CURRICULUM VITAE

MS. CHALALAI JAISAN

119/76 Moo1 Thachin Sub-district Meung Samut Sakhon 74000

E-mail: Chalalai.jai@cmu.ac.thMobile: +(66)83-0019159

EDUCATION

PERIOD	DEGREE / MAJOR	UNIVERSITY
2015 – 2018	Doctor of Philosophy (Food Science and Biotechnology)	Kyungnam University, Republic of Korea
2013 – 2015	Master of Science (Food Science and Technology)	Mae Fah Luang University, Thailand
2009 – 2012	Bachelor Degree in Science (Food Science and Technology)	Mae Fah Luang University, Thailand

RESEARCH INTERESTS:

1. By-product Utilization
2. Application of Active and Intelligent Packaging
3. Processing and Shelf-Life Prediction Models for food

LIST OF PUBLICATIONS

1. Kaewprachu, P., Klunklin, W., **Jaisan, C**., Rawdkuen, S., Sangsawad, P., Tongdeesoontorn, W., ... & Kraithong, S. (2026). Comparative Study of Cellulose Nanocrystals from Young and Mature Coconut Husks as Reinforcement Agents in Sustainable Gelatin-Based Films. *Polymers*, *18*(6), 708.
2. Kraithong, S., Shi, X., Rungraeng, N., Bunyameen, N., **Jaisan, C.**, Suwanangul, S., ... & Sangsawad, P. (2026). Modulation of cassava starch digestibility and functional properties by alginate and fucoidan: Digestive enzyme–polysaccharide docking, antioxidant activity, and gel–structural characteristics. *Food Bioscience*, 108645.
3. Sanprasert, S., Uchuwittayakul, A., Kumnerdsiri, P., Kitsanayanyong, L., Seubsai, A., Pongsetkul, J., Petsong, K., Karnjanapratum, S., **Jaisan, C.**, Sai-Ut, S. and Rawdkuen, S. (2025). Functional and

Metabolomic Analyses of Chamomile Jelly Derived from Gelatin Capsule Waste with Inulin and Polydextrose as Prebiotic Sugar Substitutes. *Antioxidants*, *14*(11), 1380.

4. Kaewprachu, P., **Jaisan, C.**, Rawdkuen, S., Tongdeesoontorn, W., Karbowiak, T., Degraeve, P., ... & Sangsawad, P. (2025). Mechanical, physical, water vapor barrier, and functional properties of carboxymethyl cellulose/anthocyanin/TiO2 films for real-time food quality monitoring. *Carbohydrate Polymer Technologies and Applications*, *11*, 100877.
5. Punbusayakul, N., Panpranot, S., Srisopa, K., Phimolsiripol, Y., Wangtueai, S., Thuengtung, S., ... & **Jaisan, C.** (2025). Valorization of Mantis Shrimp By-Product through Integrated Extraction-Encapsulation Approach for Astaxanthin Production. LWT, 118428.
6. Kaewprachu, P., **Jaisan, C.**, Rawdkuen, S., Tongdeesoontorn, W., Karbowiak, T., Degraeve, P., ... & Sangsawad, P. (2025). Mechanical, physical, water vapor barrier, and functional properties of carboxymethyl cellulose/anthocyanin/TiO2 films for real-time food quality monitoring. *Carbohydrate Polymer Technologies and Applications*, 100877.
7. Khemkaew, P., **Jaisan, C.**, Kingwascharapong, P., Rawdkuen, S., Karbowiak, T., Degraeve, P., ... & Kaewprachu, P. (2025). Biobased antioxidant packaging from chitosan incorporating cashew leaf extract and TiO2 nanoparticles for soybean oil preservation. *LWT*, *228*, 118053.
8. Punbusayakul, N., **Jaisan, C.**, Kaewprachu, P., Yarnpakdee, S., & Chakrabandhu, Y. (2025). Improvement of the physicochemical and mechanical properties of intelligent gelatin/butterfly pea films using coconut milk residue. *Applied Food Research*, *5*(1), 100814.
9. Yarnpakdee, S., Senphan, T., Karnjanapratum, S., **Jaisan, C.**, & Wangtueai, S. (2025). Structural characterization and antibacterial activity of Pearl oyster (Pinctada maxima) shell as affected by calcination temperature. *Journal of Agriculture and Food Research*, *19*, 101551.
10. Kaewprachu, P., **Jaisan, C.**, Rawdkuen, S., & Osako, K. (2024). Colorimetric indicator films based on carboxymethyl cellulose and anthocyanins as a visual indicator for shrimp freshness tracking. *Heliyon*, *10*(11).
11. Kaewprachu, P., Romruen, O., **Jaisan, C**., Rawdkuen, S., & Klunklin, W., 2024. Smart colorimetric sensing films based on carboxymethyl cellulose incorporated with a natural pH indicator.*International Journal of Biological Macromolecules*, *259*, p.129156.
12. Kaewprachu, P., & **Jaisan, C.**, 2023. Physicochemical Properties of Chitosan from Green Mussel Shells (*Perna viridis*): A Comparative Study. *Polymers*, *15*(13), p.2816.
13. Yarnpakdee, S., Senphan, T., Wangtueai, S., **Jaisan, C.**, & Nalinanon, S., 2022. Characteristic and antioxidant activity of Cladophora glomerata ethanolic extract as affected by prior chlorophyll removal and drying methods. *Journal of Food Processing and Preservation*, *46*(8), p.e15534.
14. Yarnpakdee, S., Kaewprachu, P., **Jaisan, C.**, Senphan, T., Nagarajan, M., & Wangtueai, S., 2022. Extraction and Physico–Chemical Characterization of Chitosan from Mantis Shrimp (*Oratosquilla nepa*) Shell and the Development of Bio-Composite Film with Agarose. *Polymers*, *14*(19), p.3983.
15. Lee, D. S., Wang, H. J., **Jaisan, C.**, & An, D. S., 2022. Active food packaging to control carbon dioxide. *Packaging Technology and Science*, *35*(3), p.213-227.

