESEARCH PROJECT

### *Cane and Sugarcane Industry*

- Integrated management System of Cane and Sugar Industry, 2015 (Supported by Rajburi Sugar Co., Ltd, Thailand)
- Smart Cane Supply through Advance Information Technology, 2015 (Supported by the Thailand Research Fund (Public organization), Thailand)
- The Development of Sugarcane Harvest and Transportation System for Small Sized Growers in Sugarcane Supply Chain System, 2014 (Supported by the Thailand Research Fund (Public organization), Thailand)
- Supply Chain Strategies for Enhancing Competitiveness for Sugarcane Industry in Preparation for the AEC Framework, 2013 (Supported by the Thailand Research Fund (Public organization), Thailand)
- Supply Chain Redesign for Sugarcane Industries in Preparation for the AEC Framework, 2012 (Supported by the Thailand Research Fund (Public organization), Thailand)

### **Food and Beverage Cold Chain**

- Food Cold Chain and Proper Packaging Phase III, 2015 (Supported by the Bureau of Logistics, Department of Primary Industries and Mines, Ministry of Industry, Thailand)
- Food Cold Chain and Proper Packaging Phase II, 2014 (Supported by the Bureau of Logistics, Department of Primary Industries and Mines, Ministry of Industry, Thailand)
- Food Cold Chain and Proper Packaging Phase I, 2013 (Supported by the Bureau of Logistics, Department of Primary Industries and Mines, Ministry of Industry, Thailand)

### **Palm Oil Industry**

- Development of Decision Support System for Enhancing a Community Palm Oil Refinery Factory with Collaboration of All Stakeholder, 2017 (Supported by Agricultural Research Development Agency (Public organization), Thailand)
- Sustainably Participative Management System for Palm Oil Production in the Preparation of the GAP and RSPO Standards, 2013 (Supported by Agricultural Research Development Agency (Public organization), Thailand)

### **Other Industry**

- The Study and Promotion Planning of Technology and Innovation in Energy Efficiency in Agriculture (Group 1 Agricultural Sector (Agronomy and Horticulture)), 2019 (Supported by Department of Alternative Energy Development and Efficiency, Ministry of Energy, Thailand)
- Project Evaluation and Verification of Labeling of High Performance Equipment, 2017 (Supported by Department of Alternative Energy Development and Efficiency, Ministry of Energy, Thailand)
- Logistics system for Energy Reduction in the Production and Distribution of Ice-Manufacturing Industry, 2015 (Supported by Energy Policy and Planning Office, Ministry of Energy, Thailand)
- Logistics System of Transport Management for Agro Industry, 2014 (Supported by Energy Policy and Planning Office, Ministry of Energy, Thailand)

## **PUBLICATION PAPER**

- **Kusoncum, C., Sethanan, K., Pitakaso, R., & Hartl, R. F. (2020).** Heuristics with novel approaches for cyclical multiple parallel machine scheduling in sugarcane unloading systems. *International Journal of Production Research*, 1-19. **(ISI, Q1, Impact Factor 2018: 3.199)**
- **Kusoncum, C., Sethanan, K., Hartl, R., & Jamrus, T. (2019).** The Modified Differential Evolution and Heuristic Algorithms for Dump Tippler Machines Allocation in Sugar Mills. *Operational Research*, (In process). **(ISI, Q3, Impact Factor 2018: 1.485)**
- **Kusoncum, C., Sethanan, K., Pattanapairoj, S., & Jamrus, T. (2019).** An Optimization for Scheduling and Sequencing of Sugarcane Truck to Tippler Dump System in Cane and Sugar Industry in Thailand. *KKU Research Journal (Graduate Studies)*, 19(4), 111-126. **(TCI, TIER 1)**
- **Kusoncum, C., Sethanan, K., Putri, E. P., & Neungmach, W. (2018).** Simulation-based approaches for processes improvement of a sugar mill yard management system: A case study of the sugar industry in the central region of Thailand. *Engineering and Applied Science Research*, 45(4), 320-331. **(SCOPUS, Q4, SNIP 2018: 0.033)**
- **Kusoncum, C., Sethanan, K., & Moonsri, K. (2017).** Simulation-based Approaches for Reduction of Time in the System of Vehicles in Sugar Mill Yard Management. In *Proceedings of the SIMMOD2017 Conference*, Pattaya, Thailand (pp. 47-65).
- **Kusoncum, C., Sethanan, K., & Sangsawang, C. (2015).** Development of Heuristics in Sugarcane Harvest Scheduling for Mechanical Harvester in Sugarcane Supply Chain. In *Toward Sustainable Operations of Supply Chain and Logistics Systems* (pp. 391-404). Springer, Cham. **(E-Book)**
- **Kusoncum, C., Sethanan, K., & Sangsawang, C. (2015).** Development of Heuristics in Sugarcane Harvest Scheduling for Mechanical Harvester in Sugarcane Supply Chain. In *Proceedings of the ICLS2015 Conference*, Chiang Mai, Thailand (pp. 27).
- **Kusoncum, C., Sethanan, K., Benjapiyaporn, C. (2013).** Sugarcane harvest and transportation management models for small growers: a case study of mitr kalasin sugar mill. In *Proceedings of the 9th International Conference on Intelligent Manufacturing & Logistics Systems International Symposium on Manufacturing Intelligence*, Feb.27<sup>th</sup> – Mar.2<sup>nd</sup>, 2013, Radisson Hotel Shanghai China.
- **Sethanan, K., Chetchotsak, D., Tongsokhowong, A., Chaikanha, N., & Kusoncum, C. (2012).** Inbound logistics models for Thai Sugar Industry in preparation for the AEC framework. In *Proceedings of the APIEMS2012 Conference*, Phuket, Thailand (pp. 608-617).

## **REFERENCE**

Prof. Kanchana Sethanan, Ph.D.  
Department of Industrial Engineering, Faculty of Engineering, Khon Kaen University, Thailand  
Emails: skanch@kku.ac.th, ksethanan@gmail.com Phone: 081-5536429