16. Kaewprachu, P., **Jaisan, C.**, Rawdkuen, S., Tongdeesoontorn, W., & Klunklin, W., 2022. Carboxymethyl cellulose from Young Palmyra palm fruit husk: Synthesis, characterization, and film properties. *Food Hydrocolloids*, *124*, p.107277.
17. Kaewprachu, P., **Jaisan, C.**, Klunklin, W., Phongthai, S., Rawdkuen, S., & Tongdeesoontorn, W., 2022. Mechanical and Physicochemical Properties of Composite Biopolymer Films Based on Carboxymethyl Cellulose from Young Palmyra Palm Fruit Husk and Rice Flour. *Polymers*, *14*(9), p.1872.
18. Janpet, C., Manakit, P., Klinmalai, P., Kaewprachu, P., **Jaisan, C.**, Surayot, U., Chakrabandhu, Y., & Wangtueai, S., 2022. Characteristics and functional properties of gelatin and gelatin hydrolysate from bigeye snapper (*Priacanthus tayenus*) bone . *Food Research*, *6*(2), p.403-412.

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ระดับนานาชาติ

15. Chakrabandhu, Y., Chotinun, S., Rachtanapun, P., **Jaisan, C.**, Phongthai, S., Klinmalai, P., Jinsiriwanit, S., & Chaichana, T., 2022. Computing Survey Assessing Digital Business Status: Simaon's Pradu Hang Dam Thai native Chicken Farm. *5th International Conference on Inventive Computation Technologies, ICICT 2022 – Proceedings*.

Review

16. Gao, J., Wang, Y., Kraithong, S., **Jaisan, C**., Laosam, P., Liang, Y., ... & Zhao, Y. (2026). Recent Advances in the Extraction, Structural Characterization, Mechanisms and Food Applications of Plant-Derived Peptides. *Food and Bioprocess Technology*, *19*(2), 66.
17. Kraithong, S., Bunyameen, N., **Jaisan, C.**, Liu, Y., Sangsawad, P., Huang, R., & Shi, X. (2025). Gelling, thickening, and biological properties of marine algal poly
18. Gao, J., Chen, Z., Kaewprachu, P., **Jaisan, C.**, Liu, Y., Sangsawad, P., ... & Kraithong, S. (2025). Structural and rheological properties of ulvan polysaccharides and their potential for food packaging applications. *Food Chemistry*, 144850.saccharides: Implications for food applications. *Carbohydrate Polymers*, 124309.

หนังสือบางบท (Book chapter)

Jaisan, C., Apintanapong, M., Imathiu, S., & Punbusayakul, N. (2026). Microbial Quality Changes of Packaged Food. https://doi.org/10.1016/B978-0-443-34158-8.00088-8.